

Scanning of Space Groups

Tables of monoclinic/inclined scanning for
groups of orthorhombic and higher symmetries

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**ORTHORHOMBIC
SYSTEM**

		38	Amm2	62	Pnma	85	P4/n
		39	Abm2	63	Cmcm	86	P4 ₂ /n
16	P222	40	Ama2	64	Cmca	87	I4/m
17	P222 ₁	41	Aba2	65	Cmmm	88	I4 ₁ /a
18	P2 ₁ 2 ₁ 2	42	Fmm2	66	Cccm	89	P422
19	P2 ₁ 2 ₁ 2 ₁	43	Fdd2	67	Cmma	90	P42 ₁ 2
20	C222 ₁	44	Imm2	68	Ccca	91	P4 ₁ 22
21	C222	45	Iba2	69	Fmmm	92	P4 ₁ 2 ₁ 2
22	F222	46	Ima2	70	Fddd	93	P4 ₂ 22
23	I222	47	Pmmm	71	Immm	94	P4 ₂ 2 ₁ 2
24	I2 ₁ 2 ₁ 2 ₁	48	Pnnn	72	Ibam	95	P4 ₃ 22
25	Pmm2	49	Pccm	73	Ibca	96	P4 ₃ 2 ₁ 2
26	Pmc2 ₁	50	Pban	74	Imma	97	I422
27	Pcc2	51	Pmma	TETRAGONAL SYSTEM		98	I4 ₁ 22
28	Pma2	52	Pnna	75	P4	99	P4mm
29	Pca2 ₁	53	Pmna	76	P4 ₁	100	P4bm
30	Pnc2	54	Pcca	77	P4 ₂	101	P4 ₂ cm
31	Pmn2 ₁	55	Pbam	78	P4 ₃	102	P4 ₂ nm
32	Pba2	56	Pccn	79	I4	103	P4cc
33	Pna2 ₁	57	Pbcm	80	I4 ₁	104	P4nc
34	Pnn2	58	Pnnm	81	P4	105	P4 ₂ mc
35	Cmm2	59	Pmmn	82	I4	106	P4 ₂ bc
36	Cmc2 ₁	60	Pbcn	83	P4/m	107	I4mm
37	Ccc2	61	Pbca	84	P4 ₂ /m	108	I4cm

109	$I4_1md$	133	$P4_2/nbc$	162	$P\bar{3}1m$	185	$P6_3 cm$
110	$I4_1cd$	134	$P4_2/nnm$	163	$P\bar{3}1c$	186	$P6_3 mc$
111	$P\bar{4}2m$	135	$P4_2/mbc$	164	$P\bar{3}m1$	187	$P\bar{6}m2$
112	$P\bar{4}2c$	136	$P4_2/mnm$	165	$P\bar{3}c1$	188	$P\bar{6}c2$
113	$P\bar{4}2_1m$	137	$P4_2/nmc$	166	$R\bar{3}m$	189	$P\bar{6}2m$
114	$P\bar{4}2_1c$	138	$P4_2/ncm$	167	$R\bar{3}c$	190	$P\bar{6}2c$
115	$P\bar{4}m2$	139	$I4/mmm$	HEXAGONAL SYSTEM		191	$P6/mmm$
116	$P\bar{4}c2$	140	$I4/mcm$	168	$P6$	192	$P6/mcc$
117	$P\bar{4}b2$	141	$I4_1/amd$	169	$P6_1$	193	$P6_3/mcm$
118	$P\bar{4}n2$	142	$I4_1/acd$	170	$P6_5$	194	$P6_3/mmc$
119	$I\bar{4}m2$	TRIGONAL SYSTEM		171	$P6_2$	CUBIC SYSTEM	
120	$I\bar{4}c2$	149	$P312$	172	$P6_4$	195	$P23$
121	$I\bar{4}2m$	150	$P321$	173	$P6_3$	196	$F23$
122	$I\bar{4}2d$	151	$P3_112$	174	$P\bar{6}$	197	$I23$
123	$P4/mmm$	152	$P3_121$	175	$P6/m$	198	$P2_13$
124	$P4/mcc$	153	$P3_212$	176	$P6_3/m$	199	$I2_13$
125	$P4/nbm$	154	$P3_21$	177	$P622$	200	$Pm\bar{3}$
126	$P4/nnc$	155	$R32$	178	$P6_122$	201	$Pn\bar{3}$
127	$P4/mbm$	156	$P3m1$	179	$P6_522$	202	$Fm\bar{3}$
128	$P4/mnc$	157	$P31m$	180	$P6_222$	203	$Fd\bar{3}$
129	$P4/nmm$	158	$P3c1$	181	$P6_422$	204	$Im\bar{3}$
130	$P4/ncc$	159	$P31c$	182	$p6_322$	205	$Pa\bar{3}$
131	$P4_2/mmc$	160	$R3m$	183	$p6mm$	206	$Ia\bar{3}$
132	$P4_2/mcm$	161	$R3c$	184	$P6cc$	207	$P432$

208 $P4_2 32$
209 $F432$
210 $F4_1 32$
211 $I432$
212 $P4_3 32$
213 $P4_1 32$
214 $I4_1 32$
215 $P\bar{4}3m$
216 $F\bar{4}3m$
217 $I\bar{4}3m$
218 $P\bar{4}3n$
219 $F\bar{4}3c$
220 $I\bar{4}3d$
221 $Pm\bar{3}m$
222 $Pn\bar{3}n$
223 $Pm\bar{3}n$
224 $Pn\bar{3}m$
225 $Fm\bar{3}m$
226 $Fm\bar{3}c$
227 $Fd\bar{3}m$
228 $Fd\bar{3}c$
229 $Im\bar{3}m$
230 $Ia\bar{3}d$

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
$(mn0)$ $(\bar{m}n0)$	\mathbf{c} $n\mathbf{a} - m\mathbf{b}$ $p\mathbf{a} + q\mathbf{b}$ \mathbf{c} $n\mathbf{a} + m\mathbf{b}$ $-p\mathbf{a} + q\mathbf{b}$	$P211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p211$ $p1$	L08 L01
$(0mn)$ $(0\bar{m}n)$	\mathbf{a} $n\mathbf{b} - m\mathbf{c}$ $p\mathbf{b} + q\mathbf{c}$ \mathbf{a} $n\mathbf{b} + m\mathbf{c}$ $-p\mathbf{b} + q\mathbf{c}$	$P211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p211$ $p1$	L08 L01
$(n0m)$ $(n0\bar{m})$	\mathbf{b} $n\mathbf{c} - m\mathbf{a}$ $p\mathbf{c} + q\mathbf{a}$ \mathbf{b} $n\mathbf{c} + m\mathbf{a}$ $-p\mathbf{c} + q\mathbf{a}$	$P211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p211$ $p1$	L08 L01

No. 17 $P222_1$

$\mathcal{G} = P222_1$

D_2^2

Orientation orbit (hkl)	Conventional basis of the scanning group $\mathbf{a}' \quad \mathbf{b}' \quad \mathbf{d}$	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$
$(mn0)$ $(\bar{m}n0)$	$\mathbf{c} \quad n\mathbf{a} - m\mathbf{b} \quad p\mathbf{a} + q\mathbf{b}$ $\mathbf{c} \quad n\mathbf{a} + m\mathbf{b} \quad -p\mathbf{a} + q\mathbf{b}$	$P2_111$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2_111$ L09 $p1$ L01
$(0mn)$ $(0\bar{m}n)$	$\mathbf{a} \quad n\mathbf{b} - m\mathbf{c} \quad p\mathbf{b} + q\mathbf{c}$ $\mathbf{a} \quad n\mathbf{b} + m\mathbf{c} \quad -p\mathbf{b} + q\mathbf{c}$	$P211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p211$ L08 $p1$ L01
$(n0m)$ $(n0\bar{m})$ $(\mathbf{c}/4)$	$\mathbf{b} \quad n\mathbf{c} - m\mathbf{a} \quad p\mathbf{c} + q\mathbf{a}$ $\mathbf{b} \quad n\mathbf{c} + m\mathbf{a} \quad -p\mathbf{c} + q\mathbf{a}$	$P211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p211$ L08 $p1$ L01

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
$(mn0)$ $(\bar{m}n0)$	\mathbf{c} $n\mathbf{a} - m\mathbf{b}$ $p\mathbf{a} + q\mathbf{b}$ \mathbf{c} $n\mathbf{a} + m\mathbf{b}$ $-p\mathbf{a} + q\mathbf{b}$	$P211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p211$ $p1$	L08 L01
$(0mn)$ $(0\bar{m}n)$ $(\mathbf{b}/4)$	\mathbf{a} $n\mathbf{b} - m\mathbf{c}$ $p\mathbf{b} + q\mathbf{c}$ \mathbf{a} $n\mathbf{b} + m\mathbf{c}$ $-p\mathbf{b} + q\mathbf{c}$	$P2_111$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2_111$ $p1$	L09 L01
$(n0m)$ $(n0\bar{m})$ $(\mathbf{a}/4)$	\mathbf{b} $n\mathbf{c} - m\mathbf{a}$ $p\mathbf{c} + q\mathbf{a}$ \mathbf{b} $n\mathbf{c} + m\mathbf{a}$ $-p\mathbf{c} + q\mathbf{a}$	$P2_111$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2_111$ $p1$	L09 L01

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
$(mn0)$ $(\bar{m}n0)$ $(\mathbf{a}/4)$	\mathbf{c} $n\mathbf{a} - m\mathbf{b}$ $p\mathbf{a} + q\mathbf{b}$ \mathbf{c} $n\mathbf{a} + m\mathbf{b}$ $-p\mathbf{a} + q\mathbf{b}$	$P2_111$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2_111$ $p1$	L09 L01
$(0mn)$ $(0\bar{m}n)$ $(\mathbf{b}/4)$	\mathbf{a} $n\mathbf{b} - m\mathbf{c}$ $p\mathbf{b} + q\mathbf{c}$ \mathbf{a} $n\mathbf{b} + m\mathbf{c}$ $-p\mathbf{b} + q\mathbf{c}$	$P2_111$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2_111$ $p1$	L09 L01
$(n0m)$ $(n0\bar{m})$ $(\mathbf{c}/4)$	\mathbf{b} $n\mathbf{c} - m\mathbf{a}$ $p\mathbf{c} + q\mathbf{a}$ \mathbf{b} $n\mathbf{c} + m\mathbf{a}$ $-p\mathbf{c} + q\mathbf{a}$	$P2_111$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2_111$ $p1$	L09 L01

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
$(hk0)$ $(\bar{h}k0)$	\mathbf{c} $n\hat{\mathbf{a}} - m\hat{\mathbf{b}}$ $p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$ \mathbf{c} $n\hat{\mathbf{a}} + m\hat{\mathbf{b}}$ $-p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$	$P2_111$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2_111$ $p1$	L09 L01
$\hat{\mathbf{a}} = (\mathbf{a} - \mathbf{b})/2$ h even, k odd or h odd, k even $\Rightarrow n = h + k, m = h - k$ $\hat{\mathbf{b}} = (\mathbf{a} + \mathbf{b})/2$ h, k odd $\Rightarrow n = (h + k)/2, m = (h - k)/2$					
$(0mn)$ $(0\bar{m}n)$	\mathbf{a} $n\mathbf{b} - m\mathbf{c}$ $p\mathbf{b} + q\mathbf{c}$ \mathbf{a} $n\mathbf{b} + m\mathbf{c}$ $-p\mathbf{b} + q\mathbf{c}$				
	n odd m even q odd	$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$ $\hat{p}1$	L10 L01
	m odd q odd	$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111 (\mathbf{b}'/4)$ $p1$	L08 L09 L01
	p odd m odd q even	$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111$ $p1$	L08 L09 L01
$(n0m)$ $(n0\bar{m})$ $(c/4)$	\mathbf{b} $nc - ma$ $pc + qa$ \mathbf{b} $nc + ma$ $-pc + qa$				
	n odd p even q odd	$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111$ $p1$	L08 L09 L01
	n even p odd m odd	$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$ $\hat{p}1$	L10 L01
	n odd p odd	$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111 (\mathbf{b}'/4)$ $p1$	L08 L09 L01

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group a' b' d	Scanning group \mathcal{H}	Linear orbit sd	Sectional layer group $\mathcal{L}(\mathbf{sd})$
(<i>hk0</i>) ($\bar{h}k0$)	c $n\hat{\mathbf{a}} - m\hat{\mathbf{b}}$ $p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$ c $n\hat{\mathbf{a}} + m\hat{\mathbf{b}}$ $-p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$	<i>P211</i>	0d , $\frac{1}{2}\mathbf{d}$ [sd , $-\mathbf{sd}$]	<i>p211</i> L08 <i>p1</i> L01
$\hat{\mathbf{a}} = (\mathbf{a} - \mathbf{b})/2$ $\hat{\mathbf{b}} = (\mathbf{a} + \mathbf{b})/2$ <div style="display: flex; justify-content: space-between;"> <div>$h \text{ even}, k \text{ odd or } h \text{ odd}, k \text{ even} \Rightarrow n = h + k, m = h - k$</div> <div>$h, k \text{ odd} \Rightarrow n = (h + k)/2, m = (h - k)/2$</div> </div>				
(<i>0mn</i>) ($0\bar{m}n$)	a $n\mathbf{b} - m\mathbf{c}$ $p\mathbf{b} + q\mathbf{c}$ a $n\mathbf{b} + m\mathbf{c}$ $-p\mathbf{b} + q\mathbf{c}$ <i>n</i> odd <i>m</i> even <i>q</i> odd <i>m</i> odd <i>q</i> odd <i>p</i> odd <i>m</i> odd <i>q</i> even	<i>C211</i> <i>I211</i> <i>B211</i>	0d , $\frac{1}{2}\mathbf{d}$ [sd , $-\mathbf{sd}$] [0d , $\frac{1}{2}\mathbf{d}$] [$\frac{1}{4}\mathbf{d}$, $\frac{3}{4}\mathbf{d}$] [$\pm\mathbf{sd}$, $(\pm s + \frac{1}{2})\mathbf{d}$] [0d , $\frac{1}{2}\mathbf{d}$] [$\frac{1}{4}\mathbf{d}$, $\frac{3}{4}\mathbf{d}$] [$\pm\mathbf{sd}$, $(\pm s + \frac{1}{2})\mathbf{d}$]	<i>c211</i> L10 $\hat{p}1$ L01 <i>p211</i> L08 <i>p2₁11</i> ($\mathbf{b}'/4$) L09 <i>p1</i> L01 <i>p211</i> L08 <i>p2₁11</i> L09 <i>p1</i> L01
(<i>n0m</i>) ($n0\bar{m}$)	b $n\mathbf{c} - m\mathbf{a}$ $p\mathbf{c} + q\mathbf{a}$ b $n\mathbf{c} + m\mathbf{a}$ $-p\mathbf{c} + q\mathbf{a}$ <i>n</i> odd <i>p</i> even <i>q</i> odd <i>n</i> even <i>m</i> odd <i>p</i> odd <i>n</i> odd <i>p</i> odd	<i>B211</i> <i>C211</i> <i>I211</i>	[0d , $\frac{1}{2}\mathbf{d}$] [$\frac{1}{4}\mathbf{d}$, $\frac{3}{4}\mathbf{d}$] [$\pm\mathbf{sd}$, $(\pm s + \frac{1}{2})\mathbf{d}$] 0d , $\frac{1}{2}\mathbf{d}$ [sd , $-\mathbf{sd}$] [0d , $\frac{1}{2}\mathbf{d}$] [$\frac{1}{4}\mathbf{d}$, $\frac{3}{4}\mathbf{d}$] [$\pm\mathbf{sd}$, $(\pm s + \frac{1}{2})\mathbf{d}$]	<i>p211</i> L08 <i>p2₁11</i> L09 <i>p1</i> L01 <i>c211</i> L10 $\hat{p}1$ L01 <i>p211</i> L08 <i>p2₁11</i> ($\mathbf{b}'/4$) L09 <i>p1</i> L01

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$
$(hk0)$ $(\bar{h}k0)$	\mathbf{c} $n\hat{\mathbf{a}} - m\hat{\mathbf{b}}$ $p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$	$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08
	\mathbf{c} $n\hat{\mathbf{a}} + m\hat{\mathbf{b}}$ $-p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$			$p2_111 (\mathbf{b}'/4)$ L09
	n odd m even p even q odd or n even m odd p odd q even p odd q odd			$p1$ L01
	n odd m odd	$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111$ L09 $p1$ L01
		$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$ L10 $\hat{p}1$ L01
$\hat{\mathbf{a}} = (\mathbf{a} - \mathbf{b})/2$ h even, k odd or h odd, k even $\Rightarrow n = h + k, m = h - k$ $\hat{\mathbf{b}} = (\mathbf{a} + \mathbf{b})/2$ h, k odd $\Rightarrow n = (h + k)/2, m = (h - k)/2$				
$(0hk)$ $(0\bar{h}k)$	\mathbf{a} $n\hat{\mathbf{a}} - m\hat{\mathbf{b}}$ $p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$	$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08
	\mathbf{a} $n\hat{\mathbf{a}} + m\hat{\mathbf{b}}$ $-p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$			$p2_111 (\mathbf{b}'/4)$ L09
	n odd m even p even q odd or n even m odd p odd q even p odd q odd			$p1$ L01
	n odd m odd	$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111$ L09 $p1$ L01
		$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$ L10 $\hat{p}1$ L01
$\hat{\mathbf{a}} = (\mathbf{b} - \mathbf{c})/2$ h even, k odd or h odd, k even $\Rightarrow n = h + k, m = h - k$ $\hat{\mathbf{b}} = (\mathbf{b} + \mathbf{c})/2$ h, k odd $\Rightarrow n = (h + k)/2, m = (h - k)/2$				
$(k0h)$ $(k0\bar{h})$	\mathbf{b} $n\hat{\mathbf{a}} - m\hat{\mathbf{b}}$ $p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$	$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08
	\mathbf{b} $n\hat{\mathbf{a}} + m\hat{\mathbf{b}}$ $-p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$			$p2_111 (\mathbf{b}'/4)$ L09
	n odd m even p even q odd or n even m odd p odd q even p odd q odd			$p1$ L01
	n odd m odd	$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111$ L09 $p1$ L01
		$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$ L10 $\hat{p}1$ L01
$\hat{\mathbf{a}} = (\mathbf{c} - \mathbf{a})/2$ h even, k odd or h odd, k even $\Rightarrow n = h + k, m = h - k$ $\hat{\mathbf{b}} = (\mathbf{c} + \mathbf{a})/2$ h, k odd $\Rightarrow n = (h + k)/2, m = (h - k)/2$				

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
$(mn0)$ $(\bar{m}n0)$	\mathbf{c} $n\mathbf{a} - m\mathbf{b}$ $p\mathbf{a} + q\mathbf{b}$	$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111 (\mathbf{b}'/4)$ $p1$	L08
	\mathbf{c} $n\mathbf{a} + m\mathbf{b}$ $-p\mathbf{a} + q\mathbf{b}$				L09
	n odd m even p even q odd or n even m odd p odd q even p odd q odd				L01
		$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111$ $p1$	L08 L09 L01
		$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$ $\hat{p}1$	L10 L01
		n odd m odd			
$(0mn)$ $(0\bar{m}n)$	\mathbf{a} $n\mathbf{b} - m\mathbf{c}$ $p\mathbf{b} + q\mathbf{c}$	$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111 (\mathbf{b}'/4)$ $p1$	L08
	\mathbf{a} $n\mathbf{b} + m\mathbf{c}$ $-p\mathbf{b} + q\mathbf{c}$				L09
	n odd m even p even q odd or n even m odd p odd q even p odd q odd				L01
		$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111$ $p1$	L08 L09 L01
		$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$ $\hat{p}1$	L10 L01
		n odd m odd			
$(n0m)$ $(n0\bar{m})$	\mathbf{b} $n\mathbf{c} - m\mathbf{a}$ $p\mathbf{c} + q\mathbf{a}$	$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111 (\mathbf{b}'/4)$ $p1$	L08
	\mathbf{b} $n\mathbf{c} + m\mathbf{a}$ $-p\mathbf{c} + q\mathbf{a}$				L09
	n odd m even p even q odd or n even m odd p odd q even p odd q odd				L01
		$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111$ $p1$	L08 L09 L01
		$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$ $\hat{p}1$	L10 L01
		n odd m odd			

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$
$(mn0)$ $(\bar{m}n0)$ $(\mathbf{b}/4)$	\mathbf{c} $n\mathbf{a} - m\mathbf{b}$ $p\mathbf{a} + q\mathbf{b}$ \mathbf{c} $n\mathbf{a} + m\mathbf{b}$ $-p\mathbf{a} + q\mathbf{b}$ n odd m even p even q odd or n even m odd p odd q even p odd q odd n odd m odd	$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08
				$p2_111$ ($\mathbf{b}'/4$) L09
				$p1$ L01
		$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08
				$p2_111$ L09
				$p1$ L01
$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$ L10		
		$\widehat{p}1$ L01		
$(0mn)$ $(0\bar{m}n)$ $(\mathbf{c}/4)$	\mathbf{a} $n\mathbf{b} - m\mathbf{c}$ $p\mathbf{b} + q\mathbf{c}$ \mathbf{a} $n\mathbf{b} + m\mathbf{c}$ $-p\mathbf{b} + q\mathbf{c}$ n odd m even p even q odd or n even m odd p odd q even p odd q odd n odd m odd	$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08
				$p2_111$ ($\mathbf{b}'/4$) L09
				$p1$ L01
		$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08
				$p2_111$ L09
				$p1$ L01
$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$ L10		
		$\widehat{p}1$ L01		
$(n0m)$ $(n0\bar{m})$ $(\mathbf{a}/4)$	\mathbf{b} $n\mathbf{c} - m\mathbf{a}$ $p\mathbf{c} + q\mathbf{a}$ \mathbf{b} $n\mathbf{c} + m\mathbf{a}$ $-p\mathbf{c} + q\mathbf{a}$ n odd m even p even q odd or n even m odd p odd q even p odd q odd n odd m odd	$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08
				$p2_111$ ($\mathbf{b}'/4$) L09
				$p1$ L01
		$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08
				$p2_111$ L09
				$p1$ L01
$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$ L10		
		$\widehat{p}1$ L01		

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
$(mn0)$ $(\bar{m}n0)$	\mathbf{c} $n\mathbf{a} - m\mathbf{b}$ $p\mathbf{a} + q\mathbf{b}$ \mathbf{c} $n\mathbf{a} + m\mathbf{b}$ $-p\mathbf{a} + q\mathbf{b}$	$P211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p211$ $p1$	L08 L01
$(0mn)$ $(0\bar{m}n)$	\mathbf{a} $n\mathbf{b} - m\mathbf{c}$ $p\mathbf{b} + q\mathbf{c}$ \mathbf{a} $n\mathbf{b} + m\mathbf{c}$ $-p\mathbf{b} + q\mathbf{c}$	$Pm11$	$s\mathbf{d}$	$pm11$	L11
$(n0m)$ $(n0\bar{m})$	\mathbf{b} $n\mathbf{c} - m\mathbf{a}$ $p\mathbf{c} + q\mathbf{a}$ \mathbf{b} $n\mathbf{c} + m\mathbf{a}$ $-p\mathbf{c} + q\mathbf{a}$	$Pm11$	$s\mathbf{d}$	$pm11$	L11

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
$(mn0)$ $(\bar{m}n0)$	\mathbf{c} $n\mathbf{a} - m\mathbf{b}$ $p\mathbf{a} + q\mathbf{b}$ \mathbf{c} $n\mathbf{a} + m\mathbf{b}$ $-p\mathbf{a} + q\mathbf{b}$	$P2_111$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2_111$ $p1$	L09 L01
$(0mn)$ $(0\bar{m}n)$	\mathbf{a} $n\mathbf{b} - m\mathbf{c}$ $p\mathbf{b} + q\mathbf{c}$ \mathbf{a} $n\mathbf{b} + m\mathbf{c}$ $-p\mathbf{b} + q\mathbf{c}$	$Pm11$	$s\mathbf{d}$	$pm11$	L11
$(n0m)$ $(n0\bar{m})$	\mathbf{b} $nc - ma$ $pc + qa$ \mathbf{b} $nc + ma$ $-pc + qa$				
	n odd m even q odd	$Pb11$	$s\mathbf{d}$	$pb11$	L12
	m odd q odd	$Pn11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$p1$	L01
	m odd q even	$Pc11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$p1$	L01
	p odd				

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group a' b' d	Scanning group \mathcal{H}	Linear orbit sd	Sectional layer group $\mathcal{L}(\mathbf{sd})$	
(<i>mn0</i>) ($\overline{m}n0$)	c <i>na</i> - <i>mb</i> <i>pa</i> + <i>qb</i> c <i>na</i> + <i>mb</i> - <i>pa</i> + <i>qb</i>	<i>P211</i>	0d , $\frac{1}{2}\mathbf{d}$ [sd , - sd]	<i>p211</i> <i>p1</i>	L08 L01
(<i>0mn</i>) ($0\overline{m}n$)	a <i>nb</i> - <i>mc</i> <i>pb</i> + <i>qc</i> a <i>nb</i> + <i>mc</i> - <i>pb</i> + <i>qc</i> <i>n</i> odd <i>p</i> even <i>q</i> odd <i>n</i> even <i>m</i> odd <i>p</i> odd <i>n</i> odd <i>p</i> odd	<i>Pc11</i> <i>Pb11</i> <i>Pn11</i>	[sd , (<i>s</i> + $\frac{1}{2}$) d] sd [sd , (<i>s</i> + $\frac{1}{2}$) d]	<i>p1</i> <i>pb11</i> <i>p1</i>	L01 L12 L01
(<i>n0m</i>) ($n0\overline{m}$)	b <i>nc</i> - <i>ma</i> <i>pc</i> + <i>qa</i> b <i>nc</i> + <i>ma</i> - <i>pc</i> + <i>qa</i> <i>n</i> odd <i>m</i> even <i>q</i> odd <i>m</i> odd <i>q</i> odd <i>m</i> odd <i>p</i> odd <i>q</i> even	<i>Pb11</i> <i>Pn11</i> <i>Pc11</i>	sd [sd , (<i>s</i> + $\frac{1}{2}$) d] [sd , (<i>s</i> + $\frac{1}{2}$) d]	<i>pb11</i> <i>p1</i> <i>p1</i>	L12 L01 L01

Orientation orbit (hkl)	Conventional basis of the scanning group $\mathbf{a}' \quad \mathbf{b}' \quad \mathbf{d}$	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
$(mn0)$ $(\bar{m}n0)$	$\mathbf{c} \quad n\mathbf{a} - m\mathbf{b} \quad p\mathbf{a} + q\mathbf{b}$ $\mathbf{c} \quad n\mathbf{a} + m\mathbf{b} \quad -p\mathbf{a} + q\mathbf{b}$	$P211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p211$ $p1$	L08 L01
$(0mn)$ $(0\bar{m}n)$ $(\mathbf{a}/4)$	$\mathbf{a} \quad n\mathbf{b} - m\mathbf{c} \quad p\mathbf{b} + q\mathbf{c}$ $\mathbf{a} \quad n\mathbf{b} + m\mathbf{c} \quad -p\mathbf{b} + q\mathbf{c}$	$Pm11$	$s\mathbf{d}$	$pm11$	L11
$(n0m)$ $(n0\bar{m})$	$\mathbf{b} \quad n\mathbf{c} - m\mathbf{a} \quad p\mathbf{c} + q\mathbf{a}$ $\mathbf{b} \quad n\mathbf{c} + m\mathbf{a} \quad -p\mathbf{c} + q\mathbf{a}$				
	n odd p even n even p odd n odd p odd	$Pc11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$p1$	L01
	q odd m odd	$Pb11$	$s\mathbf{d}$	$pb11$	L12
		$Pn11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$p1$	L01

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit \mathbf{sd}	Sectional layer group $\mathcal{L}(\mathbf{sd})$	
$(mn0)$ $(\bar{m}n0)$	\mathbf{c} $n\mathbf{a} - m\mathbf{b}$ $p\mathbf{a} + q\mathbf{b}$ \mathbf{c} $n\mathbf{a} + m\mathbf{b}$ $-p\mathbf{a} + q\mathbf{b}$	$P2_111$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[\mathbf{sd}, -\mathbf{sd}]$	$p2_111$ $p1$	L09 L01
$(0mn)$ $(0\bar{m}n)$ $(\mathbf{a}/4)$	\mathbf{a} $n\mathbf{b} - m\mathbf{c}$ $p\mathbf{b} + q\mathbf{c}$ \mathbf{a} $n\mathbf{b} + m\mathbf{c}$ $-p\mathbf{b} + q\mathbf{c}$ n odd p even q odd n even m odd p odd n odd p odd	$Pc11$ $Pb11$ $Pn11$	$[\mathbf{sd}, (s + \frac{1}{2})\mathbf{d}]$ \mathbf{sd} $[\mathbf{sd}, (s + \frac{1}{2})\mathbf{d}]$	$p1$ $pb11$ $p1$	L01 L12 L01
$(n0m)$ $(n0\bar{m})$	\mathbf{b} $n\mathbf{c} - m\mathbf{a}$ $p\mathbf{c} + q\mathbf{a}$ \mathbf{b} $n\mathbf{c} + m\mathbf{a}$ $-p\mathbf{c} + q\mathbf{a}$ n odd p even q odd n even m odd p odd n odd p odd	$Pc11$ $Pb11$ $Pn11$	$[\mathbf{sd}, (s + \frac{1}{2})\mathbf{d}]$ \mathbf{sd} $[\mathbf{sd}, (s + \frac{1}{2})\mathbf{d}]$	$p1$ $pb11$ $p1$	L01 L12 L01

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group a' b' d	Scanning group \mathcal{H}	Linear orbit sd	Sectional layer group $\mathcal{L}(\mathbf{sd})$	
(<i>mn0</i>) ($\overline{m}n0$)	c <i>na - mb</i> <i>pa + qb</i> c <i>na + mb</i> $-pa + qb$	<i>P211</i>	0d, $\frac{1}{2}\mathbf{d}$ [sd, -sd]	<i>p211</i> <i>p1</i>	L08 L01
(<i>0mn</i>) ($0\overline{m}n$)	a <i>nb - mc</i> <i>pb + qc</i> a <i>nb + mc</i> $-pb + qc$ <i>n</i> odd <i>m</i> even <i>p</i> even <i>q</i> odd or <i>n</i> even <i>m</i> odd <i>p</i> odd <i>q</i> even <i>p</i> odd <i>q</i> odd <i>n</i> odd <i>m</i> odd	<i>Pn11</i>	[sd, ($s + \frac{1}{2}$)d]	<i>p1</i>	L01
		<i>Pc11</i>	[sd, ($s + \frac{1}{2}$)d]	<i>p1</i>	L01
		<i>Pb11</i>	sd	<i>pb11</i>	L12
(<i>n0m</i>) (<i>n0\overline{m}</i>) (b/4)	b <i>nc - ma</i> <i>pc + qa</i> b <i>nc + ma</i> $-pc + qa$ <i>n</i> odd <i>m</i> even <i>q</i> odd <i>m</i> odd <i>q</i> odd <i>m</i> odd <i>p</i> odd <i>q</i> even	<i>Pb11</i>	sd	<i>pb11</i>	L12
		<i>Pn11</i>	[sd, ($s + \frac{1}{2}$)d]	<i>p1</i>	L01
		<i>Pc11</i>	[sd, ($s + \frac{1}{2}$)d]	<i>p1</i>	L01

Orientation orbit (hkl)	Conventional basis of the scanning group $\mathbf{a}' \quad \mathbf{b}' \quad \mathbf{d}$	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
$(mn0)$ $(\bar{m}n0)$ $(\mathbf{a}/4)$	$\mathbf{c} \quad n\mathbf{a} - m\mathbf{b} \quad p\mathbf{a} + q\mathbf{b}$ $\mathbf{c} \quad n\mathbf{a} + m\mathbf{b} \quad -p\mathbf{a} + q\mathbf{b}$	$P2_111$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2_111$ $p1$	L09 L01
$(0mn)$ $(0\bar{m}n)$	$\mathbf{a} \quad n\mathbf{b} - m\mathbf{c} \quad p\mathbf{b} + q\mathbf{c}$ $\mathbf{a} \quad n\mathbf{b} + m\mathbf{c} \quad -p\mathbf{b} + q\mathbf{c}$	$Pm11$	$s\mathbf{d}$	$pm11$	L11
$(n0m)$ $(n0\bar{m})$	$\mathbf{b} \quad n\mathbf{c} - m\mathbf{a} \quad p\mathbf{c} + q\mathbf{a}$ $\mathbf{b} \quad n\mathbf{c} + m\mathbf{a} \quad -p\mathbf{c} + q\mathbf{a}$ $n \text{ odd} \quad m \text{ even}$ $p \text{ even} \quad q \text{ odd}$ or $n \text{ even} \quad m \text{ odd}$ $p \text{ odd} \quad q \text{ even}$ $p \text{ odd} \quad q \text{ odd}$ $n \text{ odd} \quad m \text{ odd}$	$Pn11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$p1$	L01
		$Pc11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$p1$	L01
		$Pb11$	$s\mathbf{d}$	$pb11$	L12

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group a' b' d	Scanning group \mathcal{H}	Linear orbit sd	Sectional layer group $\mathcal{L}(\mathbf{sd})$	
(<i>mn0</i>) ($\overline{m}n0$)	c <i>na - mb</i> <i>pa + qb</i> c <i>na + mb</i> $-pa + qb$	<i>P211</i>	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [sd , $-\mathbf{sd}$]	<i>p211</i> <i>p1</i>	L08 L01
(<i>0mn</i>) ($0\overline{m}n$) (a /4)	a <i>nb - mc</i> <i>pb + qc</i> a <i>nb + mc</i> $-pb + qc$ <i>n</i> odd <i>m</i> even <i>q</i> odd <i>m</i> odd <i>q</i> odd <i>m</i> odd <i>p</i> odd <i>q</i> even	<i>Pb11</i> <i>Pn11</i> <i>Pc11</i>	sd [sd , $(s + \frac{1}{2})\mathbf{d}$] [sd , $(s + \frac{1}{2})\mathbf{d}$]	<i>pb11</i> <i>p1</i> <i>p1</i>	L12 L01 L01
(<i>n0m</i>) ($n0\overline{m}$) (b /4)	b <i>nc - ma</i> <i>pc + qa</i> b <i>nc + ma</i> $-pc + qa$ <i>n</i> odd <i>p</i> even <i>q</i> odd <i>n</i> even <i>m</i> odd <i>p</i> odd <i>n</i> odd <i>p</i> odd	<i>Pc11</i> <i>Pb11</i> <i>Pn11</i>	[sd , $(s + \frac{1}{2})\mathbf{d}$] sd [sd , $(s + \frac{1}{2})\mathbf{d}$]	<i>p1</i> <i>pb11</i> <i>p1</i>	L01 L12 L01

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$
$(m0)$ $(\bar{m}0)$	\mathbf{c} $na - mb$ $pa + qb$ \mathbf{c} $na + mb$ $-pa + qb$	$P2_111$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2_111$ L09 $p1$ L01
$(0mn)$ $(0\bar{m}n)$ $(\mathbf{a}/4)$	\mathbf{a} $nb - mc$ $pb + qc$ \mathbf{a} $nb + mc$ $-pb + qc$ n odd m even p even q odd or n even m odd p odd q even p odd q odd n odd m odd	$Pn11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$p1$ L01
		$Pc11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$p1$ L01
		$Pb11$	$s\mathbf{d}$	$pb11$ L12
$(n0m)$ $(n0\bar{m})$ $(\mathbf{b}/4)$	\mathbf{b} $nc - ma$ $pc + qa$ \mathbf{b} $nc + ma$ $-pc + qa$ n odd p even q odd n even m odd p odd n odd p odd	$Pc11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$p1$ L01
		$Pb11$	$s\mathbf{d}$	$pb11$ L12
		$Pn11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$p1$ L01

$$\mathcal{G} = Pnn2$$

Orientation orbit (hkl)	Conventional basis of the scanning group $\mathbf{a}' \quad \mathbf{b}' \quad \mathbf{d}$	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
$(mn0)$ $(\bar{m}n0)$	$\mathbf{c} \quad na - mb \quad pa + qb$ $\mathbf{c} \quad na + mb \quad -pa + qb$	$P211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p211$ $p1$	L08 L01
$(0mn)$ $(0\bar{m}n)$ $(\mathbf{a}/4)$	$\mathbf{a} \quad nb - mc \quad pb + qc$ $\mathbf{a} \quad nb + mc \quad -pb + qc$ n odd m even p even q odd or n even m odd p odd q even p odd q odd n odd m odd	$Pn11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$p1$	L01
		$Pc11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$p1$	L01
		$Pb11$	$s\mathbf{d}$	$pb11$	L12
$(n0m)$ $(n0\bar{m})$ $(\mathbf{b}/4)$	$\mathbf{b} \quad nc - ma \quad pc + qa$ $\mathbf{b} \quad nc + ma \quad -pc + qa$ n odd m even p even q odd or n even m odd p odd q even p odd q odd n odd m odd	$Pn11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$p1$	L01
		$Pc11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$p1$	L01
		$Pb11$	$s\mathbf{d}$	$pb11$	L12

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
$(hk0)$ $(\bar{h}k0)$	\mathbf{c} $n\hat{\mathbf{a}} - m\hat{\mathbf{b}}$ $p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$ \mathbf{c} $n\hat{\mathbf{a}} + m\hat{\mathbf{b}}$ $-p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$	$P211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p211$ $p1$	L08 L01
$\hat{\mathbf{a}} = (\mathbf{a} - \mathbf{b})/2$ $\hat{\mathbf{b}} = (\mathbf{a} + \mathbf{b})/2$ h even, k odd or h odd, k even $\Rightarrow n = h + k, m = h - k$ h, k odd $\Rightarrow n = (h + k)/2, m = (h - k)/2$					
$(0mn)$ $(0\bar{m}n)$	\mathbf{a} $n\mathbf{b} - m\mathbf{c}$ $p\mathbf{b} + q\mathbf{c}$ \mathbf{a} $n\mathbf{b} + m\mathbf{c}$ $-p\mathbf{b} + q\mathbf{c}$				
	n odd m even	$Cm11$	$s\mathbf{d}$	$cm11$	L13
	q odd	$Im11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pm11$	L11
	m odd	$Bm11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pm11$	L11
	q odd				
	m odd				
	p odd q even				
$(n0m)$ $(n0\bar{m})$	\mathbf{b} $n\mathbf{c} - m\mathbf{a}$ $p\mathbf{c} + q\mathbf{a}$ \mathbf{b} $n\mathbf{c} + m\mathbf{a}$ $-p\mathbf{c} + q\mathbf{a}$				
	n odd	$Bm11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pm11$	L11
	p even q odd	$Cm11$	$s\mathbf{d}$	$cm11$	L13
	n even m odd	$Im11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pm11$	L11
	p odd				
	n odd				
	p odd				

Orientation orbit (hkl)	Conventional basis of the scanning group $\mathbf{a}' \quad \mathbf{b}' \quad \mathbf{d}$	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
$(hk0)$ $(\bar{h}k0)$	$\mathbf{c} \quad n\hat{\mathbf{a}} - m\hat{\mathbf{b}} \quad p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$ $\mathbf{c} \quad n\hat{\mathbf{a}} + m\hat{\mathbf{b}} \quad -p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$	$P2_111$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2_111$ $p1$	L09 L01
$\hat{\mathbf{a}} = (\mathbf{a} - \mathbf{b})/2 \quad \hat{\mathbf{b}} = (\mathbf{a} + \mathbf{b})/2$ $h \text{ even, } k \text{ odd or } h \text{ odd, } k \text{ even} \Rightarrow n = h + k, m = h - k$ $h, k \text{ odd} \Rightarrow n = (h + k)/2, m = (h - k)/2$					
$(0mn)$ $(0\bar{m}n)$	$\mathbf{a} \quad n\mathbf{b} - m\mathbf{c} \quad p\mathbf{b} + q\mathbf{c}$ $\mathbf{a} \quad n\mathbf{b} + m\mathbf{c} \quad -p\mathbf{b} + q\mathbf{c}$ $n \text{ odd} \quad m \text{ even}$ $q \text{ odd}$ $m \text{ odd}$ $q \text{ odd}$ $m \text{ odd}$ $p \text{ odd} \quad q \text{ even}$	$Cm11$ $Im11$ $Bm11$	$s\mathbf{d}$ $[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$ $[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$cm11$ $pm11$ $pm11$	L13 L11 L11
$(n0m)$ $(n0\bar{m})$	$\mathbf{b} \quad n\mathbf{c} - m\mathbf{a} \quad p\mathbf{c} + q\mathbf{a}$ $\mathbf{b} \quad n\mathbf{c} + m\mathbf{a} \quad -p\mathbf{c} + q\mathbf{a}$ $n \text{ odd} \quad m \text{ even}$ $p \text{ even} \quad q \text{ odd}$ $n \text{ even} \quad m \text{ odd}$ $p \text{ odd} \quad q \text{ even}$ $n \text{ even} \quad m \text{ odd}$ $p \text{ odd} \quad q \text{ odd}$ $n \text{ odd} \quad m \text{ odd}$ $p \text{ even} \quad q \text{ odd}$ $n \text{ odd} \quad m \text{ odd}$ $p \text{ odd} \quad q \text{ even}$ $n \text{ odd} \quad m \text{ even}$ $p \text{ odd} \quad q \text{ odd}$	$Bb11$ $Cc11$ $Cn11$ $Bn11$ $Ic11$ $Ib11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$ $[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$ $[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$ $[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$ $[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$ $[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11$ $\hat{p}1$ $\hat{p}1$ $pb11 (\mathbf{a}'/4)$ $pb11 (\mathbf{a}'/4)$ $pb11$	L12 L01 L01 L12 L12 L12

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group a' b' d	Scanning group \mathcal{H}	Linear orbit sd	Sectional layer group $\mathcal{L}(\mathbf{sd})$	
(<i>hk0</i>) ($\bar{h}k0$)	c $n\hat{\mathbf{a}} - m\hat{\mathbf{b}}$ $p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$ c $n\hat{\mathbf{a}} + m\hat{\mathbf{b}}$ $-p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$	<i>P211</i>	0d , $\frac{1}{2}\mathbf{d}$ [sd , $-\mathbf{sd}$]	<i>p211</i> <i>p1</i>	L08 L01
$\hat{\mathbf{a}} = (\mathbf{a} - \mathbf{b})/2$ $\hat{\mathbf{b}} = (\mathbf{a} + \mathbf{b})/2$ <i>h</i> even, <i>k</i> odd or <i>h</i> odd, <i>k</i> even $\Rightarrow n = h + k, m = h - k$ <i>h, k</i> odd $\Rightarrow n = (h + k)/2, m = (h - k)/2$					
(<i>0mn</i>) ($0\bar{m}n$)	a $n\mathbf{b} - m\mathbf{c}$ $p\mathbf{b} + q\mathbf{c}$ a $n\mathbf{b} + m\mathbf{c}$ $-p\mathbf{b} + q\mathbf{c}$ <i>n</i> odd <i>m</i> even <i>p</i> even <i>q</i> odd <i>n</i> even <i>m</i> odd <i>p</i> odd <i>q</i> even <i>n</i> even <i>m</i> odd <i>p</i> odd <i>q</i> odd <i>n</i> odd <i>m</i> odd <i>p</i> even <i>q</i> odd <i>n</i> odd <i>m</i> odd <i>p</i> odd <i>q</i> even <i>n</i> odd <i>m</i> even <i>p</i> odd <i>q</i> odd	<i>Cc11</i> <i>Bb11</i> <i>Ib11</i> <i>Ic11</i> <i>Bn11</i> <i>Cn11</i>	[sd , $(s + \frac{1}{2})\mathbf{d}$] [sd , $(s + \frac{1}{2})\mathbf{d}$] [sd , $(s + \frac{1}{2})\mathbf{d}$] [sd , $(s + \frac{1}{2})\mathbf{d}$] [sd , $(s + \frac{1}{2})\mathbf{d}$] [sd , $(s + \frac{1}{2})\mathbf{d}$]	$\hat{p}1$ <i>pb11</i> <i>pb11</i> <i>pb11</i> <i>pb11</i> ($\mathbf{a}'/4$) <i>pb11</i> ($\mathbf{a}'/4$) $\hat{p}1$	L01 L12 L12 L12 L12 L01
(<i>n0m</i>) ($n0\bar{m}$)	b $n\mathbf{c} - m\mathbf{a}$ $p\mathbf{c} + q\mathbf{a}$ b $n\mathbf{c} + m\mathbf{a}$ $-p\mathbf{c} + q\mathbf{a}$ <i>n</i> odd <i>m</i> even <i>p</i> even <i>q</i> odd <i>n</i> even <i>m</i> odd <i>p</i> odd <i>q</i> even <i>n</i> even <i>m</i> odd <i>p</i> odd <i>q</i> odd <i>n</i> odd <i>m</i> odd <i>p</i> even <i>q</i> odd <i>n</i> odd <i>m</i> odd <i>p</i> odd <i>q</i> even <i>n</i> odd <i>m</i> even <i>p</i> odd <i>q</i> odd	<i>Bb11</i> <i>Cc11</i> <i>Cn11</i> <i>Bn11</i> <i>Ic11</i> <i>Ib11</i>	[sd , $(s + \frac{1}{2})\mathbf{d}$] [sd , $(s + \frac{1}{2})\mathbf{d}$] [sd , $(s + \frac{1}{2})\mathbf{d}$] [sd , $(s + \frac{1}{2})\mathbf{d}$] [sd , $(s + \frac{1}{2})\mathbf{d}$] [sd , $(s + \frac{1}{2})\mathbf{d}$]	<i>pb11</i> $\hat{p}1$ $\hat{p}1$ <i>pb11</i> ($\mathbf{a}'/4$) <i>pb11</i> ($\mathbf{a}'/4$) <i>pb11</i>	L12 L01 L01 L12 L12 L12

$\mathcal{G} = Amm2$

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group a' b' d	Scanning group \mathcal{H}	Linear orbit sd	Sectional layer group $\mathcal{L}(sd)$
(<i>mn0</i>) ($\bar{m}n0$)	c <i>na</i> - <i>mb</i> <i>pa</i> + <i>qb</i> c <i>na</i> + <i>mb</i> - <i>pa</i> + <i>qb</i> <i>n</i> odd <i>p</i> even <i>q</i> odd <i>n</i> even <i>m</i> odd <i>p</i> odd <i>n</i> odd <i>p</i> odd	<i>B211</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p211</i> L08
				<i>p2₁11</i> L09
				<i>p1</i> L01
		<i>C211</i>	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	<i>c211</i> L10
		<i>I211</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p211</i> L08
		<i>p2₁11</i> (b' /4) L09		
<i>p1</i> L01				
(<i>0kl</i>) ($\bar{k}l0$)	a $n\hat{\mathbf{a}}$ - $m\hat{\mathbf{b}}$ $p\hat{\mathbf{a}}$ + $q\hat{\mathbf{b}}$ a $n\hat{\mathbf{a}}$ + $m\hat{\mathbf{b}}$ - $p\hat{\mathbf{a}}$ + $q\hat{\mathbf{b}}$	<i>Pm11</i>	sd	<i>pm11</i> L11
$\hat{\mathbf{a}} = (\mathbf{b} - \mathbf{c})/2$ $\hat{\mathbf{b}} = (\mathbf{b} + \mathbf{c})/2$		<i>k</i> even, <i>l</i> odd or <i>k</i> odd, <i>l</i> even $\Rightarrow n = k + l, m = k - l$ <i>k</i> , <i>l</i> odd $\Rightarrow n = (k + l)/2, m = (k - l)/2$		
(<i>n0m</i>) (<i>n0m</i>)	b <i>nc</i> - <i>ma</i> <i>pc</i> + <i>qa</i> b <i>nc</i> + <i>ma</i> - <i>pc</i> + <i>qa</i> <i>n</i> odd <i>m</i> even <i>q</i> odd <i>m</i> odd <i>q</i> odd <i>m</i> odd <i>p</i> odd <i>q</i> even	<i>Cm11</i>	sd	<i>cm11</i> L13
		<i>Im11</i>	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	<i>pm11</i> L11
		<i>Bm11</i>	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	<i>pm11</i> L11

$$\mathcal{G} = Abm2$$

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group a' b' d	Scanning group \mathcal{H}	Linear orbit sd	Sectional layer group $\mathcal{L}(\mathbf{sd})$		
$(mn0)$ $(\bar{m}n0)$	c $na - mb$ $pa + qb$ c $na + mb$ $-pa + qb$ <i>n</i> odd <i>p</i> even <i>q</i> odd <i>n</i> even <i>m</i> odd <i>p</i> odd <i>n</i> odd <i>p</i> odd	<i>B</i> 211	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p</i> 211 L08 <i>p</i> 2 ₁ 11 L09 <i>p</i> 1 L01		
		<i>C</i> 211	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	<i>c</i> 211 L10 $\hat{p}1$ L01		
		<i>I</i> 211	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p</i> 211 L08 <i>p</i> 2 ₁ 11 (b' /4) L09 <i>p</i> 1 L01		
		$(0kl)$ $(\bar{k}l0)$	a $n\hat{\mathbf{a}} - m\hat{\mathbf{b}}$ $p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$ a $n\hat{\mathbf{a}} + m\hat{\mathbf{b}}$ $-p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$ <i>n</i> odd <i>m</i> eve <i>p</i> even <i>q</i> odd or <i>n</i> even <i>m</i> odd <i>p</i> odd <i>q</i> even <i>p</i> odd <i>q</i> odd <i>n</i> odd <i>m</i> odd	<i>Pn</i> 11	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	<i>p</i> 1 L01
				<i>Pc</i> 11	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	<i>p</i> 1 L01
				<i>Pb</i> 11	sd	<i>pb</i> 11 L12
$\hat{\mathbf{a}} = (\mathbf{b} - \mathbf{c})/2$ $\hat{\mathbf{b}} = (\mathbf{b} + \mathbf{c})/2$		k even, l odd or k odd, l even $\Rightarrow n = k + l, m = k - l$ k, l odd $\Rightarrow n = (k + l)/2, m = (k - l)/2$				
$(n0m)$ $(n0\bar{m})$ $(\mathbf{b}/4)$	b $nc - ma$ $pc + qa$ b $nc + ma$ $-pc + qa$ <i>n</i> odd <i>m</i> even <i>q</i> odd <i>m</i> odd <i>q</i> odd <i>m</i> odd <i>p</i> odd <i>q</i> even	<i>Cm</i> 11	sd	<i>cm</i> 11 L13		
		<i>Im</i> 11	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	<i>pm</i> 11 L11		
		<i>Bm</i> 11	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	<i>pm</i> 11 L11		

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group a' b' d	Scanning group \mathcal{H}	Linear orbit sd	Sectional layer group $\mathcal{L}(\mathbf{sd})$
(<i>mn0</i>) ($\overline{m}n0$)	c <i>na - mb</i> <i>pa + qb</i> c <i>na + mb</i> $-pa + qb$ <i>n</i> odd <i>p</i> even <i>q</i> odd <i>n</i> even <i>m</i> odd <i>p</i> odd <i>n</i> odd <i>p</i> odd	<i>B211</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p211</i> L08
				<i>p2₁11</i> L09
				<i>p1</i> L01
		<i>C211</i>	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	<i>c211</i> L10
		<i>I211</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p211</i> L08
		<i>p2₁11</i> (b' /4) L09		
<i>p1</i> L01				
(<i>0kl</i>) ($\overline{k}l0$) (a /4)	a $n\hat{\mathbf{a}} - m\hat{\mathbf{b}}$ $p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$ a $n\hat{\mathbf{a}} + m\hat{\mathbf{b}}$ $-p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$	<i>Pm11</i>	sd	<i>pm11</i> L11
$\hat{\mathbf{a}} = (\mathbf{b} - \mathbf{c})/2$ $\hat{\mathbf{b}} = (\mathbf{b} + \mathbf{c})/2$ <i>k</i> even, <i>l</i> odd or <i>k</i> odd, <i>l</i> even $\Rightarrow n = k + l, m = k - l$ <i>k, l</i> odd $\Rightarrow n = (k + l)/2, m = (k - l)/2$				
(<i>n0m</i>) ($n0\overline{m}$)	b <i>nc - ma</i> <i>pc + qa</i> b <i>nc + ma</i> $-pc + qa$ <i>n</i> odd <i>m</i> even <i>p</i> even <i>q</i> odd <i>n</i> even <i>m</i> odd <i>p</i> odd <i>q</i> even <i>n</i> even <i>m</i> odd <i>p</i> odd <i>q</i> odd <i>n</i> odd <i>m</i> odd <i>p</i> even <i>q</i> odd <i>n</i> odd <i>m</i> odd <i>p</i> odd <i>q</i> even <i>n</i> odd <i>m</i> even <i>p</i> odd <i>q</i> odd	<i>Cc11</i>	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$ L01
		<i>Bb11</i>	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	<i>pb11</i> L12
		<i>Ib11</i>	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	<i>pb11</i> L12
		<i>Ic11</i>	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	<i>pb11</i> (a' /4) L12
		<i>Bn11</i>	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	<i>pb11</i> (a' /4) L12
		<i>Cn11</i>	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$ L01

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group a' b' d	Scanning group \mathcal{H}	Linear orbit sd	Sectional layer group $\mathcal{L}(\mathbf{sd})$
$(mn0)$ $(\bar{m}n0)$ $(\mathbf{a}/4)$	c $na - mb$ $pa + qb$ c $na + mb$ $-pa + qb$ <i>n</i> odd <i>p</i> even <i>q</i> odd <i>n</i> even <i>m</i> odd <i>p</i> odd <i>n</i> odd <i>p</i> odd	<i>B</i> 211	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111$ L09 $p1$ L01
		<i>C</i> 211	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$ L10 $\hat{p}1$ L01
		<i>I</i> 211	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111 (\mathbf{b}'/4)$ L09 $p1$ L01
		<i>P</i> <i>n</i> 11	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$p1$ L01
		<i>P</i> <i>c</i> 11	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$p1$ L01
		<i>P</i> <i>b</i> 11	$s\mathbf{d}$	$pb11$ L12
$\hat{\mathbf{a}} = (\mathbf{b} - \mathbf{c})/2$ $\hat{\mathbf{b}} = (\mathbf{b} + \mathbf{c})/2$		k even, l odd or k odd, l even $\Rightarrow n = k + l, m = k - l$ k, l odd $\Rightarrow n = (k + l)/2, m = (k - l)/2$		
$(n0m)$ $(n0\bar{m})$ $(\mathbf{b}/4)$	b $nc - ma$ $pc + qa$ b $nc + ma$ $-pc + qa$ <i>n</i> odd <i>m</i> even <i>p</i> even <i>q</i> odd <i>n</i> even <i>m</i> odd <i>p</i> odd <i>q</i> even <i>n</i> even <i>m</i> odd <i>p</i> odd <i>q</i> odd <i>n</i> odd <i>m</i> odd <i>p</i> even <i>q</i> odd <i>n</i> odd <i>m</i> odd <i>p</i> odd <i>q</i> even <i>n</i> odd <i>m</i> even <i>p</i> odd <i>q</i> odd	<i>C</i> <i>c</i> 11	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$ L01
		<i>B</i> <i>b</i> 11	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11$ L12
		<i>I</i> <i>b</i> 11	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11$ L12
		<i>I</i> <i>c</i> 11	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$ L12
		<i>B</i> <i>n</i> 11	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$ L12
		<i>C</i> <i>n</i> 11	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$ L01

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$
$(hk0)$ $(\bar{h}k0)$	\mathbf{c} $n\hat{\mathbf{a}} - m\hat{\mathbf{b}}$ $p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$ \mathbf{c} $n\hat{\mathbf{a}} + m\hat{\mathbf{b}}$ $-p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$	$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08
	n odd m even p even q odd or n even m odd p odd q even p odd q odd			$p2_111$ ($\mathbf{b}'/4$) L09 $p1$ L01
	n odd m odd			$p211$ L08 $p2_111$ L09 $p1$ L01
		$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111$ L09 $p1$ L01
		$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$ L10 $\hat{p}1$ L01
$\hat{\mathbf{a}} = (\mathbf{a} - \mathbf{b})/2$ $\hat{\mathbf{b}} = (\mathbf{a} + \mathbf{b})/2$		h even, k odd or h odd, k even $\Rightarrow n = h + k, m = h - k$ h, k odd $\Rightarrow n = (h + k)/2, m = (h - k)/2$		
$(0hk)$ $(0\bar{h}k)$	\mathbf{a} $n\hat{\mathbf{a}} - m\hat{\mathbf{b}}$ $p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$ \mathbf{a} $n\hat{\mathbf{a}} + m\hat{\mathbf{b}}$ $-p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$	$Im11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pm11$ L11
	n odd m even p even q odd or n even m odd p odd q even p odd q odd			$pm11$ L11
	n odd m odd			$cm11$ L13
		$Bm11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pm11$ L11
		$Cm11$	$s\mathbf{d}$	$cm11$ L13
$\hat{\mathbf{a}} = (\mathbf{b} - \mathbf{c})/2$ $\hat{\mathbf{b}} = (\mathbf{b} + \mathbf{c})/2$		h even, k odd or h odd, k even $\Rightarrow n = h + k, m = h - k$ h, k odd $\Rightarrow n = (h + k)/2, m = (h - k)/2$		
$(k0h)$ $(k0\bar{h})$	\mathbf{b} $n\hat{\mathbf{a}} - m\hat{\mathbf{b}}$ $p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$ \mathbf{b} $n\hat{\mathbf{a}} + m\hat{\mathbf{b}}$ $-p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$	$Im11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pm11$ L11
	n odd m even p even q odd or n even m odd p odd q even p odd q odd			$pm11$ L11
	n odd m odd			$cm11$ L13
		$Bm11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pm11$ L11
		$Cm11$	$s\mathbf{d}$	$cm11$ L13
$\hat{\mathbf{a}} = (\mathbf{c} - \mathbf{a})/2$ $\hat{\mathbf{b}} = (\mathbf{c} + \mathbf{a})/2$		h even, k odd or h odd, k even $\Rightarrow n = h + k, m = h - k$ h, k odd $\Rightarrow n = (h + k)/2, m = (h - k)/2$		

$$\mathcal{G} = Fdd2$$

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group a' b' d	Scanning group \mathcal{H}	Linear orbit sd	Sectional layer group $\mathcal{L}(\mathbf{sd})$
<i>(hk0)</i> <i>($\bar{h}k0$)</i>	c $n\hat{\mathbf{a}} - m\hat{\mathbf{b}}$ $p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$ c $n\hat{\mathbf{a}} + m\hat{\mathbf{b}}$ $-p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$	<i>I211</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p211</i> L08
	<i>n</i> odd <i>m</i> even <i>p</i> even <i>q</i> odd or <i>n</i> even <i>m</i> odd <i>p</i> odd <i>q</i> even <i>p</i> odd <i>q</i> odd			<i>p2₁11</i> (b' /4) L09 <i>p1</i> L01
	<i>n</i> odd <i>m</i> odd			<i>B211</i> L08 <i>p2₁11</i> L09 <i>p1</i> L01
		<i>C211</i>	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	<i>c211</i> L10 $\hat{p}1$ L01
$\hat{\mathbf{a}} = (\mathbf{a} - \mathbf{b})/2$ $\hat{\mathbf{b}} = (\mathbf{a} + \mathbf{b})/2$		<i>h</i> even, <i>k</i> odd or <i>h</i> odd, <i>k</i> even $\Rightarrow n = h + k, m = h - k$ <i>h, k</i> odd $\Rightarrow n = (h + k)/2, m = (h - k)/2$		
<i>(0hk)</i> <i>(0$\bar{h}k$)</i> (a /8)	a $n\hat{\mathbf{a}} - m\hat{\mathbf{b}}$ $p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$ a $n\hat{\mathbf{a}} + m\hat{\mathbf{b}}$ $-p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$	<i>Ic11</i>	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	<i>pb11</i> (a' /4) L12
	<i>n</i> odd <i>m</i> even <i>p</i> even <i>q</i> odd <i>n</i> even <i>m</i> odd <i>p</i> odd <i>q</i> even			<i>Ib11</i> L12
	<i>n</i> even <i>m</i> odd <i>p</i> odd <i>q</i> odd			<i>Bb11</i> L12
	<i>n</i> even <i>m</i> odd <i>p</i> odd <i>q</i> odd			<i>Cc11</i> L01
	<i>n</i> odd <i>m</i> odd <i>p</i> even <i>q</i> odd			<i>Cn11</i> L01
	<i>n</i> odd <i>m</i> odd <i>p</i> odd <i>q</i> even			
	<i>n</i> odd <i>m</i> even <i>p</i> odd <i>q</i> odd			<i>Bn11</i> L12
$\hat{\mathbf{a}} = (\mathbf{b} - \mathbf{c})/2$ $\hat{\mathbf{b}} = (\mathbf{b} + \mathbf{c})/2$		<i>h</i> even, <i>k</i> odd or <i>h</i> odd, <i>k</i> even $\Rightarrow n = h + k, m = h - k$ <i>h, k</i> odd $\Rightarrow n = (h + k)/2, m = (h - k)/2$		

Continued

$(k0h)$	\mathbf{b}	$n\hat{\mathbf{a}} - m\hat{\mathbf{b}}$	$p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$			
$(k0\bar{h})$	\mathbf{b}	$n\hat{\mathbf{a}} + m\hat{\mathbf{b}}$	$-p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$			
$(\mathbf{a}/8)$		n odd	m even	$Ic11$	$[\mathbf{sd}, (s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$ L12
		p even	q odd			
		n even	m odd	$Ib11$	$[\mathbf{sd}, (s + \frac{1}{2})\mathbf{d}]$	$pb11$ L12
		p odd	q even			
		n even	m odd	$Bb11$	$[\mathbf{sd}, (s + \frac{1}{2})\mathbf{d}]$	$pb11$ L12
		p odd	q odd			
		n odd	m odd	$Cc11$	$[\mathbf{sd}, (s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$ L01
		p even	q odd			
		n odd	m odd	$Cn11$	$[\mathbf{sd}, (s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$ L01
		p odd	q even			
		n odd	m even	$Bn11$	$[\mathbf{sd}, (s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$ L12
		p odd	q odd			
		$\hat{\mathbf{a}} = (\mathbf{c} - \mathbf{a})/2$	h even, k odd or h odd, k even $\Rightarrow n = h + k, m = h - k$			
		$\hat{\mathbf{b}} = (\mathbf{c} + \mathbf{a})/2$	h, k odd $\Rightarrow n = (h + k)/2, m = (h - k)/2$			

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group a' b' d	Scanning group \mathcal{H}	Linear orbit sd	Sectional layer group $\mathcal{L}(\mathbf{sd})$	
<i>(mn0)</i> <i>($\overline{m}n0$)</i>	c <i>na - mb</i> <i>pa + qb</i> c <i>na + mb</i> <i>-pa + qb</i> <i>n</i> odd <i>m</i> even <i>p</i> even <i>q</i> odd or <i>n</i> even <i>m</i> odd <i>p</i> odd <i>q</i> even <i>p</i> odd <i>q</i> odd	<i>I</i> 211	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p</i> 211 L08 <i>p</i> 2 ₁ 11 (b' /4) L09 <i>p</i> 1 L01	
	<i>n</i> odd <i>m</i> odd			<i>B</i> 211	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$ <i>p</i> 211 L08 <i>p</i> 2 ₁ 11 L09 <i>p</i> 1 L01
				<i>C</i> 211	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$ <i>c</i> 211 L10 $\widehat{p}1$ L01
<i>(0mn)</i> <i>(0$\overline{m}n$)</i>	a <i>nb - mc</i> <i>pb + qc</i> a <i>nb + mc</i> <i>-pb + qc</i> <i>n</i> odd <i>m</i> even <i>p</i> even <i>q</i> odd or <i>n</i> even <i>m</i> odd <i>p</i> odd <i>q</i> even <i>p</i> odd <i>q</i> odd <i>n</i> odd <i>m</i> odd	<i>Im</i> 11	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	<i>pm</i> 11 L11	
				<i>Bm</i> 11 L11 $[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	
				<i>Cm</i> 11 L13 sd	
<i>(n0m)</i> <i>(n0\overline{m})</i>	b <i>nc - ma</i> <i>pc + qa</i> b <i>nc + ma</i> <i>-pc + qa</i> <i>n</i> odd <i>m</i> even <i>p</i> even <i>q</i> odd or <i>n</i> even <i>m</i> odd <i>p</i> odd <i>q</i> even <i>p</i> odd <i>q</i> odd <i>n</i> odd <i>m</i> odd	<i>Im</i> 11	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	<i>pm</i> 11 L11	
				<i>Bm</i> 11 L11 $[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	
				<i>Cm</i> 11 L13 sd	

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$
$(mn0)$ $(\overline{m}n0)$	\mathbf{c} $n\mathbf{a} - m\mathbf{b}$ $p\mathbf{a} + q\mathbf{b}$	$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08
	\mathbf{c} $n\mathbf{a} + m\mathbf{b}$ $-p\mathbf{a} + q\mathbf{b}$			$p2_111$ ($\mathbf{b}'/4$) L09
	n odd m even			$p1$ L01
	p even q odd			
	or			
	n even m odd			
	p odd q even			
	p odd q odd			
	n odd m odd			
$(0mn)$ $(0\overline{m}n)$	\mathbf{a} $n\mathbf{b} - m\mathbf{c}$ $p\mathbf{b} + q\mathbf{c}$	$Ic11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11$ ($\mathbf{a}'/4$) L12
	\mathbf{a} $n\mathbf{b} + m\mathbf{c}$ $-p\mathbf{b} + q\mathbf{c}$			$pb11$ L12
	n odd m even			
	p even q odd			
	n even m odd			
	p odd q even			
	n even m odd			
	p odd q odd			
	n odd m odd			
$(n0m)$ $(n0\overline{m})$	\mathbf{b} $n\mathbf{c} - m\mathbf{a}$ $p\mathbf{c} + q\mathbf{a}$	$Ib11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11$ L12
	\mathbf{b} $n\mathbf{c} + m\mathbf{a}$ $-p\mathbf{c} + q\mathbf{a}$			$pb11$ ($\mathbf{a}'/4$) L12
	n odd m even			
	p even q odd			
	n even m odd			
	p odd q even			
	n even m odd			
	p odd q odd			
	n odd m odd			
$(n0m)$ $(n0\overline{m})$	\mathbf{b} $n\mathbf{c} - m\mathbf{a}$ $p\mathbf{c} + q\mathbf{a}$	$Ic11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11$ ($\mathbf{a}'/4$) L12
	\mathbf{b} $n\mathbf{c} + m\mathbf{a}$ $-p\mathbf{c} + q\mathbf{a}$			$pb11$ ($\mathbf{a}'/4$) L12
	n odd m even			
	p even q odd			
	n even m odd			
	p odd q even			
	n even m odd			
	p odd q odd			
	n odd m odd			
$(n0m)$ $(n0\overline{m})$	\mathbf{b} $n\mathbf{c} - m\mathbf{a}$ $p\mathbf{c} + q\mathbf{a}$	$Bn11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11$ ($\mathbf{a}'/4$) L12
	\mathbf{b} $n\mathbf{c} + m\mathbf{a}$ $-p\mathbf{c} + q\mathbf{a}$			$pb11$ L12
	n odd m even			
	p even q odd			
	n even m odd			
	p odd q even			
	n even m odd			
	p odd q odd			
	n odd m odd			
$(n0m)$ $(n0\overline{m})$	\mathbf{b} $n\mathbf{c} - m\mathbf{a}$ $p\mathbf{c} + q\mathbf{a}$	$Cc11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}1$ L01
	\mathbf{b} $n\mathbf{c} + m\mathbf{a}$ $-p\mathbf{c} + q\mathbf{a}$			$\widehat{p}1$ L01
	n odd m even			
	p even q odd			
	n even m odd			
	p odd q even			
	n even m odd			
	p odd q odd			
	n odd m odd			
$(n0m)$ $(n0\overline{m})$	\mathbf{b} $n\mathbf{c} - m\mathbf{a}$ $p\mathbf{c} + q\mathbf{a}$	$Bb11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11$ L12
	\mathbf{b} $n\mathbf{c} + m\mathbf{a}$ $-p\mathbf{c} + q\mathbf{a}$			$pb11$ L12
	n odd m even			
	p even q odd			
	n even m odd			
	p odd q even			
	n even m odd			
	p odd q odd			
	n odd m odd			

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$
$(mn0)$ $(\overline{m}n0)$	\mathbf{c} $n\mathbf{a} - m\mathbf{b}$ $p\mathbf{a} + q\mathbf{b}$	$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08
	\mathbf{c} $n\mathbf{a} + m\mathbf{b}$ $-p\mathbf{a} + q\mathbf{b}$			$p2_111$ ($\mathbf{b}'/4$) L09
	n odd m even p even q odd or n even m odd p odd q even p odd q odd			$p1$ L01
	n odd m odd	$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08
				$p2_111$ L09
				$p1$ L01
n odd m odd	$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$ L10	
			$\widehat{p}1$ L01	
$(0mn)$ $(0\overline{m}n)$ $(\mathbf{a}/4)$	\mathbf{a} $n\mathbf{b} - m\mathbf{c}$ $p\mathbf{b} + q\mathbf{c}$	$Im11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pm11$ L11
	\mathbf{a} $n\mathbf{b} + m\mathbf{c}$ $-p\mathbf{b} + q\mathbf{c}$			
	n odd m even p even q odd or n even m odd p odd q even p odd q odd n odd m odd			
	n odd m odd	$Bm11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pm11$ L11
	$Cm11$	$s\mathbf{d}$	$cm11$ L13	
$(n0m)$ $(n0\overline{m})$	\mathbf{b} $n\mathbf{c} - m\mathbf{a}$ $p\mathbf{c} + q\mathbf{a}$	$Ic11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11$ ($\mathbf{a}'/4$) L12
	\mathbf{b} $n\mathbf{c} + m\mathbf{a}$ $-p\mathbf{c} + q\mathbf{a}$			
	n odd m even p even q odd n even m odd p odd q even n even m odd p odd q odd n odd m odd p even q odd n odd m odd p odd q even n odd m even p odd q odd	$Ib11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11$ L12
		$Bb11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11$ L12
		$Cc11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}1$ L01
		$Cn11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}1$ L01
		$Bn11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11$ ($\mathbf{a}'/4$) L12

$$\mathcal{G} = P \begin{matrix} 2 & 2 & 2 \\ m & m & m \end{matrix}$$

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
$(mn0)$ $(\bar{m}n0)$	\mathbf{c} $n\mathbf{a} - m\mathbf{b}$ $p\mathbf{a} + q\mathbf{b}$ \mathbf{c} $n\mathbf{a} + m\mathbf{b}$ $-p\mathbf{a} + q\mathbf{b}$	$P2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2/m11$ $pm11$	L14 L11
$(0mn)$ $(0\bar{m}n)$	\mathbf{a} $n\mathbf{b} - m\mathbf{c}$ $p\mathbf{b} + q\mathbf{c}$ \mathbf{a} $n\mathbf{b} + m\mathbf{c}$ $-p\mathbf{b} + q\mathbf{c}$	$P2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2/m11$ $pm11$	L14 L11
$(n0m)$ $(n0\bar{m})$	\mathbf{b} $nc - ma$ $pc + qa$ \mathbf{b} $nc + ma$ $-pc + qa$	$P2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2/m11$ $pm11$	L14 L11

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$
$(mn0)$ $(\bar{m}n0)$ [[$\mathbf{a} + \mathbf{b} + \mathbf{c}$]/4]	\mathbf{c} $n\mathbf{a} - m\mathbf{b}$ $p\mathbf{a} + q\mathbf{b}$	$P2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ L02
	\mathbf{c} $n\mathbf{a} + m\mathbf{b}$ $-p\mathbf{a} + q\mathbf{b}$			$p211$ ($\mathbf{b}'/4$) L08
	n odd m even p even q odd			$p1$ L01
	or n even m odd p odd q even p odd q odd			
	n odd m odd	$P2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ L02 $p211$ L08 $p1$ L01
	n odd m odd	$P2/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2/b11$ L16 $pb11$ L12
$(0mn)$ $(0\bar{m}n)$ [[$\mathbf{a} + \mathbf{b} + \mathbf{c}$]/4]	\mathbf{a} $n\mathbf{b} - m\mathbf{c}$ $p\mathbf{b} + q\mathbf{c}$	$P2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ L02
	\mathbf{a} $n\mathbf{b} + m\mathbf{c}$ $-p\mathbf{b} + q\mathbf{c}$			$p211$ ($\mathbf{b}'/4$) L08
	n odd m even p even q odd			$p1$ L01
	or n even m odd p odd q even p odd q odd			
	n odd m odd	$P2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ L02 $p211$ L08 $p1$ L01
	n odd m odd	$P2/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2/b11$ L16 $pb11$ L12
$(n0m)$ $(n0\bar{m})$ [[$\mathbf{a} + \mathbf{b} + \mathbf{c}$]/4]	\mathbf{b} $nc - ma$ $pc + qa$	$P2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ L02
	\mathbf{b} $nc + ma$ $-pc + qa$			$p211$ ($\mathbf{b}'/4$) L08
	n odd m even p even q odd			$p1$ L01
	or n even m odd p odd q even p odd q odd			
	n odd m odd	$P2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ L02 $p211$ L08 $p1$ L01
	n odd m odd	$P2/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2/b11$ L16 $pb11$ L12

Continued

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$
$(mn0)$ $(\bar{m}n0)$	\mathbf{c} $n\mathbf{a} - m\mathbf{b}$ $p\mathbf{a} + q\mathbf{b}$	$P2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ L02
	\mathbf{c} $n\mathbf{a} + m\mathbf{b}$ $-\mathbf{p}\mathbf{a} + q\mathbf{b}$			$p211 (\mathbf{b}'/4)$ L08
	n odd m even			$p1$ L01
	p even q odd			
	or			
	n even m odd			
p odd q even				
p odd q odd		$P2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ L02 $p211$ L08 $p1$ L01
n odd m odd		$P2/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2/b11$ L16 $pb11$ L12
$(0mn)$ $(0\bar{m}n)$	\mathbf{a} $n\mathbf{b} - m\mathbf{c}$ $p\mathbf{b} + q\mathbf{c}$	$P2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ L02
	\mathbf{a} $n\mathbf{b} + m\mathbf{c}$ $-\mathbf{p}\mathbf{b} + q\mathbf{c}$			$p211 (\mathbf{b}'/4)$ L08
	n odd m even			$p1$ L01
	p even q odd			
	or			
	n even m odd			
p odd q even				
p odd q odd		$P2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ L02 $p211$ L08 $p1$ L01
n odd m odd		$P2/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2/b11$ L16 $pb11$ L12
$(n0m)$ $(n0\bar{m})$	\mathbf{b} $n\mathbf{c} - m\mathbf{a}$ $p\mathbf{c} + q\mathbf{a}$	$P2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ L02
	\mathbf{b} $n\mathbf{c} + m\mathbf{a}$ $-\mathbf{p}\mathbf{c} + q\mathbf{a}$			$p211 (\mathbf{b}'/4)$ L08
	n odd m even			$p1$ L01
	p even q odd			
	or			
	n even m odd			
p odd q even				
p odd q odd		$P2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ L02 $p211$ L08 $p1$ L01
n odd m odd		$P2/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2/b11$ L16 $pb11$ L12

$$\mathcal{G} = P_{c c m}^2 2 2$$

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group a' b' d	Scanning group \mathcal{H}	Linear orbit sd	Sectional layer group $\mathcal{L}(\mathbf{sd})$	
(<i>mn0</i>) ($\overline{m}n0$)	c <i>na</i> - <i>mb</i> <i>pa</i> + <i>qb</i> c <i>na</i> + <i>mb</i> - <i>pa</i> + <i>qb</i>	<i>P2/m11</i>	0d , $\frac{1}{2}\mathbf{d}$ [sd , - sd]	<i>p2/m11</i> <i>pm11</i>	L14 L11
(<i>0mn</i>) ($0\overline{m}n$)	a <i>nb</i> - <i>mc</i> <i>pb</i> + <i>qc</i> a <i>nb</i> + <i>mc</i> - <i>pb</i> + <i>qc</i> <i>p</i> even <i>q</i> odd <i>n</i> even <i>m</i> odd <i>p</i> odd <i>n</i> odd <i>p</i> odd	<i>P2/c11</i> <i>P2/b11</i> <i>P2/n11</i>	[0d , $\frac{1}{2}\mathbf{d}$] [$\frac{1}{4}\mathbf{d}$, $\frac{3}{4}\mathbf{d}$] [$\pm\mathbf{sd}$, $(\pm s + \frac{1}{2})\mathbf{d}$] 0d , $\frac{1}{2}\mathbf{d}$ [sd , - sd] [0d , $\frac{1}{2}\mathbf{d}$] [$\frac{1}{4}\mathbf{d}$, $\frac{3}{4}\mathbf{d}$] [$\pm\mathbf{sd}$, $(\pm s + \frac{1}{2})\mathbf{d}$]	$p\overline{1}$ <i>p211</i> <i>p1</i> <i>p2/b11</i> <i>pb11</i> $p\overline{1}$ <i>p211</i> (b' /4) <i>p1</i>	L02 L08 L01 L16 L12 L02 L08 L01
(<i>n0m</i>) ($n0\overline{m}$)	b <i>nc</i> - <i>ma</i> <i>pc</i> + <i>qa</i> b <i>nc</i> + <i>ma</i> - <i>pc</i> + <i>qa</i> <i>n</i> odd <i>m</i> even <i>q</i> odd <i>m</i> odd <i>q</i> odd <i>m</i> odd <i>p</i> odd <i>q</i> even	<i>P2/b11</i> <i>P2/n11</i> <i>P2/c11</i>	0d , $\frac{1}{2}\mathbf{d}$ [sd , - sd] [0d , $\frac{1}{2}\mathbf{d}$] [$\frac{1}{4}\mathbf{d}$, $\frac{3}{4}\mathbf{d}$] [$\pm\mathbf{sd}$, $(\pm s + \frac{1}{2})\mathbf{d}$] [0d , $\frac{1}{2}\mathbf{d}$] [$\frac{1}{4}\mathbf{d}$, $\frac{3}{4}\mathbf{d}$] [$\pm\mathbf{sd}$, $(\pm s + \frac{1}{2})\mathbf{d}$]	<i>p2/b11</i> <i>pb11</i> $p\overline{1}$ <i>p211</i> (b' /4) <i>p1</i> $p\overline{1}$ <i>p211</i> <i>p1</i>	L16 L12 L02 L08 L01 L02 L08 L01

$$\mathcal{G} = P_{ba n}^2 \frac{2}{2} \frac{2}{2} \text{ origin } 1$$

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group a' b' d	Scanning group \mathcal{H}	Linear orbit sd	Sectional layer group $\mathcal{L}(\mathbf{sd})$			
$(mn0)$ $(\bar{m}n0)$ $[(\mathbf{a} + \mathbf{b})/4]$	c $na - mb$ $pa + qb$ c $na + mb$ $-pa + qb$ <i>n</i> odd <i>m</i> even <i>p</i> even <i>q</i> odd or <i>n</i> even <i>m</i> odd <i>p</i> odd <i>q</i> even <i>p</i> odd <i>q</i> odd <i>n</i> odd <i>m</i> odd	$P2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p211 (\mathbf{b}'/4)$ $p1$	L02 L08 L01		
		$P2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p211$ $p1$	L02 L08 L01		
		$P2/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2/b11$ $pb11$	L16 L12		
		$(0mn)$ $(0\bar{m}n)$ $[(\mathbf{a} + \mathbf{b})/4]$	a $nb - mc$ $pb + qc$ a $nb + mc$ $-pb + qc$ <i>n</i> odd <i>m</i> even <i>q</i> odd <i>m</i> odd <i>q</i> odd <i>m</i> odd <i>p</i> odd <i>q</i> even	$P2/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2/b11$ $pb11$	L16 L12
				$P2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p211 (\mathbf{b}'/4)$ $p1$	L02 L08 L01
				$P2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p211$ $p1$	L02 L08 L01
$(n0m)$ $(n0\bar{m})$ $[(\mathbf{a} + \mathbf{b})/4]$	b $nc - ma$ $pc + qa$ b $nc + ma$ $-pc + qa$ <i>n</i> odd <i>p</i> even <i>q</i> odd <i>n</i> even <i>m</i> odd <i>p</i> odd <i>n</i> odd <i>p</i> odd	$P2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p211$ $p1$	L02 L08 L01		
		$P2/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2/b11$ $pb11$	L16 L12		
		$P2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p211 (\mathbf{b}'/4)$ $p1$	L02 L08 L01		

Continued

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group a' b' d	Scanning group \mathcal{H}	Linear orbit sd	Sectional layer group $\mathcal{L}(\mathbf{sd})$		
(mn0) ($\bar{m}n0$)	c <i>na - mb</i> <i>pa + qb</i>	<i>P2/n11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ <i>p211</i> (b' /4) <i>p1</i>	L02	
	c <i>na + mb</i> $-pa + qb$				L08	
	<i>n</i> odd <i>m</i> even				L01	
	<i>p</i> even <i>q</i> odd					
	or					
	<i>n</i> even <i>m</i> odd					
<i>p</i> odd <i>q</i> even						
<i>p</i> odd <i>q</i> odd						
	<i>P2/c11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ <i>p211</i> <i>p1</i>	L02 L08 L01		
	<i>P2/b11</i>	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	<i>p2/b11</i> <i>pb11</i>	L16 L12		
(0mn) ($0\bar{m}n$)	a <i>nb - mc</i> <i>pb + qc</i>	<i>P2/b11</i>	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	<i>p2/b11</i> <i>pb11</i>	L16	
	a <i>nb + mc</i> $-pb + qc$				L12	
	<i>n</i> odd <i>m</i> even				$p\bar{1}$	L02
	<i>q</i> odd				<i>p211</i> (b' /4)	L08
	<i>m</i> odd				<i>p1</i>	L01
	<i>q</i> odd					
	<i>P2/n11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ <i>p211</i> (b' /4) <i>p1</i>	L02 L08 L01		
	<i>P2/c11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ <i>p211</i> <i>p1</i>	L02 L08 L01		
(n0m) ($n0\bar{m}$)	b <i>nc - ma</i> <i>pc + qa</i>	<i>P2/c11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ <i>p211</i> <i>p1</i>	L02	
	b <i>nc + ma</i> $-pc + qa$				L08	
	<i>n</i> odd				L01	
	<i>p</i> even <i>q</i> odd					
	<i>n</i> even <i>m</i> odd					
	<i>p</i> odd <i>q</i> odd					
	<i>P2/b11</i>	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	<i>p2/b11</i> <i>pb11</i>	L16 L12		
	<i>P2/n11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ <i>p211</i> (b' /4) <i>p1</i>	L02 L08 L01		

$$\mathcal{G} = P_m^2 \frac{2}{m} \frac{2}{m} \frac{2}{a}$$

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group a' b' d	Scanning group \mathcal{H}	Linear orbit sd	Sectional layer group $\mathcal{L}(\mathbf{sd})$	
(mn0) ($\bar{m}n0$)	c <i>na</i> - <i>mb</i> <i>pa</i> + <i>qb</i>	<i>P2/b11</i>	0d , $\frac{1}{2}\mathbf{d}$ [sd , - sd]	<i>p2/b11</i> L16	
	c <i>na</i> + <i>mb</i> - <i>pa</i> + <i>qb</i>			<i>pb11</i> L12	
	<i>n</i> odd <i>m</i> even <i>q</i> odd <i>m</i> odd <i>q</i> odd			<i>P2/n11</i>	[0d , $\frac{1}{2}\mathbf{d}$] [$\frac{1}{4}\mathbf{d}$, $\frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}$, $(\pm s + \frac{1}{2})\mathbf{d}$]
	<i>p</i> odd <i>m</i> odd <i>q</i> even	<i>P2/c11</i>	[0d , $\frac{1}{2}\mathbf{d}$] [$\frac{1}{4}\mathbf{d}$, $\frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}$, $(\pm s + \frac{1}{2})\mathbf{d}$]	$p\bar{1}$ L02 <i>p211</i> L08 <i>p1</i> L01	
	(0mn) ($0\bar{m}n$)	a <i>nb</i> - <i>mc</i> <i>pb</i> + <i>qc</i> a <i>nb</i> + <i>mc</i> - <i>pb</i> + <i>qc</i>	<i>P2₁/m11</i>	0d , $\frac{1}{2}\mathbf{d}$ [sd , - sd]	<i>p2₁/m11</i> L15 <i>pm11</i> (a' /4) L11
	(n0m) ($n0\bar{m}$)	b <i>nc</i> - <i>ma</i> <i>pc</i> + <i>qa</i> b <i>nc</i> + <i>ma</i> - <i>pc</i> + <i>qa</i>	<i>P2/m11</i>	0d , $\frac{1}{2}\mathbf{d}$ [sd , - sd]	<i>p2/m11</i> L14 <i>pm11</i> L11

$$\mathcal{G} = P_n^2 \frac{2_1}{n} \frac{2}{a}$$

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$
$(mn0)$ $(\bar{m}n0)$	\mathbf{c} $na - m\mathbf{b}$ $pa + q\mathbf{b}$	$P2/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2/b11$ L16
	\mathbf{c} $na + m\mathbf{b}$ $-pa + q\mathbf{b}$			$pb11$ L12
	n odd m even q odd			$p\bar{1}$ L02
	m odd q odd	$P2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211 (\mathbf{b}'/4)$ L08 $p1$ L01
	m odd q even	$P2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ L02 $p211$ L08 $p1$ L01
	p odd			
$(0mn)$ $(0\bar{m}n)$	\mathbf{a} $n\mathbf{b} - m\mathbf{c}$ $p\mathbf{b} + q\mathbf{c}$	$P2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ L02
	\mathbf{a} $n\mathbf{b} + m\mathbf{c}$ $-p\mathbf{b} + q\mathbf{c}$			$p211 (\mathbf{b}'/4)$ L08
	n odd m even p even q odd			$p1$ L01
	or			
	n even m odd p odd q even	$P2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ L02 $p211$ L08 $p1$ L01
	p odd q odd			
$(n0m)$ $(n0\bar{m})$	\mathbf{b} $nc - ma$ $pc + qa$	$P2_1/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ L02
	\mathbf{b} $nc + ma$ $-pc + qa$			$p2_111 (\mathbf{b}'/4)$ L09
	n odd m even p even q odd			$p1$ L01
	or			
	n even m odd p odd q even	$P2_1/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ L02 $p2_111$ L09 $p1$ L01
	p odd q odd			
n odd m odd		$P2_1/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2_1/b11$ L17 $pb11 (\mathbf{a}'/4)$ L12

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$
$(mn0)$ $(\bar{m}n0)$	\mathbf{c} $na - mb$ $pa + qb$ \mathbf{c} $na + mb$ $-pa + qb$ n odd m even q odd m odd q odd m odd q even	$P2_1/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2_1/b11$ L17 $pb11 (\mathbf{a}'/4)$ L12
		$P2_1/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ L02 $p2_111 (\mathbf{b}'/4)$ L09 $p1$ L01
		$P2_1/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ L02 $p2_111$ L09 $p1$ L01
		$P2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2/m11$ L14 $pm11$ L11
		$P2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ L02 $p211 (\mathbf{b}'/4)$ L08 $p1$ L01
		$P2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ L02 $p211$ L08 $p1$ L01
$(n0m)$ $(n0\bar{m})$	\mathbf{b} $nc - ma$ $pc + qa$ \mathbf{b} $nc + ma$ $-pc + qa$ n odd m even p even q odd or n even m odd p odd q even p odd q odd n odd m odd	$P2/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2/b11$ L16 $pb11$ L12

$$\mathcal{G} = P_{c c a}^{2_1 2_2 2}$$

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group a' b' d	Scanning group \mathcal{H}	Linear orbit sd	Sectional layer group $\mathcal{L}(\mathbf{sd})$	
(mn0) ($\overline{m}n0$)	c <i>na</i> – <i>mb</i> <i>pa</i> + <i>qb</i> c <i>na</i> + <i>mb</i> – <i>pa</i> + <i>qb</i> <i>n</i> odd <i>m</i> even <i>q</i> odd <i>m</i> odd <i>q</i> odd	<i>P2/b11</i>	0d , $\frac{1}{2}\mathbf{d}$ [sd , – sd]	<i>p2/b11</i> L16 <i>pb11</i> L12	
		<i>P2/n11</i>	[0d , $\frac{1}{2}\mathbf{d}$] [$\frac{1}{4}\mathbf{d}$, $\frac{3}{4}\mathbf{d}$] [$\pm\mathbf{sd}$, $(\pm s + \frac{1}{2})\mathbf{d}$]	$p\overline{1}$ L02 <i>p211</i> (b' /4) L08 <i>p1</i> L01	
		<i>P2/c11</i>	[0d , $\frac{1}{2}\mathbf{d}$] [$\frac{1}{4}\mathbf{d}$, $\frac{3}{4}\mathbf{d}$] [$\pm\mathbf{sd}$, $(\pm s + \frac{1}{2})\mathbf{d}$]	$p\overline{1}$ L02 <i>p211</i> L08 <i>p1</i> L01	
	<i>n</i> even <i>m</i> odd <i>p</i> odd <i>n</i> odd <i>p</i> odd	a <i>nb</i> – <i>mc</i> <i>pb</i> + <i>qc</i> a <i>nb</i> + <i>mc</i> – <i>pb</i> + <i>qc</i> <i>n</i> odd <i>p</i> even <i>q</i> odd	<i>P2₁/c11</i>	[0d , $\frac{1}{2}\mathbf{d}$] [$\frac{1}{4}\mathbf{d}$, $\frac{3}{4}\mathbf{d}$] [$\pm\mathbf{sd}$, $(\pm s + \frac{1}{2})\mathbf{d}$]	$p\overline{1}$ L02 <i>p2₁11</i> L09 <i>p1</i> L01
			<i>P2₁/b11</i>	0d , $\frac{1}{2}\mathbf{d}$ [sd , – sd]	<i>p2₁/b11</i> L17 <i>pb11</i> (a' /4) L12
			<i>P2₁/n11</i>	[0d , $\frac{1}{2}\mathbf{d}$] [$\frac{1}{4}\mathbf{d}$, $\frac{3}{4}\mathbf{d}$] [$\pm\mathbf{sd}$, $(\pm s + \frac{1}{2})\mathbf{d}$]	$p\overline{1}$ L02 <i>p2₁11</i> (b' /4) L09 <i>p1</i> L01
(n0m) (n0 \overline{m})	b <i>nc</i> – <i>ma</i> <i>pc</i> + <i>qa</i> b <i>nc</i> + <i>ma</i> – <i>pc</i> + <i>qa</i> <i>n</i> odd <i>m</i> even <i>q</i> odd <i>m</i> odd <i>q</i> odd	<i>P2/b11</i>	0d , $\frac{1}{2}\mathbf{d}$ [sd , – sd]	<i>p2/b11</i> L16 <i>pb11</i> L12	
		<i>P2/n11</i>	[0d , $\frac{1}{2}\mathbf{d}$] [$\frac{1}{4}\mathbf{d}$, $\frac{3}{4}\mathbf{d}$] [$\pm\mathbf{sd}$, $(\pm s + \frac{1}{2})\mathbf{d}$]	$p\overline{1}$ L02 <i>p211</i> (b' /4) L08 <i>p1</i> L01	
		<i>P2/c11</i>	[0d , $\frac{1}{2}\mathbf{d}$] [$\frac{1}{4}\mathbf{d}$, $\frac{3}{4}\mathbf{d}$] [$\pm\mathbf{sd}$, $(\pm s + \frac{1}{2})\mathbf{d}$]	$p\overline{1}$ L02 <i>p211</i> L08 <i>p1</i> L01	
	<i>p</i> odd <i>q</i> even	<i>n</i> even <i>m</i> odd <i>p</i> odd <i>n</i> odd <i>p</i> odd	<i>P2₁/c11</i>	[0d , $\frac{1}{2}\mathbf{d}$] [$\frac{1}{4}\mathbf{d}$, $\frac{3}{4}\mathbf{d}$] [$\pm\mathbf{sd}$, $(\pm s + \frac{1}{2})\mathbf{d}$]	$p\overline{1}$ L02 <i>p2₁11</i> L09 <i>p1</i> L01
			<i>P2₁/b11</i>	0d , $\frac{1}{2}\mathbf{d}$ [sd , – sd]	<i>p2₁/b11</i> L17 <i>pb11</i> (a' /4) L12
			<i>P2₁/n11</i>	[0d , $\frac{1}{2}\mathbf{d}$] [$\frac{1}{4}\mathbf{d}$, $\frac{3}{4}\mathbf{d}$] [$\pm\mathbf{sd}$, $(\pm s + \frac{1}{2})\mathbf{d}$]	$p\overline{1}$ L02 <i>p2₁11</i> (b' /4) L09 <i>p1</i> L01

$$\mathcal{G} = P \frac{2_1}{b} \frac{2_1}{a} \frac{2}{m}$$

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group a' b' d	Scanning group \mathcal{H}	Linear orbit sd	Sectional layer group $\mathcal{L}(\mathbf{sd})$	
(<i>mn0</i>) ($\overline{m}n0$)	c <i>na</i> – <i>mb</i> <i>pa</i> + <i>qb</i> c <i>na</i> + <i>mb</i> – <i>pa</i> + <i>qb</i>	<i>P2/m11</i>	0d , $\frac{1}{2}\mathbf{d}$ [sd , – sd]	<i>p2/m11</i> <i>pm11</i>	L14 L11
(<i>0mn</i>) ($0\overline{m}n$)	a <i>nb</i> – <i>mc</i> <i>pb</i> + <i>qc</i> a <i>nb</i> + <i>mc</i> – <i>pb</i> + <i>qc</i> <i>n</i> odd <i>m</i> even <i>q</i> odd <i>m</i> odd <i>q</i> odd <i>p</i> odd <i>q</i> even	<i>P2₁/b11</i> <i>P2₁/n11</i> <i>P2₁/c11</i>	0d , $\frac{1}{2}\mathbf{d}$ [sd , – sd] [0d , $\frac{1}{2}\mathbf{d}$] [$\frac{1}{4}\mathbf{d}$, $\frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}$, ($\pm s + \frac{1}{2}$) \mathbf{d}] [0d , $\frac{1}{2}\mathbf{d}$] [$\frac{1}{4}\mathbf{d}$, $\frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}$, ($\pm s + \frac{1}{2}$) \mathbf{d}]	<i>p2₁/b11</i> <i>pb11</i> (a' /4) $p\overline{1}$ <i>p2₁11</i> (b' /4) <i>p1</i> $p\overline{1}$ <i>p2₁11</i> <i>p1</i>	L17 L12 L02 L09 L01 L02 L09 L01
(<i>n0m</i>) ($n0\overline{m}$)	b <i>nc</i> – <i>ma</i> <i>pc</i> + <i>qa</i> b <i>nc</i> + <i>ma</i> – <i>pc</i> + <i>qa</i> <i>n</i> odd <i>p</i> even <i>q</i> odd <i>n</i> even <i>m</i> odd <i>p</i> odd <i>n</i> odd <i>p</i> odd	<i>P2₁/c11</i> <i>P2₁/b11</i> <i>P2₁/n11</i>	[0d , $\frac{1}{2}\mathbf{d}$] [$\frac{1}{4}\mathbf{d}$, $\frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}$, ($\pm s + \frac{1}{2}$) \mathbf{d}] 0d , $\frac{1}{2}\mathbf{d}$ [sd , – sd] [0d , $\frac{1}{2}\mathbf{d}$] [$\frac{1}{4}\mathbf{d}$, $\frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}$, ($\pm s + \frac{1}{2}$) \mathbf{d}]	$p\overline{1}$ <i>p2₁11</i> <i>p1</i> <i>p2₁/b11</i> <i>pb11</i> (a' /4) $p\overline{1}$ <i>p2₁11</i> (b' /4) <i>p1</i>	L02 L09 L01 L17 L12 L02 L09 L01

$$\mathcal{G} = P_{c \ c \ n}^{2_1 \ 2_1 \ 2}$$

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group a' b' d	Scanning group \mathcal{H}	Linear orbit sd	Sectional layer group $\mathcal{L}(\mathbf{sd})$
<p>(<i>mn0</i>) ($\bar{m}n0$)</p>	<p>c <i>na</i> – <i>mb</i> <i>pa</i> + <i>qb</i> c <i>na</i> + <i>mb</i> –<i>pa</i> + <i>qb</i></p>	<i>P2/n11</i>	<p>$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$</p>	<p>$p\bar{1}$ L02 <i>p211</i> (b'/4) L08 <i>p1</i> L01</p>
	<p><i>n</i> odd <i>m</i> even <i>p</i> even <i>q</i> odd or <i>n</i> even <i>m</i> odd <i>p</i> odd <i>q</i> even <i>p</i> odd <i>q</i> odd</p>			
	<p><i>n</i> odd <i>m</i> odd</p>			
		<i>P2/c11</i>	<p>$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$</p>	<p>$p\bar{1}$ L02 <i>p211</i> L08 <i>p1</i> L01</p>
		<i>P2/b11</i>	<p>$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$</p>	<p><i>p2/b11</i> L16 <i>pb11</i> L12</p>
<p>(<i>0mn</i>) ($0\bar{m}n$)</p>	<p>a <i>nb</i> – <i>mc</i> <i>pb</i> + <i>qc</i> a <i>nb</i> + <i>mc</i> –<i>pb</i> + <i>qc</i></p>	<i>P2₁/c11</i>	<p>$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$</p>	<p>$p\bar{1}$ L02 <i>p2₁11</i> L09 <i>p1</i> L01</p>
	<p><i>n</i> odd <i>p</i> even <i>q</i> odd</p>			
	<p><i>n</i> even <i>m</i> odd <i>p</i> odd <i>n</i> odd <i>p</i> odd</p>			
		<i>P2₁/b11</i>	<p>$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$</p>	<p><i>p2₁/b11</i> L17 <i>pb11</i> (a'/4) L12</p>
		<i>P2₁/n11</i>	<p>$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$</p>	<p>$p\bar{1}$ L02 <i>p2₁11</i> (b'/4) L09 <i>p1</i> L01</p>
<p>(<i>n0m</i>) ($n0\bar{m}$)</p>	<p>b <i>nc</i> – <i>ma</i> <i>pc</i> + <i>qa</i> b <i>nc</i> + <i>ma</i> –<i>pc</i> + <i>qa</i></p>	<i>P2₁/b11</i>	<p>$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$</p>	<p><i>p2₁/b11</i> L17 <i>pb11</i> (a'/4) L12</p>
	<p><i>n</i> odd <i>m</i> even <i>q</i> odd <i>m</i> odd <i>q</i> odd</p>			
	<p><i>p</i> odd <i>m</i> odd <i>q</i> even</p>			
		<i>P2₁/n11</i>	<p>$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$</p>	<p>$p\bar{1}$ L02 <i>p2₁11</i> (b'/4) L09 <i>p1</i> L01</p>
		<i>P2₁/c11</i>	<p>$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$</p>	<p>$p\bar{1}$ L02 <i>p2₁11</i> L09 <i>p1</i> L01</p>

$$\mathcal{G} = P_{\frac{2}{b} \frac{2}{c} \frac{2}{m}}$$

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
$(mn0)$ $(\bar{m}n0)$	\mathbf{c} $n\mathbf{a} - m\mathbf{b}$ $p\mathbf{a} + q\mathbf{b}$ \mathbf{c} $n\mathbf{a} + m\mathbf{b}$ $-p\mathbf{a} + q\mathbf{b}$	$P2_1/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2_1/m11$ $pm11 (\mathbf{a}'/4)$	L15 L11
$(0mn)$ $(0\bar{m}n)$	\mathbf{a} $n\mathbf{b} - m\mathbf{c}$ $p\mathbf{b} + q\mathbf{c}$ \mathbf{a} $n\mathbf{b} + m\mathbf{c}$ $-p\mathbf{b} + q\mathbf{c}$				
	n odd m even q odd	$P2/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2/b11$ $pb11$	L16 L12
	m odd q odd	$P2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p211 (\mathbf{b}'/4)$ $p1$	L02 L08 L01
	m odd q even	$P2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p211$ $p1$	L02 L08 L01
$(n0m)$ $(n0\bar{m})$	\mathbf{b} $nc - ma$ $pc + qa$ \mathbf{b} $nc + ma$ $-pc + qa$				
	n odd m even q odd	$P2_1/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2_1/b11$ $pb11 (\mathbf{a}'/4)$	L17 L12
	m odd q odd	$P2_1/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p2_111 (\mathbf{b}'/4)$ $p1$	L02 L09 L01
	m odd q even	$P2_1/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p2_111$ $p1$	L02 L09 L01

$$\mathcal{G} = P_{m m n}^{2_1 2_1 2} \text{ origin } 1$$

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group a' b' d	Scanning group \mathcal{H}	Linear orbit sd	Sectional layer group $\mathcal{L}(\mathbf{sd})$	
$(mn0)$ $(\bar{m}n0)$ $[(\mathbf{a} + \mathbf{b})/4]$	c $n\mathbf{a} - m\mathbf{b}$ $p\mathbf{a} + q\mathbf{b}$ c $n\mathbf{a} + m\mathbf{b}$ $-p\mathbf{a} + q\mathbf{b}$ <i>n</i> odd <i>m</i> even <i>p</i> even <i>q</i> odd or <i>n</i> even <i>m</i> odd <i>p</i> odd <i>q</i> even <i>p</i> odd <i>q</i> odd	$P2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p211 (\mathbf{b}'/4)$ $p1$	L02 L08 L01
		$P2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p211$ $p1$	L02 L08 L01
		$P2/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2/b11$ $pb11$	L16 L12
		<i>n</i> odd <i>m</i> odd			
$(0mn)$ $(0\bar{m}n)$ $[(\mathbf{a} + \mathbf{b})/4]$	a $n\mathbf{b} - m\mathbf{c}$ $p\mathbf{b} + q\mathbf{c}$ a $n\mathbf{b} + m\mathbf{c}$ $-p\mathbf{b} + q\mathbf{c}$	$P2_1/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2_1/m11$ $pm11 (\mathbf{a}'/4)$	L15 L11
	b $nc - ma$ $pc + qa$ b $nc + ma$ $-pc + qa$	$P2_1/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2_1/m11$ $pm11 (\mathbf{a}'/4)$	L15 L11

Continued

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group a' b' d	Scanning group \mathcal{H}	Linear orbit sd	Sectional layer group $\mathcal{L}(\mathbf{sd})$
(<i>mn</i> 0) ($\overline{m}n$ 0)	c <i>na</i> – <i>mb</i> <i>pa</i> + <i>qb</i>	<i>P2/n</i> 11	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\overline{1}$ L02 <i>p</i> 211 (b' /4) L08 <i>p</i> 1 L01
	c <i>na</i> + <i>mb</i> – <i>pa</i> + <i>qb</i>			
	<i>n</i> odd <i>m</i> even <i>p</i> even <i>q</i> odd or <i>n</i> even <i>m</i> odd <i>p</i> odd <i>q</i> even <i>p</i> odd <i>q</i> odd			
	<i>n</i> odd <i>m</i> odd			
		<i>P2/c</i> 11	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\overline{1}$ L02 <i>p</i> 211 L08 <i>p</i> 1 L01
		<i>P2/b</i> 11	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	<i>p2/b</i> 11 L16 <i>pb</i> 11 L12
(0 <i>mn</i>) (0 $\overline{m}n$)	a <i>nb</i> – <i>mc</i> <i>pb</i> + <i>qc</i>	<i>P2</i> ₁ / <i>m</i> 11	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	<i>p2</i> ₁ / <i>m</i> 11 L15 <i>pm</i> 11 (a' /4) L11
	a <i>nb</i> + <i>mc</i> – <i>pb</i> + <i>qc</i>			
(0 <i>n</i> 0) (0 \overline{n} 0)	b <i>nc</i> – <i>ma</i> <i>pc</i> + <i>qa</i>	<i>P2</i> ₁ / <i>m</i> 11	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	<i>p2</i> ₁ / <i>m</i> 11 L15 <i>pm</i> 11 (a' /4) L11
	b <i>nc</i> + <i>ma</i> – <i>pc</i> + <i>qa</i>			

$$\mathcal{G} = P_{bcn}^{2_1 2_1 2_1}$$

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$
$(mn0)$ $(\bar{m}n0)$	\mathbf{c} $n\mathbf{a} - m\mathbf{b}$ $p\mathbf{a} + q\mathbf{b}$ \mathbf{c} $n\mathbf{a} + m\mathbf{b}$ $-p\mathbf{a} + q\mathbf{b}$ n odd m even p even q odd or n even m odd p odd q even p odd q odd	$P2_1/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ L02
				$p2_111$ ($\mathbf{b}'/4$) L09
				$p1$ L01
		$P2_1/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ L02
				$p2_111$ L09
				$p1$ L01
n odd m odd	$P2_1/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2_1/b11$ L17	
			$pb11$ ($\mathbf{a}'/4$) L12	
$(0mn)$ $(0\bar{m}n)$	\mathbf{a} $n\mathbf{b} - m\mathbf{c}$ $p\mathbf{b} + q\mathbf{c}$ \mathbf{a} $n\mathbf{b} + m\mathbf{c}$ $-p\mathbf{b} + q\mathbf{c}$ n odd m even q odd m odd q odd m odd p odd q even	$P2_1/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2_1/b11$ L17
				$pb11$ ($\mathbf{a}'/4$) L12
		$P2_1/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ L02
				$p2_111$ ($\mathbf{b}'/4$) L09
				$p1$ L01
		p odd q even	$P2_1/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$
$p2_111$ L09				
$p1$ L01				
$(n0m)$ $(n0\bar{m})$	\mathbf{b} $nc - ma$ $pc + qa$ \mathbf{b} $nc + ma$ $-pc + qa$ n odd m even q odd m odd q odd m odd p odd q even	$P2/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2/b11$ L16
				$pb11$ L12
		$P2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ L02
				$p211$ ($\mathbf{b}'/4$) L08
				$p1$ L01
		p odd q even	$P2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$
$p211$ L08				
$p1$ L01				

$$\mathcal{G} = P_{\frac{2_1}{b} \frac{2_1}{c} \frac{2_1}{a}}$$

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group a' b' d	Scanning group \mathcal{H}	Linear orbit sd	Sectional layer group $\mathcal{L}(\mathbf{sd})$	
$(mn0)$ $(\bar{m}n0)$	c $na - mb$ $pa + qb$ c $na + mb$ $-pa + qb$ <i>n</i> odd <i>m</i> even	$P2_1/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[\mathbf{sd}, -\mathbf{sd}]$	$p2_1/b11$ L17 $pb11 (\mathbf{a}'/4)$ L12	
		$P2_1/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ L02 $p2_111 (\mathbf{b}'/4)$ L09 $p1$ L01	
		$P2_1/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ L02 $p2_111$ L09 $p1$ L01	
	<i>m</i> odd <i>q</i> odd	<i>p</i> odd <i>q</i> even	$P2_1/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[\mathbf{sd}, -\mathbf{sd}]$	$p2_1/b11$ L17 $pb11 (\mathbf{a}'/4)$ L12
			$P2_1/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ L02 $p2_111 (\mathbf{b}'/4)$ L09 $p1$ L01
			$P2_1/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ L02 $p2_111$ L09 $p1$ L01
	$(0mn)$ $(0\bar{m}n)$	a $nb - mc$ $pb + qc$ a $nb + mc$ $-pb + qc$ <i>n</i> odd <i>m</i> even	$P2_1/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[\mathbf{sd}, -\mathbf{sd}]$	$p2_1/b11$ L17 $pb11 (\mathbf{a}'/4)$ L12
			$P2_1/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ L02 $p2_111 (\mathbf{b}'/4)$ L09 $p1$ L01
			$P2_1/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ L02 $p2_111$ L09 $p1$ L01
<i>m</i> odd <i>q</i> odd		<i>p</i> odd <i>q</i> even	$P2_1/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[\mathbf{sd}, -\mathbf{sd}]$	$p2_1/b11$ L17 $pb11 (\mathbf{a}'/4)$ L12
			$P2_1/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ L02 $p2_111 (\mathbf{b}'/4)$ L09 $p1$ L01
			$P2_1/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ L02 $p2_111$ L09 $p1$ L01
$(n0m)$ $(n0\bar{m})$		b $nc - ma$ $pc + qa$ b $nc + ma$ $-pc + qa$ <i>n</i> odd <i>m</i> even	$P2_1/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[\mathbf{sd}, -\mathbf{sd}]$	$p2_1/b11$ L17 $pb11 (\mathbf{a}'/4)$ L12
			$P2_1/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ L02 $p2_111 (\mathbf{b}'/4)$ L09 $p1$ L01
			$P2_1/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ L02 $p2_111$ L09 $p1$ L01
	<i>m</i> odd <i>q</i> odd	<i>p</i> odd <i>q</i> even	$P2_1/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[\mathbf{sd}, -\mathbf{sd}]$	$p2_1/b11$ L17 $pb11 (\mathbf{a}'/4)$ L12
			$P2_1/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ L02 $p2_111 (\mathbf{b}'/4)$ L09 $p1$ L01
			$P2_1/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ L02 $p2_111$ L09 $p1$ L01

$$\mathcal{G} = P_{n \ m \ a}^{2_1 \ 2_1 \ 2_1}$$

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group a' b' d	Scanning group \mathcal{H}	Linear orbit sd	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
(mn0) ($\overline{m}n0$)	c na - mb pa + qb	$P2_1/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [$s\mathbf{d}, -s\mathbf{d}$]	$p2_1/b11$ L17	
	c na + mb -pa + qb			$pb11 (\mathbf{a}'/4)$ L12	
	<i>n</i> odd <i>m</i> even <i>q</i> odd <i>m</i> odd <i>q</i> odd			$P2_1/n11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [$\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]
	<i>p</i> odd <i>m</i> odd <i>q</i> even	$P2_1/c11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [$\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	$p\overline{1}$ L02 $p2_111$ L09 <i>p</i> 1 L01	
	(0mn) ($0\overline{m}n$)	a nb - mc pb + qc	$P2_1/n11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [$\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	$p\overline{1}$ L02
		a nb + mc -pb + qc			$p2_111 (\mathbf{b}'/4)$ L09
<i>n</i> odd <i>m</i> even <i>p</i> even <i>q</i> odd or <i>n</i> even <i>m</i> odd <i>p</i> odd <i>q</i> even <i>p</i> odd <i>q</i> odd		$p1 L01$			
<i>n</i> odd <i>m</i> odd		$P2_1/c11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [$\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	$p\overline{1}$ L02 $p2_111$ L09 <i>p</i> 1 L01	
		$P2_1/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [$s\mathbf{d}, -s\mathbf{d}$]	$p2_1/b11$ L17 $pb11 (\mathbf{a}'/4)$ L12	
(n0m) ($n0\overline{m}$)		b nc - ma pc + qa	$P2_1/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [$s\mathbf{d}, -s\mathbf{d}$]	$p2_1/m11$ L15
	b nc + ma -pc + qa	$pm11 (\mathbf{a}'/4)$ L11			

$$\mathcal{G} = C_{m c m}^{\underline{2} \underline{2} \underline{2}_1}$$

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group a' b' d	Scanning group \mathcal{H}	Linear orbit sd	Sectional layer group $\mathcal{L}(sd)$	
(<i>hk0</i>) ($\overline{hk}0$)	c $n\hat{\mathbf{a}} - m\hat{\mathbf{b}}$ $p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$ c $n\hat{\mathbf{a}} + m\hat{\mathbf{b}}$ $-p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$	$P2_1/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [$\mathbf{sd}, -\mathbf{sd}$]	$p2_1/m11$ $pm11 (\mathbf{a}'/4)$	L15 L11
$\hat{\mathbf{a}} = (\mathbf{a} - \mathbf{b})/2$ $\hat{\mathbf{b}} = (\mathbf{a} + \mathbf{b})/2$ <i>h</i> even, <i>k</i> odd or <i>h</i> odd, <i>k</i> even $\Rightarrow n = h + k, m = h - k$ <i>h, k</i> odd $\Rightarrow n = (h + k)/2, m = (h - k)/2$					
(<i>0mn</i>) ($0\overline{m}n$)	a $nb - mc$ $pb + qc$ a $nb + mc$ $-pb + qc$ <i>n</i> odd <i>m</i> even <i>q</i> odd <i>m</i> odd <i>q</i> odd <i>m</i> odd <i>p</i> odd <i>q</i> even	$C2/m11$ $I2/m11$ $B2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [$\mathbf{sd}, -\mathbf{sd}$] $[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ [$\pm\mathbf{sd}, (\pm s + \frac{1}{2})\mathbf{d}$] $[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ [$\pm\mathbf{sd}, (\pm s + \frac{1}{2})\mathbf{d}$]	$c2/m11$ $cm11$ $p2/m11$ $p2_1/m11 [(a' + b')/4]$ $pm11$ $p2/m11$ $p2_1/m11 (\mathbf{a}'/4)$ $pm11$	L18 L13 L14 L15 L11 L14 L15 L11
(<i>n0m</i>) ($n0\overline{m}$)	b $nc - ma$ $pc + qa$ b $nc + ma$ $-pc + qa$ <i>n</i> odd <i>m</i> even <i>p</i> even <i>q</i> odd <i>n</i> even <i>m</i> odd <i>p</i> odd <i>q</i> even <i>n</i> even <i>m</i> odd <i>p</i> odd <i>q</i> odd <i>n</i> odd <i>m</i> odd <i>p</i> even <i>q</i> odd <i>n</i> odd <i>m</i> odd <i>p</i> odd <i>q</i> even <i>n</i> odd <i>m</i> even <i>p</i> odd <i>q</i> odd	$B2/b11$ $C2/c11$ $C2/n11$ $B2/n11$ $I2/c11$ $I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ [$\pm\mathbf{sd}, (\pm s + \frac{1}{2})\mathbf{d}$] $[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ [$\pm\mathbf{sd}, (\pm s + \frac{1}{2})\mathbf{d}$] $[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ [$\pm\mathbf{sd}, (\pm s + \frac{1}{2})\mathbf{d}$] $[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ [$\pm\mathbf{sd}, (\pm s + \frac{1}{2})\mathbf{d}$] $[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ [$\pm\mathbf{sd}, (\pm s + \frac{1}{2})\mathbf{d}$]	$p2/b11$ $p2_1/b11 (\mathbf{a}'/4)$ $pb11$ $\widehat{p}\overline{1}$ $c211$ $\widehat{p}1$ $\widehat{p}\overline{1}$ $c211 (\mathbf{b}'/4)$ $\widehat{p}1$ $p2_1/b11$ $p2/b11 (\mathbf{a}'/4)$ $pb11 (\mathbf{a}'/4)$ $p2_1/b11$ $p2/b11 [(a' + b')/4]$ $pb11 (\mathbf{a}'/4)$ $p2/b11$ $p2_1/b11 [(a' + b')/4]$ $pb11$	L16 L17 L12 L02 L12 L01 L02 L10 L01 L17 L16 L12 L17 L16 L12 L16 L17 L12

$$\mathcal{G} = C_{mca}^{\frac{2}{2} \frac{2}{2} \frac{2}{2}}$$

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group a' b' d	Scanning group \mathcal{H}	Linear orbit sd	Sectional layer group $\mathcal{L}(\mathbf{sd})$			
$(hk0)$ $(\bar{h}k0)$	c $n\hat{\mathbf{a}} - m\hat{\mathbf{b}}$ $p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$ c $n\hat{\mathbf{a}} + m\hat{\mathbf{b}}$ $-p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$ <i>n</i> odd <i>m</i> even <i>p</i> even <i>q</i> odd or <i>n</i> even <i>m</i> odd <i>p</i> odd <i>q</i> even <i>p</i> odd <i>q</i> odd <i>n</i> odd <i>m</i> odd	$P2_1/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p2_111 (\mathbf{b}'/4)$ $p1$	L02 L09 L01		
		$P2_1/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p2_111$ $p1$	L02 L09 L01		
		$P2_1/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2_1/b11$ $pb11 (\mathbf{a}'/4)$	L17 L12		
		$\hat{\mathbf{a}} = (\mathbf{a} - \mathbf{b})/2$ h even, k odd or h odd, k even $\Rightarrow n = h + k, m = h - k$ $\hat{\mathbf{b}} = (\mathbf{a} + \mathbf{b})/2$ h, k odd $\Rightarrow n = (h + k)/2, m = (h - k)/2$					
		$(0mn)$ $(0\bar{m}n)$	a $n\mathbf{b} - m\mathbf{c}$ $p\mathbf{b} + q\mathbf{c}$ a $n\mathbf{b} + m\mathbf{c}$ $-p\mathbf{b} + q\mathbf{c}$ <i>n</i> odd <i>m</i> even <i>q</i> odd <i>m</i> odd <i>q</i> odd <i>m</i> odd <i>p</i> odd <i>q</i> even	$C2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c2/m11$ $cm11$	L18 L13
				$I2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ $p2_1/m11 [(a' + b')/4]$ $pm11$	L14 L15 L11
$B2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$			$p2/m11$ $p2_1/m11 (\mathbf{a}'/4)$ $pm11$	L14 L15 L11		
$(n0m)$ $(n0\bar{m})$	b $nc - ma$ $pc + qa$ b $nc + ma$ $-pc + qa$ <i>n</i> odd <i>m</i> even <i>p</i> even <i>q</i> odd <i>n</i> even <i>m</i> odd <i>p</i> odd <i>q</i> even <i>n</i> even <i>m</i> odd <i>p</i> odd <i>q</i> odd <i>n</i> odd <i>m</i> odd <i>p</i> even <i>q</i> odd <i>n</i> odd <i>m</i> odd <i>p</i> odd <i>q</i> even <i>n</i> odd <i>m</i> even <i>p</i> odd <i>q</i> odd			$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ $p2/b11 (\mathbf{a}'/4)$ $pb11 (\mathbf{a}'/4)$	L17 L16 L12
				$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}\bar{1}$ $c211 (\mathbf{b}'/4)$ $\hat{p}1$	L02 L10 L01
				$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}\bar{1}$ $c211$ $\hat{p}1$	L02 L10 L01
		$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ $p2_1/b11 (\mathbf{a}'/4)$ $pb11$	L16 L17 L12		
		$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ $p2_1/b11 [(a' + b')/4]$ $pb11$	L16 L17 L12		
		$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ $p2/b11 [(a' + b')/4]$ $pb11 (\mathbf{a}'/4)$	L17 L16 L12		

$$\mathcal{G} = C_{m m m}^{\frac{2}{2} \frac{2}{2} \frac{2}{2}}$$

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group a' b' d	Scanning group \mathcal{H}	Linear orbit sd	Sectional layer group $\mathcal{L}(\mathbf{sd})$	
(<i>hk0</i>) ($\bar{h}k0$)	c $n\hat{\mathbf{a}} - m\hat{\mathbf{b}}$ $p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$ c $n\hat{\mathbf{a}} + m\hat{\mathbf{b}}$ $-p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$	<i>P2/m11</i>	0d , $\frac{1}{2}\mathbf{d}$ [sd , $-\mathbf{sd}$]	<i>p2/m11</i> <i>pm11</i>	L14 L11
$\hat{\mathbf{a}} = (\mathbf{a} - \mathbf{b})/2$ $\hat{\mathbf{b}} = (\mathbf{a} + \mathbf{b})/2$ <p style="text-align: center;"><i>h</i> even, <i>k</i> odd or <i>h</i> odd, <i>k</i> even $\Rightarrow n = h + k, m = h - k$ <i>h, k</i> odd $\Rightarrow n = (h + k)/2, m = (h - k)/2$</p>					
(<i>0mn</i>) ($0\bar{m}n$)	a $n\mathbf{b} - m\mathbf{c}$ $p\mathbf{b} + q\mathbf{c}$ a $n\mathbf{b} + m\mathbf{c}$ $-p\mathbf{b} + q\mathbf{c}$ <i>n</i> odd <i>m</i> even <i>q</i> odd <i>m</i> odd <i>q</i> odd <i>p</i> odd <i>m</i> odd <i>q</i> even	<i>C2/m11</i> <i>I2/m11</i> <i>B2/m11</i>	0d , $\frac{1}{2}\mathbf{d}$ [sd , $-\mathbf{sd}$] [0d , $\frac{1}{2}\mathbf{d}$] [$\frac{1}{4}\mathbf{d}$, $\frac{3}{4}\mathbf{d}$] [$\pm\mathbf{sd}$, $(\pm s + \frac{1}{2})\mathbf{d}$] [0d , $\frac{1}{2}\mathbf{d}$] [$\frac{1}{4}\mathbf{d}$, $\frac{3}{4}\mathbf{d}$] [$\pm\mathbf{sd}$, $(\pm s + \frac{1}{2})\mathbf{d}$]	<i>c2/m11</i> <i>cm11</i> <i>p2/m11</i> <i>p2₁/m11</i> [(a' + b')/4] <i>pm11</i> <i>p2/m11</i> <i>p2₁/m11</i> (a' /4) <i>pm11</i>	L18 L13 L14 L15 L11 L14 L15 L11
(<i>n0m</i>) ($n0\bar{m}$)	b $n\mathbf{c} - m\mathbf{a}$ $p\mathbf{c} + q\mathbf{a}$ b $n\mathbf{c} + m\mathbf{a}$ $-p\mathbf{c} + q\mathbf{a}$ <i>n</i> odd <i>p</i> even <i>q</i> odd <i>n</i> even <i>m</i> odd <i>p</i> odd <i>n</i> odd <i>p</i> odd	<i>B2/m11</i> <i>C2/m11</i> <i>I2/m11</i>	[0d , $\frac{1}{2}\mathbf{d}$] [$\frac{1}{4}\mathbf{d}$, $\frac{3}{4}\mathbf{d}$] [$\pm\mathbf{sd}$, $(\pm s + \frac{1}{2})\mathbf{d}$] [0d , $\frac{1}{2}\mathbf{d}$] [sd , $-\mathbf{sd}$] [0d , $\frac{1}{2}\mathbf{d}$] [$\frac{1}{4}\mathbf{d}$, $\frac{3}{4}\mathbf{d}$] [$\pm\mathbf{sd}$, $(\pm s + \frac{1}{2})\mathbf{d}$]	<i>p2/m11</i> <i>p2₁/m11</i> (a' /4) <i>pm11</i> <i>c2/m11</i> <i>cm11</i> <i>p2/m11</i> <i>p2₁/m11</i> [(a' + b')/4] <i>pm11</i>	L14 L15 L11 L18 L13 L14 L15 L11

$$\mathcal{G} = C_{c\ c\ m}^{\frac{2}{2}\frac{2}{2}\frac{2}{2}}$$

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group a' b' d	Scanning group \mathcal{H}	Linear orbit sd	Sectional layer group $\mathcal{L}(\mathbf{sd})$	
(<i>hk0</i>) ($\bar{h}k0$)	c $n\hat{\mathbf{a}} - m\hat{\mathbf{b}}$ $p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$ c $n\hat{\mathbf{a}} + m\hat{\mathbf{b}}$ $-p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$	<i>P2/m11</i>	0d , $\frac{1}{2}\mathbf{d}$ [sd , $-\mathbf{sd}$]	<i>p2/m11</i> <i>pm11</i>	L14 L11
$\hat{\mathbf{a}} = (\mathbf{a} - \mathbf{b})/2$ $\hat{\mathbf{b}} = (\mathbf{a} + \mathbf{b})/2$ <p style="text-align: center;"><i>h</i> even, <i>k</i> odd or <i>h</i> odd, <i>k</i> even $\Rightarrow n = h + k, m = h - k$ <i>h, k</i> odd $\Rightarrow n = (h + k)/2, m = (h - k)/2$</p>					
(<i>0mn</i>) ($0\bar{m}n$)	a $n\mathbf{b} - m\mathbf{c}$ $p\mathbf{b} + q\mathbf{c}$ a $n\mathbf{b} + m\mathbf{c}$ $-p\mathbf{b} + q\mathbf{c}$				
	<i>n</i> odd <i>m</i> even <i>p</i> even <i>q</i> odd	<i>C2/c11</i>	[0d , $\frac{1}{2}\mathbf{d}$] [$\frac{1}{4}\mathbf{d}$, $\frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}$, $(\pm s + \frac{1}{2})\mathbf{d}$]	$\widehat{p}\bar{1}$ <i>c211</i> $\widehat{p}1$	L02 L10 L01
	<i>n</i> even <i>m</i> odd <i>p</i> odd <i>q</i> even	<i>B2/b11</i>	[0d , $\frac{1}{2}\mathbf{d}$] [$\frac{1}{4}\mathbf{d}$, $\frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}$, $(\pm s + \frac{1}{2})\mathbf{d}$]	<i>p2/b11</i> <i>p2₁/b11</i> (a' /4) <i>pb11</i>	L16 L17 L12
	<i>n</i> even <i>m</i> odd <i>p</i> odd <i>q</i> odd	<i>I2/b11</i>	[0d , $\frac{1}{2}\mathbf{d}$] [$\frac{1}{4}\mathbf{d}$, $\frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}$, $(\pm s + \frac{1}{2})\mathbf{d}$]	<i>p2/b11</i> <i>p2₁/b11</i> [(a' + b')/4] <i>pb11</i>	L16 L17 L12
	<i>n</i> odd <i>m</i> odd <i>p</i> even <i>q</i> odd	<i>I2/c11</i>	[0d , $\frac{1}{2}\mathbf{d}$] [$\frac{1}{4}\mathbf{d}$, $\frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}$, $(\pm s + \frac{1}{2})\mathbf{d}$]	<i>p2₁/b11</i> <i>p2/b11</i> [(a' + b')/4] <i>pb11</i> (a' /4)	L17 L16 L12
	<i>n</i> odd <i>m</i> odd <i>p</i> odd <i>q</i> even	<i>B2/n11</i>	[0d , $\frac{1}{2}\mathbf{d}$] [$\frac{1}{4}\mathbf{d}$, $\frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}$, $(\pm s + \frac{1}{2})\mathbf{d}$]	<i>p2₁/b11</i> <i>p2/b11</i> (a' /4) <i>pb11</i> (a' /4)	L17 L16 L12
	<i>n</i> odd <i>m</i> even <i>p</i> odd <i>q</i> odd	<i>C2/n11</i>	[0d , $\frac{1}{2}\mathbf{d}$] [$\frac{1}{4}\mathbf{d}$, $\frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}$, $(\pm s + \frac{1}{2})\mathbf{d}$]	$\widehat{p}\bar{1}$ <i>c211</i> (b' /4) $\widehat{p}1$	L02 L10 L01
(<i>n0m</i>) ($n0\bar{m}$)	b $n\mathbf{c} - m\mathbf{a}$ $p\mathbf{c} + q\mathbf{a}$ b $n\mathbf{c} + m\mathbf{a}$ $-p\mathbf{c} + q\mathbf{a}$				
	<i>n</i> odd <i>m</i> even <i>p</i> even <i>q</i> odd	<i>B2/b11</i>	[0d , $\frac{1}{2}\mathbf{d}$] [$\frac{1}{4}\mathbf{d}$, $\frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}$, $(\pm s + \frac{1}{2})\mathbf{d}$]	<i>p2/b11</i> <i>p2₁/b11</i> (a' /4) <i>pb11</i>	L16 L17 L12
	<i>n</i> even <i>m</i> odd <i>p</i> odd <i>q</i> even	<i>C2/c11</i>	[0d , $\frac{1}{2}\mathbf{d}$] [$\frac{1}{4}\mathbf{d}$, $\frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}$, $(\pm s + \frac{1}{2})\mathbf{d}$]	$\widehat{p}\bar{1}$ <i>c211</i> $\widehat{p}1$	L02 L12 L01
	<i>n</i> even <i>m</i> odd <i>p</i> odd <i>q</i> odd	<i>C2/n11</i>	[0d , $\frac{1}{2}\mathbf{d}$] [$\frac{1}{4}\mathbf{d}$, $\frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}$, $(\pm s + \frac{1}{2})\mathbf{d}$]	$\widehat{p}\bar{1}$ <i>c211</i> (b' /4) $\widehat{p}1$	L02 L10 L01
	<i>n</i> odd <i>m</i> odd <i>p</i> even <i>q</i> odd	<i>B2/n11</i>	[0d , $\frac{1}{2}\mathbf{d}$] [$\frac{1}{4}\mathbf{d}$, $\frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}$, $(\pm s + \frac{1}{2})\mathbf{d}$]	<i>p2₁/b11</i> <i>p2/b11</i> (a' /4) <i>pb11</i> (a' /4)	L17 L16 L12
	<i>n</i> odd <i>m</i> odd <i>p</i> odd <i>q</i> even	<i>I2/c11</i>	[0d , $\frac{1}{2}\mathbf{d}$] [$\frac{1}{4}\mathbf{d}$, $\frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}$, $(\pm s + \frac{1}{2})\mathbf{d}$]	<i>p2₁/b11</i> <i>p2/b11</i> [(a' + b')/4] <i>pb11</i> (a' /4)	L17 L16 L12
	<i>n</i> odd <i>m</i> even <i>p</i> odd <i>q</i> odd	<i>I2/b11</i>	[0d , $\frac{1}{2}\mathbf{d}$] [$\frac{1}{4}\mathbf{d}$, $\frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}$, $(\pm s + \frac{1}{2})\mathbf{d}$]	<i>p2/b11</i> <i>p2₁/b11</i> [(a' + b')/4] <i>pb11</i>	L16 L17 L12

$$\mathcal{G} = C_{m m a}^{\frac{2}{2} \frac{2}{2} \frac{2}{2}}$$

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group a' b' d	Scanning group \mathcal{H}	Linear orbit sd	Sectional layer group $\mathcal{L}(\mathbf{sd})$
$(hk0)$ $(\bar{h}k0)$	c $n\hat{\mathbf{a}} - m\hat{\mathbf{b}}$ $p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$ c $n\hat{\mathbf{a}} + m\hat{\mathbf{b}}$ $-p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$	<i>P2/n11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ L02 $p211 (\mathbf{b}'/4)$ L08 $p1$ L01
	<i>n</i> odd <i>m</i> even <i>p</i> even <i>q</i> odd or <i>n</i> even <i>m</i> odd <i>p</i> odd <i>q</i> even <i>p</i> odd <i>q</i> odd			
	<i>n</i> odd <i>m</i> odd			
		<i>P2/c11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ L02 $p211$ L08 $p1$ L01
		<i>P2/b11</i>	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2/b11$ L16 $pb11$ L12
	$\hat{\mathbf{a}} = (\mathbf{a} - \mathbf{b})/2$ h even, k odd or h odd, k even $\Rightarrow n = h + k, m = h - k$ $\hat{\mathbf{b}} = (\mathbf{a} + \mathbf{b})/2$ h, k odd $\Rightarrow n = (h + k)/2, m = (h - k)/2$			
$(0mn)$ $(0\bar{m}n)$	a $n\mathbf{b} - m\mathbf{c}$ $p\mathbf{b} + q\mathbf{c}$ a $n\mathbf{b} + m\mathbf{c}$ $-p\mathbf{b} + q\mathbf{c}$	<i>C2/m11</i>	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c2/m11$ L18 $cm11$ L13
	<i>n</i> odd <i>m</i> even <i>q</i> odd <i>m</i> odd <i>q</i> odd			
		<i>I2/m11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ L14 $p2_1/m11 [(\mathbf{a}' + \mathbf{b}')/4]$ L15 $pm11$ L11
	<i>m</i> odd <i>p</i> odd <i>q</i> even	<i>B2/m11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ L14 $p2_1/m11 (\mathbf{a}'/4)$ L15 $pm11$ L11
$(n0m)$ $(n0\bar{m})$ $[(\mathbf{a} + \mathbf{b})/4]$	b $n\mathbf{c} - m\mathbf{a}$ $p\mathbf{c} + q\mathbf{a}$ b $n\mathbf{c} + m\mathbf{a}$ $-p\mathbf{c} + q\mathbf{a}$	<i>B2/m11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ L14 $p2_1/m11 (\mathbf{a}'/4)$ L15 $pm11$ L11
	<i>n</i> odd <i>p</i> even <i>q</i> odd			
	<i>n</i> even <i>m</i> odd <i>p</i> odd	<i>C2/m11</i>	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c2/m11$ L18 $cm11$ L13
	<i>n</i> odd <i>p</i> odd	<i>I2/m11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ L14 $p2_1/m11 [(\mathbf{a}' + \mathbf{b}')/4]$ L15 $pm11$ L11

$$\mathcal{G} = C_{c c a}^{\frac{2}{2} \frac{2}{2} \frac{2}{2}} \text{ origin } 1$$

Orientation orbit (<i>hkl</i>)	Conventional basis the scanning group a' b' d	Scanning group \mathcal{H}	Linear orbit sd	Sectional layer group $\mathcal{L}(\mathbf{sd})$
$(hk0)$ $(\bar{h}k0)$ $[(\mathbf{b} + \mathbf{c})/4]$	c $n\hat{\mathbf{a}} - m\hat{\mathbf{b}}$ $p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$ c $n\hat{\mathbf{a}} + m\hat{\mathbf{b}}$ $-p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$ <i>n</i> odd <i>m</i> even <i>p</i> even <i>q</i> odd or <i>n</i> even <i>m</i> odd <i>p</i> odd <i>q</i> even <i>p</i> odd <i>q</i> odd	<i>P2/n11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ L02 $p211 (\mathbf{b}'/4)$ L08 $p1$ L01
	 	<i>P2/c11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ L02 $p211$ L08 $p1$ L01
	 	<i>P2/b11</i>	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2/b11$ L16 $pb11$ L12
$\hat{\mathbf{a}} = (\mathbf{a} - \mathbf{b})/2$ <i>h</i> even, <i>k</i> odd or <i>h</i> odd, <i>k</i> even $\Rightarrow n = h + k, m = h - k$ $\hat{\mathbf{b}} = (\mathbf{a} + \mathbf{b})/2$ <i>h, k</i> odd $\Rightarrow n = (h + k)/2, m = (h - k)/2$				
$(0mn)$ $(0\bar{m}n)$ $[(\mathbf{a} + \mathbf{c})/4]$	a $n\mathbf{b} - m\mathbf{c}$ $p\mathbf{b} + q\mathbf{c}$ a $n\mathbf{b} + m\mathbf{c}$ $-p\mathbf{b} + q\mathbf{c}$ <i>n</i> odd <i>m</i> even <i>p</i> even <i>q</i> odd <i>n</i> even <i>m</i> odd <i>p</i> odd <i>q</i> even <i>n</i> even <i>m</i> odd <i>p</i> odd <i>q</i> odd <i>n</i> odd <i>m</i> odd <i>p</i> even <i>q</i> odd <i>n</i> odd <i>m</i> odd <i>p</i> odd <i>q</i> even <i>n</i> odd <i>m</i> even <i>p</i> odd <i>q</i> odd	<i>C2/n11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}\bar{1}$ L02 $c211 (\mathbf{b}'/4)$ L10 $\hat{p}1$ L01
	 	<i>B2/n11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ L17 $p2/b11 (\mathbf{a}'/4)$ L16 $pb11 (\mathbf{a}'/4)$ L12
	 	<i>I2/c11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ L17 $p2/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ L16 $pb11 (\mathbf{a}'/4)$ L12
	 	<i>I2/b11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ L16 $p2_1/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ L17 $pb11$ L12
	 	<i>B2/b11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ L16 $p2_1/b11 (\mathbf{a}'/4)$ L17 $pb11$ L12
	 	<i>C2/c11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}\bar{1}$ L02 $c211$ L10 $\hat{p}1$ L01

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$$\mathcal{G} = C_{c c a}^{2 2 2} \text{ origin } 1$$

$(n0m)$ $(n0\bar{m})$ $[(\mathbf{b} + \mathbf{c})/4]$	\mathbf{b} $nc - ma$ $pc + qa$				
	\mathbf{b} $nc + ma$ $-pc + qa$				
	n odd	m even	$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2/b11$ L16
	p even	q odd		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2_1/b11 (\mathbf{a}'/4)$ L17
				$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11$ L12
	n even	m odd	$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$\widehat{p1}$ L02
	p odd	q even		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$c211$ L12
				$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p1}$ L01
	n even	m odd	$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$\widehat{p1}$ L02
	p odd	q odd		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$c211 (\mathbf{b}'/4)$ L10
				$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p1}$ L01
	n odd	m odd	$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2_1/b11$ L17
p even	q odd		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2/b11 (\mathbf{a}'/4)$ L16	
			$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$ L12	
n odd	m odd	$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2_1/b11$ L17	
p odd	q even		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ L16	
			$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$ L12	
n odd	m even	$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2/b11$ L16	
p odd	q odd		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2_1/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ L17	
			$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11$ L12	

Continued

Orientation orbit (<i>hkl</i>)	Conventional basis the scanning group a' b' d	Scanning group \mathcal{H}	Linear orbit sd	Sectional layer group $\mathcal{L}(sd)$
<i>(hk0)</i> <i>($\bar{h}k0$)</i>	c $n\hat{\mathbf{a}} - m\hat{\mathbf{b}}$ $p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$	<i>P2/n11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ L02
	c $n\hat{\mathbf{a}} + m\hat{\mathbf{b}}$ $-p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$			$p211$ (b' /4) L08
	<i>n</i> odd <i>m</i> even <i>p</i> even <i>q</i> odd or <i>n</i> even <i>m</i> odd <i>p</i> odd <i>q</i> even <i>p</i> odd <i>q</i> odd			$p1$ L01
	<i>n</i> odd <i>m</i> odd	<i>P2/c11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ L02 $p211$ L08 $p1$ L01
		<i>P2/b11</i>	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2/b11$ L16 $pb11$ L12
$\hat{\mathbf{a}} = (\mathbf{a} - \mathbf{b})/2$ $\hat{\mathbf{b}} = (\mathbf{a} + \mathbf{b})/2$		<i>h</i> even, <i>k</i> odd or <i>h</i> odd, <i>k</i> even $\Rightarrow n = h + k, m = h - k$ <i>h, k</i> odd $\Rightarrow n = (h + k)/2, m = (h - k)/2$		
<i>(0mn)</i> <i>(0$\bar{m}n$)</i>	a $n\mathbf{b} - m\mathbf{c}$ $p\mathbf{b} + q\mathbf{c}$	<i>C2/n11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}\bar{1}$ L02
	a $n\mathbf{b} + m\mathbf{c}$ $-p\mathbf{b} + q\mathbf{c}$			$c211$ (b' /4) L10
	<i>n</i> odd <i>m</i> even <i>p</i> even <i>q</i> odd			$\hat{p}1$ L01
	<i>n</i> even <i>m</i> odd <i>p</i> odd <i>q</i> even			$p2_1/b11$ L17
				$p2/b11$ (a' /4) L16
				$pb11$ (a' /4) L12
	<i>n</i> even <i>m</i> odd <i>p</i> odd <i>q</i> odd			$p2_1/b11$ L17
				$p2/b11$ [(a' + b')/4] L16
				$pb11$ (a' /4) L12
	<i>n</i> odd <i>m</i> odd <i>p</i> even <i>q</i> odd			$p2/b11$ L16
	$p2_1/b11$ [(a' + b')/4] L17			
	$pb11$ L12			
<i>n</i> odd <i>m</i> odd <i>p</i> odd <i>q</i> even	$p2/b11$ L16			
	$p2_1/b11$ (a' /4) L17			
	$pb11$ L12			
<i>n</i> odd <i>m</i> even <i>p</i> odd <i>q</i> odd	<i>C2/c11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}\bar{1}$ L02 $c211$ L10 $\hat{p}1$ L01	

Continued

$(n0m)$ $(n0\bar{m})$	b $nc - ma$ $pc + qa$				
	b $nc + ma$ $-pc + qa$				
	n odd m even	$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2/b11$	L16
	p even q odd		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2_1/b11 (\mathbf{a}'/4)$	L17
			$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11$	L12
	n even m odd	$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$\widehat{p1}$	L02
	p odd q even		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$c211$	L12
			$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p1}$	L01
	n even m odd	$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$\widehat{p1}$	L02
	p odd q odd		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$c211 (\mathbf{b}'/4)$	L10
			$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p1}$	L01
	n odd m odd	$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2_1/b11$	L17
	p even q odd		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2/b11 (\mathbf{a}'/4)$	L16
			$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$	L12
	n odd m odd	$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2_1/b11$	L17
	p odd q even		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2/b11 [(\mathbf{a}' + \mathbf{b}')/4]$	L16
			$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$	L12
	n odd m even	$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2/b11$	L16
	p odd q odd		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2_1/b11 [(\mathbf{a}' + \mathbf{b}')/4]$	L17
			$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11$	L12

$$\mathcal{G} = F_{m m m}^{\underline{2} \underline{2} \underline{2}}$$

Orientation orbit hkl	Conventional basis of the scanning group $\mathbf{a}' \quad \mathbf{b}' \quad \mathbf{d}$	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L} \quad s\mathbf{d}$
$(hk0)$ $(\bar{h}k0)$	$\mathbf{c} \quad n\hat{\mathbf{a}} - m\hat{\mathbf{b}} \quad p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$ $\mathbf{c} \quad n\hat{\mathbf{a}} + m\hat{\mathbf{b}} \quad -p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$	$I2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ L14
	n odd m even p even q odd or n even m odd p odd q even p odd q odd			$p2_1/m11 [(a' + b')/4]$ L15 $pm11$ L11
	n odd m odd			$p2/m11$ L14 $p2_1/m11 (a'/4)$ L15 $pm11$ L11
		$B2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ L14 $p2_1/m11 (a'/4)$ L15 $pm11$ L11
		$C2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c2/m11$ L18 $cm11$ L13
$\hat{\mathbf{a}} = (\mathbf{a} - \mathbf{b})/2$ h even, k odd or h odd, k even $\Rightarrow n = h + k, m = h - k$ $\hat{\mathbf{b}} = (\mathbf{a} + \mathbf{b})/2$ h, k odd $\Rightarrow n = (h + k)/2, m = (h - k)/2$				
$(0hk)$ $(0\bar{h}k)$	$\mathbf{a} \quad n\hat{\mathbf{a}} - m\hat{\mathbf{b}} \quad p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$ $\mathbf{a} \quad n\hat{\mathbf{a}} + m\hat{\mathbf{b}} \quad -p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$	$I2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ L14
	n odd m even p even q odd or n even m odd p odd q even p odd q odd			$p2_1/m11 [(a' + b')/4]$ L15 $pm11$ L11
	n odd m odd			$p2/m11$ L14 $p2_1/m11 (a'/4)$ L15 $pm11$ L11
		$B2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ L14 $p2_1/m11 (a'/4)$ L15 $pm11$ L11
		$C2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c2/m11$ L18 $cm11$ L13
$\hat{\mathbf{a}} = (\mathbf{b} - \mathbf{c})/2$ h even, k odd or h odd, k even $\Rightarrow n = h + k, m = h - k$ $\hat{\mathbf{b}} = (\mathbf{b} + \mathbf{c})/2$ h, k odd $\Rightarrow n = (h + k)/2, m = (h - k)/2$				
$(k0h)$ $(k0\bar{h})$	$\mathbf{b} \quad n\hat{\mathbf{a}} - m\hat{\mathbf{b}} \quad p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$ $\mathbf{b} \quad n\hat{\mathbf{a}} + m\hat{\mathbf{b}} \quad -p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$	$I2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ L14
	n odd m even p even q odd or n even m odd p odd q even p odd q odd			$p2_1/m11 [(a' + b')/4]$ L15 $pm11$ L11
	n odd m odd			$p2/m11$ L14 $p2_1/m11 (a'/4)$ L15 $pm11$ L11
		$B2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ L14 $p2_1/m11 (a'/4)$ L15 $pm11$ L11
		$C2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c2/m11$ L18 $cm11$ L13
$\hat{\mathbf{a}} = (\mathbf{c} - \mathbf{a})/2$ h even, k odd or h odd, k even $\Rightarrow n = h + k, m = h - k$ $\hat{\mathbf{b}} = (\mathbf{c} + \mathbf{a})/2$ h, k odd $\Rightarrow n = (h + k)/2, m = (h - k)/2$				

$$\mathcal{G} = F_{\bar{d}d}^{\bar{2}2\bar{2}} \text{ origin } 1$$

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit \mathbf{sd}	Sectional layer group $\mathcal{L}(\mathbf{sd})$
$(hk0)$ $(\bar{h}k0)$ $[(\mathbf{a} + \mathbf{b} + \mathbf{c})/8]$	\mathbf{c} $n\hat{\mathbf{a}} - m\hat{\mathbf{b}}$ $p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$ \mathbf{c} $n\hat{\mathbf{a}} + m\hat{\mathbf{b}}$ $-p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$			
	n odd m even	$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2_1/b11$ L17
	p even q odd		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ L16
			$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$ L12
	n even m odd	$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2/b11$ L16
	p odd q even		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2_1/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ L17
			$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11$ L12
	n even m odd	$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2/b11$ L16
	p odd q odd		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2_1/b11 (\mathbf{a}'/4)$ L17
			$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11$ L12
	n odd m odd	$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$\widehat{p}\bar{1}$ L02
	p even q odd		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$c211$ L10
		$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}1$ L01	
n odd m odd	$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$\widehat{p}\bar{1}$ L02	
p odd q even		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$c211 (\mathbf{b}'/4)$ L10	
		$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}1$ L01	
n odd m even	$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2_1/b11$ L17	
p odd q odd		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2/b11 (\mathbf{a}'/4)$ L16	
		$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$ L12	
$\hat{\mathbf{a}} = (\mathbf{a} - \mathbf{b})/2$ $\hat{\mathbf{b}} = (\mathbf{a} + \mathbf{b})/2$		h even, k odd or h odd, k even $\Rightarrow n = h + k, m = h - k$ h, k odd $\Rightarrow n = (h + k)/2, m = (h - k)/2$		
$(0hk)$ $(0\bar{h}k)$ $[(\mathbf{a} + \mathbf{b} + \mathbf{c})/8]$	\mathbf{a} $n\hat{\mathbf{a}} - m\hat{\mathbf{b}}$ $p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$ \mathbf{a} $n\hat{\mathbf{a}} + m\hat{\mathbf{b}}$ $-p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$			
	n odd m even	$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2_1/b11$ L17
	p even q odd		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ L16
			$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$ L12
	n even m odd	$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2/b11$ L16
	p odd q even		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2_1/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ L17
			$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11$ L12
	n even m odd	$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2/b11$ L16
	p odd q odd		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2_1/b11 (\mathbf{a}'/4)$ L17
			$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11$ L12
	n odd m odd	$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$\widehat{p}\bar{1}$ L02
	p even q odd		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$c211$ L10
		$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}1$ L01	
n odd m odd	$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$\widehat{p}\bar{1}$ L02	
p odd q even		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$c211 (\mathbf{b}'/4)$ L10	
		$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}1$ L01	
n odd m even	$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2_1/b11$ L17	
p odd q odd		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2/b11 (\mathbf{a}'/4)$ L16	
		$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$ L12	
$\hat{\mathbf{a}} = (\mathbf{b} - \mathbf{c})/2$ $\hat{\mathbf{b}} = (\mathbf{b} + \mathbf{c})/2$		h even, k odd or h odd, k even $\Rightarrow n = h + k, m = h - k$ h, k odd $\Rightarrow n = (h + k)/2, m = (h - k)/2$		

Continued

$(k0h)$ $(k0\bar{h})$ [[$\mathbf{a} + \mathbf{b} + \mathbf{c}$]/8]	\mathbf{b} $n\hat{\mathbf{a}} - m\hat{\mathbf{b}}$ \mathbf{b} $n\hat{\mathbf{a}} + m\hat{\mathbf{b}}$	$p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$ $-p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$					
	n odd p even	m even q odd	$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ $p2/b11 [(a' + b')/4]$ $pb11 (a'/4)$	L17 L16 L12	
	n even p odd	m odd q even	$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ $p2_1/b11 [(a' + b')/4]$ $pb11$	L16 L17 L12	
	n even p odd	m odd q odd	$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ $p2_1/b11 (a'/4)$ $pb11$	L16 L17 L12	
	n odd p even	m odd q odd	$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}\bar{1}$ $c211$ $\hat{p}1$	L02 L10 L01	
	n odd p odd	m odd q even	$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}\bar{1}$ $c211 (b'/4)$ $\hat{p}1$	L02 L10 L01	
	n odd p odd	m even q odd	$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ $p2/b11 (a'/4)$ $pb11 (a'/4)$	L17 L16 L12	
	$\hat{\mathbf{a}} = (\mathbf{c} - \mathbf{a})/2$ $\hat{\mathbf{b}} = (\mathbf{c} + \mathbf{a})/2$		h even, k odd or h odd, k even $\Rightarrow n = h + k, m = h - k$ h, k odd $\Rightarrow n = (h + k)/2, m = (h - k)/2$				

Continued

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group a' b' d	Scanning group \mathcal{H}	Linear orbit sd	Sectional layer group $\mathcal{L}(sd)$	
(<i>hk0</i>) ($\bar{h}k0$)	c $n\hat{\mathbf{a}} - m\hat{\mathbf{b}}$ $p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$ c $n\hat{\mathbf{a}} + m\hat{\mathbf{b}}$ $-p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$				
	<i>n</i> odd <i>m</i> even <i>p</i> even <i>q</i> odd	<i>I2/c11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p2</i> ₁ / <i>b11</i> L17 <i>p2/b11</i> [(a' + b')/4] L16 <i>pb11</i> (a' /4) L12	
	<i>n</i> even <i>m</i> odd <i>p</i> odd <i>q</i> even	<i>I2/b11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p2/b11</i> L16 <i>p2</i> ₁ / <i>b11</i> [(a' + b')/4] L17 <i>pb11</i> L12	
	<i>n</i> even <i>m</i> odd <i>p</i> odd <i>q</i> odd	<i>B2/b11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p2/b11</i> L16 <i>p2</i> ₁ / <i>b11</i> (a' /4) L17 <i>pb11</i> L12	
	<i>n</i> odd <i>m</i> odd <i>p</i> even <i>q</i> odd	<i>C2/c11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p1}$ L02 <i>c211</i> L10 $\widehat{p1}$ L01	
	<i>n</i> odd <i>m</i> odd <i>p</i> odd <i>q</i> even	<i>C2/n11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p1}$ L02 <i>c211</i> (b' /4) L10 $\widehat{p1}$ L01	
	<i>n</i> odd <i>m</i> even <i>p</i> odd <i>q</i> odd	<i>B2/n11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p2</i> ₁ / <i>b11</i> L17 <i>p2/b11</i> (a' /4) L16 <i>pb11</i> (a' /4) L12	
$\hat{\mathbf{a}} = (\mathbf{a} - \mathbf{b})/2$ $\hat{\mathbf{b}} = (\mathbf{a} + \mathbf{b})/2$		<i>h</i> even, <i>k</i> odd or <i>h</i> odd, <i>k</i> even $\Rightarrow n = h + k, m = h - k$ <i>h, k</i> odd $\Rightarrow n = (h + k)/2, m = (h - k)/2$			
(<i>0hk</i>) (<i>0hk</i>)	a $n\hat{\mathbf{a}} - m\hat{\mathbf{b}}$ $p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$ a $n\hat{\mathbf{a}} + m\hat{\mathbf{b}}$ $-p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$				
	<i>n</i> odd <i>m</i> even <i>p</i> even <i>q</i> odd	<i>I2/c11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p2</i> ₁ / <i>b11</i> L17 <i>p2/b11</i> [(a' + b')/4] L16 <i>pb11</i> (a' /4) L12	
	<i>n</i> even <i>m</i> odd <i>p</i> odd <i>q</i> even	<i>I2/b11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p2/b11</i> L16 <i>p2</i> ₁ / <i>b11</i> [(a' + b')/4] L17 <i>pb11</i> L12	
	<i>n</i> even <i>m</i> odd <i>p</i> odd <i>q</i> odd	<i>B2/b11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p2/b11</i> L16 <i>p2</i> ₁ / <i>b11</i> (a' /4) L17 <i>pb11</i> L12	
	<i>n</i> odd <i>m</i> odd <i>p</i> even <i>q</i> odd	<i>C2/c11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p1}$ L02 <i>c211</i> L10 $\widehat{p1}$ L01	
	<i>n</i> odd <i>m</i> odd <i>p</i> odd <i>q</i> even	<i>C2/n11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p1}$ L02 <i>c211</i> (b' /4) L10 $\widehat{p1}$ L01	
	<i>n</i> odd <i>m</i> even <i>p</i> odd <i>q</i> odd	<i>B2/n11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p2</i> ₁ / <i>b11</i> L17 <i>p2/b11</i> (a' /4) L16 <i>pb11</i> (a' /4) L12	
$\hat{\mathbf{a}} = (\mathbf{b} - \mathbf{c})/2$ $\hat{\mathbf{b}} = (\mathbf{b} + \mathbf{c})/2$		<i>h</i> even, <i>k</i> odd or <i>h</i> odd, <i>k</i> even $\Rightarrow n = h + k, m = h - k$ <i>h, k</i> odd $\Rightarrow n = (h + k)/2, m = (h - k)/2$			

$(k0h)$ $(k0\bar{h})$	\mathbf{b} $n\hat{\mathbf{a}} - m\hat{\mathbf{b}}$ \mathbf{b} $n\hat{\mathbf{a}} + m\hat{\mathbf{b}}$	$p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$ $-p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$					
	n odd p even	m even q odd	$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ $p2/b11 [(a' + b')/4]$ $pb11 (a'/4)$	L17 L16 L12	
	n even p odd	m odd q even	$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ $p2_1/b11 [(a' + b')/4]$ $pb11$	L16 L17 L12	
	n even p odd	m odd q odd	$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ $p2_1/b11 (a'/4)$ $pb11$	L16 L17 L12	
	n odd p even	m odd q odd	$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}\bar{1}$ $c211$ $\hat{p}1$	L02 L10 L01	
	n odd p odd	m odd q even	$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}\bar{1}$ $c211 (b'/4)$ $\hat{p}1$	L02 L10 L01	
	n odd p odd	m even q odd	$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ $p2/b11 (a'/4)$ $pb11 (a'/4)$	L17 L16 L12	
	$\hat{\mathbf{a}} = (\mathbf{c} - \mathbf{a})/2$ $\hat{\mathbf{b}} = (\mathbf{c} + \mathbf{a})/2$		h even, k odd or h odd, k even $\Rightarrow n = h + k, m = h - k$ h, k odd $\Rightarrow n = (h + k)/2, m = (h - k)/2$				

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group a' b' d	Scanning group \mathcal{H}	Linear orbit sd	Sectional layer group $\mathcal{L}(\mathbf{sd})$
<i>(mn0)</i> <i>($\bar{m}n0$)</i>	c <i>na - mb</i> <i>pa + qb</i>	<i>I2/m11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p2/m11</i> L14
	c <i>na + mb</i> <i>-pa + qb</i> <i>n</i> odd <i>m</i> even <i>p</i> even <i>q</i> odd or <i>n</i> even <i>m</i> odd <i>p</i> odd <i>q</i> even <i>p</i> odd <i>q</i> odd			<i>p2₁/m11 [(a' + b')/4]</i> L15
	<i>n</i> odd <i>m</i> odd			<i>pm11</i> L11
		<i>B2/m11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p2/m11</i> L14 <i>p2₁/m11 (a'/4)</i> L15 <i>pm11</i> L11
		<i>C2/m11</i>	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	<i>c2/m11</i> L18 <i>cm11</i> L13
<i>(0mn)</i> <i>(0$\bar{m}n$)</i>	a <i>nb - mc</i> <i>pb + qc</i>	<i>I2/m11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p2/m11</i> L14
	a <i>nb + mc</i> <i>-pb + qc</i> <i>n</i> odd <i>m</i> even <i>p</i> even <i>q</i> odd or <i>n</i> even <i>m</i> odd <i>p</i> odd <i>q</i> even <i>p</i> odd <i>q</i> odd			<i>p2₁/m11 [(a' + b')/4]</i> L15
	<i>n</i> odd <i>m</i> odd			<i>pm11</i> L11
		<i>B2/m11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p2/m11</i> L14 <i>p2₁/m11 (a'/4)</i> L15 <i>pm11</i> L11
		<i>C2/m11</i>	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	<i>c2/m11</i> L18 <i>cm11</i> L13
<i>(n0m)</i> <i>(n0\bar{m})</i>	b <i>nc - ma</i> <i>pc + qa</i>	<i>I2/m11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p2/m11</i> L14
	b <i>nc + ma</i> <i>-pc + qa</i> <i>n</i> odd <i>m</i> even <i>p</i> even <i>q</i> odd or <i>n</i> even <i>m</i> odd <i>p</i> odd <i>q</i> even <i>p</i> odd <i>q</i> odd			<i>p2₁/m11 [(a' + b')/4]</i> L15
	<i>n</i> odd <i>m</i> odd			<i>pm11</i> L11
		<i>B2/m11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p2/m11</i> L14 <i>p2₁/m11 (a'/4)</i> L15 <i>pm11</i> L11
		<i>C2/m11</i>	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	<i>c2/m11</i> L18 <i>cm11</i> L13

$$\mathcal{G} = I_{b a m}^2 \frac{2}{2} \frac{2}{2}$$

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group a' b' d	Scanning group \mathcal{H}	Linear orbit sd	Sectional layer group $\mathcal{L}(sd)$
(mn0) ($\overline{m}n0$)	c na - mb pa + qb	<i>I</i> 2/ <i>m</i> 11	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p</i> 2/ <i>m</i> 11 L14
	c na + mb -pa + qb			<i>p</i> 2 ₁ / <i>m</i> 11 [(a' + b')/4] L15
	<i>n</i> odd <i>m</i> even			<i>pm</i> 11 L11
	<i>p</i> even <i>q</i> odd			
	or			
	<i>n</i> even <i>m</i> odd			
	<i>p</i> odd <i>q</i> even			
	<i>p</i> odd <i>q</i> odd			
	<i>n</i> odd <i>m</i> odd			
(0mn) ($0\overline{m}n$)	a nb - mc pb + qc	<i>I</i> 2/ <i>c</i> 11	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p</i> 2 ₁ / <i>b</i> 11 L17
	a nb + mc -pb + qc			<i>p</i> 2/ <i>b</i> 11 [(a' + b')/4] L16
	<i>n</i> odd <i>m</i> even			<i>pb</i> 11 (a' /4) L12
	<i>p</i> even <i>q</i> odd			
	<i>n</i> even <i>m</i> odd			
	<i>p</i> odd <i>q</i> even			
	<i>n</i> even <i>m</i> odd			
	<i>p</i> odd <i>q</i> odd			
	<i>n</i> odd <i>m</i> odd			
(0mn) ($0\overline{m}n$)	a nb - mc pb + qc	<i>I</i> 2/ <i>b</i> 11	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p</i> 2/ <i>b</i> 11 L16
	a nb + mc -pb + qc			<i>p</i> 2 ₁ / <i>b</i> 11 [(a' + b')/4] L17
	<i>n</i> odd <i>m</i> even			<i>pb</i> 11 L12
	<i>p</i> even <i>q</i> odd			
	<i>n</i> even <i>m</i> odd			
	<i>p</i> odd <i>q</i> even			
	<i>n</i> even <i>m</i> odd			
	<i>p</i> odd <i>q</i> odd			
	<i>n</i> odd <i>m</i> odd			
(0mn) ($0\overline{m}n$)	a nb - mc pb + qc	<i>B</i> 2/ <i>b</i> 11	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p</i> 2/ <i>b</i> 11 L16
	a nb + mc -pb + qc			<i>p</i> 2 ₁ / <i>b</i> 11 (a' /4) L17
	<i>n</i> odd <i>m</i> even			<i>pb</i> 11 L12
	<i>p</i> even <i>q</i> odd			
	<i>n</i> even <i>m</i> odd			
	<i>p</i> odd <i>q</i> even			
	<i>n</i> even <i>m</i> odd			
	<i>p</i> odd <i>q</i> odd			
	<i>n</i> odd <i>m</i> odd			
(0mn) ($0\overline{m}n$)	a nb - mc pb + qc	<i>C</i> 2/ <i>c</i> 11	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}\overline{1}$ L02
	a nb + mc -pb + qc			<i>c</i> 211 L10
	<i>n</i> odd <i>m</i> even			$\widehat{p}1$ L01
	<i>p</i> even <i>q</i> odd			
	<i>n</i> even <i>m</i> odd			
	<i>p</i> odd <i>q</i> even			
	<i>n</i> even <i>m</i> odd			
	<i>p</i> odd <i>q</i> odd			
	<i>n</i> odd <i>m</i> odd			
(0mn) ($0\overline{m}n$)	a nb - mc pb + qc	<i>C</i> 2/ <i>n</i> 11	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}\overline{1}$ L02
	a nb + mc -pb + qc			<i>c</i> 211 (b' /4) L10
	<i>n</i> odd <i>m</i> even			$\widehat{p}1$ L01
	<i>p</i> even <i>q</i> odd			
	<i>n</i> even <i>m</i> odd			
	<i>p</i> odd <i>q</i> even			
	<i>n</i> even <i>m</i> odd			
	<i>p</i> odd <i>q</i> odd			
	<i>n</i> odd <i>m</i> odd			
(0mn) ($0\overline{m}n$)	a nb - mc pb + qc	<i>B</i> 2/ <i>n</i> 11	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p</i> 2 ₁ / <i>b</i> 11 L17
	a nb + mc -pb + qc			<i>p</i> 2/ <i>b</i> 11 (a' /4) L16
	<i>n</i> odd <i>m</i> even			<i>pb</i> 11 (a' /4) L12
	<i>p</i> even <i>q</i> odd			
	<i>n</i> even <i>m</i> odd			
	<i>p</i> odd <i>q</i> even			
	<i>n</i> even <i>m</i> odd			
	<i>p</i> odd <i>q</i> odd			
	<i>n</i> odd <i>m</i> odd			

Continued

$$\mathcal{G} = I_b^2 \frac{2}{a} \frac{2}{m}$$

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group a' b' d	Scanning group \mathcal{H}	Linear orbit sd	Sectional layer group $\mathcal{L}(\mathbf{sd})$
(<i>n0m</i>) (<i>n0m</i>)	b <i>nc - ma</i> <i>pc + qa</i> b <i>nc + ma</i> <i>-pc + qa</i>			
	<i>n</i> odd <i>m</i> even <i>p</i> even <i>q</i> odd	<i>I2/b11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p2/b11</i> L16 <i>p2₁/b11</i> [(a' + b')/4] L17 <i>pb11</i> L12
	<i>n</i> even <i>m</i> odd <i>p</i> odd <i>q</i> even	<i>I2/c11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p2₁/b11</i> L17 <i>p2/b11</i> [(a' + b')/4] L16 <i>pb11</i> (a' /4) L12
	<i>n</i> even <i>m</i> odd <i>p</i> odd <i>q</i> odd	<i>B2/n11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p2₁/b11</i> L17 <i>p2/b11</i> (a' /4) L16 <i>pb11</i> (a' /4) L12
	<i>n</i> odd <i>m</i> odd <i>p</i> even <i>q</i> odd	<i>C2/n11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p1}$ L02 <i>c211</i> (b' /4) L10 $\widehat{p1}$ L01
	<i>n</i> odd <i>m</i> odd <i>p</i> odd <i>q</i> even	<i>C2/c11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p1}$ L02 <i>c211</i> L10 $\widehat{p1}$ L01
	<i>n</i> odd <i>m</i> even <i>p</i> odd <i>q</i> odd	<i>B2/b11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p2/b11</i> L16 <i>p2₁/b11</i> (a' /4) L17 <i>pb11</i> L12

$$\mathcal{G} = I \frac{2_1}{b} \frac{2_1}{c} \frac{2}{a}$$

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group a' b' d	Scanning group \mathcal{H}	Linear orbit sd	Sectional layer group $\mathcal{L}(\mathbf{sd})$	
<i>(mn0)</i> <i>($\bar{m}n0$)</i>	c <i>na</i> – <i>mb</i> <i>pa</i> + <i>qb</i>	<i>I2/c11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm\mathbf{sd}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p2</i> ₁ / <i>b11</i> L17	
	c <i>na</i> + <i>mb</i> – <i>pa</i> + <i>qb</i>			<i>p2/b11</i> [(a' + b')/4] L16	
	<i>n</i> odd <i>m</i> even <i>p</i> even <i>q</i> odd			<i>pb11</i> (a' /4) L12	
	<i>n</i> even <i>m</i> odd <i>p</i> odd <i>q</i> even	<i>I2/b11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm\mathbf{sd}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p2/b11</i> L16 <i>p2</i> ₁ / <i>b11</i> [(a' + b')/4] L17 <i>pb11</i> L12	
	<i>n</i> even <i>m</i> odd <i>p</i> odd <i>q</i> odd	<i>B2/b11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm\mathbf{sd}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p2/b11</i> L16 <i>p2</i> ₁ / <i>b11</i> (a' /4) L17 <i>pb11</i> L12	
	<i>n</i> odd <i>m</i> odd <i>p</i> even <i>q</i> odd	<i>C2/c11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm\mathbf{sd}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p\bar{1}}$ L02 <i>c211</i> L10 $\widehat{p1}$ L01	
	<i>n</i> odd <i>m</i> odd <i>p</i> odd <i>q</i> even	<i>C2/n11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm\mathbf{sd}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p\bar{1}}$ L02 <i>c211</i> (b' /4) L10 $\widehat{p1}$ L01	
	<i>n</i> odd <i>m</i> even <i>p</i> odd <i>q</i> odd	<i>B2/n11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm\mathbf{sd}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p2</i> ₁ / <i>b11</i> L17 <i>p2/b11</i> (a' /4) L16 <i>pb11</i> (a' /4) L12	
	<i>(0mn)</i> <i>(0$\bar{m}n$)</i>	a <i>nb</i> – <i>mc</i> <i>pb</i> + <i>qc</i>	<i>I2/c11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm\mathbf{sd}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p2</i> ₁ / <i>b11</i> L17
		a <i>nb</i> + <i>mc</i> – <i>pb</i> + <i>qc</i>			<i>p2/b11</i> [(a' + b')/4] L16
		<i>n</i> odd <i>m</i> even <i>p</i> even <i>q</i> odd			<i>pb11</i> (a' /4) L12
		<i>n</i> even <i>m</i> odd <i>p</i> odd <i>q</i> even	<i>I2/b11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm\mathbf{sd}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p2/b11</i> L16 <i>p2</i> ₁ / <i>b11</i> [(a' + b')/4] L17 <i>pb11</i> L12
<i>n</i> even <i>m</i> odd <i>p</i> odd <i>q</i> odd		<i>B2/b11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm\mathbf{sd}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p2/b11</i> L16 <i>p2</i> ₁ / <i>b11</i> (a' /4) L17 <i>pb11</i> L12	
<i>n</i> odd <i>m</i> odd <i>p</i> even <i>q</i> odd		<i>C2/c11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm\mathbf{sd}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p\bar{1}}$ L02 <i>c211</i> L10 $\widehat{p1}$ L01	
<i>n</i> odd <i>m</i> odd <i>p</i> odd <i>q</i> even		<i>C2/n11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm\mathbf{sd}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p\bar{1}}$ L02 <i>c211</i> (b' /4) L10 $\widehat{p1}$ L01	
<i>n</i> odd <i>m</i> even <i>p</i> odd <i>q</i> odd		<i>B2/n11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm\mathbf{sd}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p2</i> ₁ / <i>b11</i> L17 <i>p2/b11</i> (a' /4) L16 <i>pb11</i> (a' /4) L12	

Continued

$$\mathcal{G} = I \frac{2_1}{b} \frac{2_1}{c} \frac{2}{a}$$

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group a' b' d	Scanning group \mathcal{H}	Linear orbit sd	Sectional layer group $\mathcal{L}(\mathbf{sd})$
<i>(n0m)</i> <i>(n0m̄)</i>	b <i>nc - ma</i> <i>pc + qa</i>	<i>I2/c11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p2₁/b11</i> L17
	b <i>nc + ma</i> <i>-pc + qa</i>			<i>p2/b11 [(a' + b')/4]</i> L16
	<i>n</i> odd <i>m</i> even <i>p</i> even <i>q</i> odd			<i>pb11 (a'/4)</i> L12
	<i>n</i> even <i>m</i> odd <i>p</i> odd <i>q</i> even	<i>I2/b11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p2/b11</i> L16
		<i>p2₁/b11 [(a' + b')/4]</i> L17		
		<i>pb11</i> L12		
	<i>n</i> even <i>m</i> odd <i>p</i> odd <i>q</i> odd	<i>B2/b11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p2/b11</i> L16
		<i>p2₁/b11 (a'/4)</i> L17		
		<i>pb11</i> L12		
	<i>n</i> odd <i>m</i> odd <i>p</i> even <i>q</i> odd	<i>C2/c11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}\bar{1}$ L02
		<i>c211</i> L10		
		$\widehat{p}1$ L01		
<i>n</i> odd <i>m</i> odd <i>p</i> odd <i>q</i> even	<i>C2/n11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}\bar{1}$ L02	
	<i>c211 (b'/4)</i> L10			
	$\widehat{p}1$ L01			
<i>n</i> odd <i>m</i> even <i>p</i> odd <i>q</i> odd	<i>B2/n11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p2₁/b11</i> L17	
	<i>p2/b11 (a'/4)</i> L16			
	<i>pb11 (a'/4)</i> L12			

$$\mathcal{G} = I_m^{2_1} 2_1 2_1 a$$

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group a' b' d	Scanning group \mathcal{H}	Linear orbit sd	Sectional layer group $\mathcal{L}(\mathbf{sd})$	
(mn0) ($\bar{m}n0$)	c <i>na - mb</i> <i>pa + qb</i>	<i>I2/c11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm\mathbf{sd}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p2₁/b11</i> L17	
	c <i>na + mb</i> <i>-pa + qb</i>			<i>p2/b11</i> L16	
	<i>n</i> odd <i>m</i> even <i>p</i> even <i>q</i> odd			<i>pb11</i> (<i>a'</i> /4) L12	
	<i>n</i> even <i>m</i> odd <i>p</i> odd <i>q</i> even	<i>I2/b11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm\mathbf{sd}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p2/b11</i> L16 <i>p2₁/b11</i> [(<i>a'</i> + <i>b'</i>)/4] L17 <i>pb11</i> L12	
	<i>n</i> even <i>m</i> odd <i>p</i> odd <i>q</i> odd	<i>B2/b11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm\mathbf{sd}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p2/b11</i> L16 <i>p2₁/b11</i> (<i>a'</i> /4) L17 <i>pb11</i> L12	
	<i>n</i> odd <i>m</i> odd <i>p</i> even <i>q</i> odd	<i>C2/c11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm\mathbf{sd}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}\bar{1}$ L02 <i>c211</i> L10 $\widehat{p}1$ L01	
	<i>n</i> odd <i>m</i> odd <i>p</i> odd <i>q</i> even	<i>C2/n11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm\mathbf{sd}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}\bar{1}$ L02 <i>c211</i> (<i>b'</i> /4) L10 $\widehat{p}1$ L01	
	<i>n</i> odd <i>m</i> even <i>p</i> odd <i>q</i> odd	<i>B2/n11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm\mathbf{sd}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p2₁/b11</i> L17 <i>p2/b11</i> (<i>a'</i> /4) L16 <i>pb11</i> (<i>a'</i> /4) L12	
	(0mn) (0 $\bar{m}n$)	a <i>nb - mc</i> <i>pb + qc</i>	<i>I2/m11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm\mathbf{sd}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p2/m11</i> L14
		a <i>nb + mc</i> <i>-pb + qc</i>			<i>p2₁/m11</i> [(<i>a'</i> + <i>b'</i>)/4] L15
		<i>n</i> odd <i>m</i> even <i>p</i> even <i>q</i> odd			<i>pm11</i> L11
		or <i>n</i> even <i>m</i> odd <i>p</i> odd <i>q</i> even <i>p</i> odd <i>q</i> odd	<i>B2/m11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm\mathbf{sd}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p2/m11</i> L14 <i>p2₁/m11</i> (<i>a'</i> /4) L15 <i>pm11</i> L11
<i>n</i> odd <i>m</i> odd		<i>C2/m11</i>	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[\mathbf{sd}, -\mathbf{sd}]$	<i>c2/m11</i> L18 <i>cm11</i> L13	

Continued

No. 75 $P4$ C_4^1

$$\mathcal{G} = P4$$

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
$(mn0)$ $(\bar{n}m0)$	\mathbf{c} $n\mathbf{a} - m\mathbf{b}$ $p\mathbf{a} + q\mathbf{b}$ \mathbf{c} $m\mathbf{a} + n\mathbf{b}$ $-q\mathbf{a} + p\mathbf{b}$	$P211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p211$ $p1$	L08 L01

No. 76 $P4_1$ C_4^2

$$\mathcal{G} = P4_1$$

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
$(mn0)$ $(\bar{n}m0)$	\mathbf{c} $n\mathbf{a} - m\mathbf{b}$ $p\mathbf{a} + q\mathbf{b}$ \mathbf{c} $m\mathbf{a} + n\mathbf{b}$ $-q\mathbf{a} + p\mathbf{b}$	$P2_111$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2_111$ $p1$	L09 L01

No. 77 $P4_2$ C_4^3

$$\mathcal{G} = P4_2$$

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
$(mn0)$ $(\bar{n}m0)$	\mathbf{c} $n\mathbf{a} - m\mathbf{b}$ $p\mathbf{a} + q\mathbf{b}$ \mathbf{c} $m\mathbf{a} + n\mathbf{b}$ $-q\mathbf{a} + p\mathbf{b}$	$P211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p211$ $p1$	L08 L01

No. 78 $P4_3$ C_4^4

$$\mathcal{G} = P4_3$$

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
$(mn0)$ $(\bar{n}m0)$	\mathbf{c} $n\mathbf{a} - m\mathbf{b}$ $p\mathbf{a} + q\mathbf{b}$ \mathbf{c} $m\mathbf{a} + n\mathbf{b}$ $-q\mathbf{a} + p\mathbf{b}$	$P2_111$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2_111$ $p1$	L09 L01

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
$(mn0)$ $(\bar{n}m0)$	\mathbf{c} $n\mathbf{a} - m\mathbf{b}$ $p\mathbf{a} + q\mathbf{b}$	$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111 (\mathbf{b}'/4)$ $p1$	L08
	\mathbf{c} $m\mathbf{a} + n\mathbf{b}$ $-q\mathbf{a} + p\mathbf{b}$				L09
	n odd m even p even q odd or n even m odd p odd q even p odd q odd	$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111$ $p1$	L08 L09 L01
	n odd m odd	$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$ $\hat{p}1$	L10 L01

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
$(mn0)$ $(\bar{n}m0)$	\mathbf{c} $n\mathbf{a} - m\mathbf{b}$ $p\mathbf{a} + q\mathbf{b}$	$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111 (\mathbf{b}'/4)$ $p1$	L08
	\mathbf{c} $m\mathbf{a} + n\mathbf{b}$ $-q\mathbf{a} + p\mathbf{b}$				L09
	n odd m even p even q odd or n even m odd p odd q even p odd q odd	$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111$ $p1$	L08 L09 L01
	n odd m odd	$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$ $\hat{p}1$	L10 L01

No. 81 $P\bar{4}$

S_4^1

$$\mathcal{G} = P\bar{4}$$

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
$(mn0)$ $(\bar{n}m0)$	\mathbf{c} $na - m\mathbf{b}$ $pa + q\mathbf{b}$ \mathbf{c} $ma + n\mathbf{b}$ $-qa + p\mathbf{b}$	$P211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p211$ $p1$	L08 L01

No. 82 $I\bar{4}$

S_4^2

$$\mathcal{G} = I\bar{4}$$

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
$(mn0)$ $(\bar{n}m0)$	\mathbf{c} $na - m\mathbf{b}$ $pa + q\mathbf{b}$ \mathbf{c} $ma + n\mathbf{b}$ $-qa + p\mathbf{b}$				
	n odd m even p even q odd or n even m odd p odd q even p odd q odd	$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111 (\mathbf{b}'/4)$ $p1$	L08 L09 L01
	n odd m odd	$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111$ $p1$	L08 L09 L01
		$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$ $\hat{p}1$	L10 L01

No. 83 $P4/m$

$$\mathcal{G} = P4/m$$

C_{4h}^1

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
$(mn0)$	\mathbf{c} $na - mb$ $pa + qb$	$P2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2/m11$ $pm11$	L14
$(\bar{n}m0)$	\mathbf{c} $ma + nb$ $-qa + pb$				L11

No. 84 $P4_2/m$

$$\mathcal{G} = P4_2/m$$

C_{4h}^2

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
$(mn0)$	\mathbf{c} $na - mb$ $pa + qb$	$P2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2/m11$ $pm11$	L14
$(\bar{n}m0)$	\mathbf{c} $ma + nb$ $-qa + pb$				L11

$$\mathcal{G} = P4/n \text{ origin 1}$$

Orientation orbit (hkl)	Conventional basis of the scanning group $\mathbf{a}' \quad \mathbf{b}' \quad \mathbf{d}$	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$
$(mn0)$ $(\bar{n}m0)$ $(\mathbf{a} + \mathbf{b})/4$	$\mathbf{c} \quad n\mathbf{a} - m\mathbf{b} \quad p\mathbf{a} + q\mathbf{b}$ $\mathbf{c} \quad m\mathbf{a} + n\mathbf{b} \quad -q\mathbf{a} + p\mathbf{b}$ n odd m even p even q odd or n even m odd p odd q even p odd q odd	$P2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ L02 $p211 (\mathbf{b}'/4)$ L08 $p1$ L01
		$P2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ L02 $p211$ L08 $p1$ L01
	n odd m odd	$P2/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2/b11$ L16 $pb11$ L12

Continued

Continued

$$\mathcal{G} = P4/n \text{ origin 2}$$

Orientation orbit (hkl)	Conventional basis of the scanning group $\mathbf{a}' \quad \mathbf{b}' \quad \mathbf{d}$	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$
$(mn0)$ $(\bar{n}m0)$	$\mathbf{c} \quad n\mathbf{a} - m\mathbf{b} \quad p\mathbf{a} + q\mathbf{b}$ $\mathbf{c} \quad m\mathbf{a} + n\mathbf{b} \quad -q\mathbf{a} + p\mathbf{b}$ n odd m even p even q odd or n even m odd p odd q even p odd q odd	$P2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ L02 $p211 (\mathbf{b}'/4)$ L08 $p1$ L01
		$P2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ L02 $p211$ L08 $p1$ L01
	n odd m odd	$P2/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2/b11$ L16 $pb11$ L12

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$
$(mn0)$ $(\bar{n}m0)$ $(\mathbf{a} + \mathbf{b} + \mathbf{c})/4$	\mathbf{c} $n\mathbf{a} - m\mathbf{b}$ $p\mathbf{a} + q\mathbf{b}$ \mathbf{c} $m\mathbf{a} + n\mathbf{b}$ $-q\mathbf{a} + p\mathbf{b}$	$P2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ L02 $p211 (\mathbf{b}'/4)$ L08 $p1$ L01
	n odd m even p even q odd or n even m odd p odd q even p odd q odd			
	$P2/c11$			
	n odd m odd	$P2/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p\bar{1}$ L02 $p211$ L08 $p1$ L01 $p2/b11$ L16 $pb11$ L12

Continued

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$
$(mn0)$ $(\bar{n}m0)$	\mathbf{c} $n\mathbf{a} - m\mathbf{b}$ $p\mathbf{a} + q\mathbf{b}$ \mathbf{c} $m\mathbf{a} + n\mathbf{b}$ $-q\mathbf{a} + p\mathbf{b}$	$P2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ L02 $p211 (\mathbf{b}'/4)$ L08 $p1$ L01
	n odd m even p even q odd or n even m odd p odd q even p odd q odd			
	$P2/c11$			
	n odd m odd	$P2/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p\bar{1}$ L02 $p211$ L08 $p1$ L01 $p2/b11$ L16 $pb11$ L12

Orientation orbit (hkl)	Conventional basis of the scanning group $\mathbf{a}' \quad \mathbf{b}' \quad \mathbf{d}$	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$
$(mn0)$ $(\bar{n}m0)$	$\mathbf{c} \quad n\mathbf{a} - m\mathbf{b} \quad p\mathbf{a} + q\mathbf{b}$ $\mathbf{c} \quad m\mathbf{a} + n\mathbf{b} \quad -q\mathbf{a} + p\mathbf{b}$			
	n odd m even p even q odd or n even m odd p odd q even p odd q odd	$I2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ L14 $p2_1/m11 [(a' + b')/4]$ L15 $pm11$ L11
	n odd m odd	$B2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ L14 $p2_1/m11 (a'/4)$ L15 $pm11$ L11
		$C2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c2/m11$ L18 $cm11$ L13

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$		
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}					
$(mn0)$ $(\bar{n}m0)$ $(\mathbf{b}/4 + \mathbf{c}/8)$	\mathbf{c}	$n\mathbf{a} - m\mathbf{b}$	$p\mathbf{a} + q\mathbf{b}$	$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$	L17	
	\mathbf{c}	$m\mathbf{a} + n\mathbf{b}$	$-q\mathbf{a} + p\mathbf{b}$			$p2/b11$ [$(\mathbf{a}' + \mathbf{b}')/4$]	L16	
	n odd	m even	p even			q odd	$pb11$ ($\mathbf{a}'/4$)	L12
	n even	m odd	p odd	q even	$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$	L16
	p odd	q even					$p2_1/b11$ [$(\mathbf{a}' + \mathbf{b}')/4$]	L17
							$pb11$	L12
	n even	m odd	p odd	q odd	$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$	L16
							$p2_1/b11$ ($\mathbf{a}'/4$)	L17
							$pb11$	L12
	n odd	m odd	p even	q odd	$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}\bar{1}$	L02
							$c211$	L10
							$\widehat{p}1$	L01
	n odd	m odd	p odd	q even	$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}\bar{1}$	L02
							$c211$ ($\mathbf{b}'/4$)	L10
				$\widehat{p}1$			L01	
n odd	m even	p odd	q odd	$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$	L17	
						$p2/b11$ ($\mathbf{a}'/4$)	L16	
						$pb11$ ($\mathbf{a}'/4$)	L12	

Continued

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$		
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}					
$(mn0)$ $(\bar{n}m0)$	\mathbf{c}	$n\mathbf{a} - m\mathbf{b}$	$p\mathbf{a} + q\mathbf{b}$	$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$	L17	
	\mathbf{c}	$m\mathbf{a} + n\mathbf{b}$	$-q\mathbf{a} + p\mathbf{b}$			$p2/b11$ [$(\mathbf{a}' + \mathbf{b}')/4$]	L16	
	n odd	m even	p even			q odd	$pb11$ ($\mathbf{a}'/4$)	L12
	n even	m odd	p odd	q even	$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$	L16
							$p2_1/b11$ [$(\mathbf{a}' + \mathbf{b}')/4$]	L17
							$pb11$	L12
	n even	m odd	p odd	q odd	$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$	L16
							$p2_1/b11$ ($\mathbf{a}'/4$)	L17
							$pb11$	L12
	n odd	m odd	p even	q odd	$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}\bar{1}$	L02
							$c211$	L10
							$\widehat{p}1$	L01
	n odd	m odd	p odd	q even	$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}\bar{1}$	L02
							$c211$ ($\mathbf{b}'/4$)	L10
				$\widehat{p}1$			L01	
n odd	m even	p odd	q odd	$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$	L17	
						$p2/b11$ ($\mathbf{a}'/4$)	L16	
						$pb11$ ($\mathbf{a}'/4$)	L12	

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}				
$(mn0)$	\mathbf{c}	$n\mathbf{a} - m\mathbf{b}$	$p\mathbf{a} + q\mathbf{b}$	$P211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p211$	L08
$(\bar{n}m0)$	\mathbf{c}	$m\mathbf{a} + n\mathbf{b}$	$-q\mathbf{a} + p\mathbf{b}$				
$(\bar{m}n0)$	\mathbf{c}	$n\mathbf{a} + m\mathbf{b}$	$-p\mathbf{a} + q\mathbf{b}$				
$(nm0)$	\mathbf{c}	$m\mathbf{a} - n\mathbf{b}$	$q\mathbf{a} + p\mathbf{b}$				
						$p1$	L01
$(0mn)$	\mathbf{a}	$n\mathbf{b} - m\mathbf{c}$	$p\mathbf{b} + q\mathbf{c}$	$P211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p211$	L08
$(0\bar{m}n)$	\mathbf{a}	$n\mathbf{b} + m\mathbf{c}$	$-p\mathbf{b} + q\mathbf{c}$				
$(m0n)$	\mathbf{b}	$m\mathbf{c} - n\mathbf{a}$	$q\mathbf{c} + p\mathbf{a}$				
$(m0\bar{n})$	\mathbf{b}	$m\mathbf{c} + n\mathbf{a}$	$-q\mathbf{c} + p\mathbf{a}$				
						$p1$	L01
(hhl)	$\mathbf{a} - \mathbf{b}$	$n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$	$p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$	$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$	L10
$(\bar{h}hl)$	$\mathbf{a} - \mathbf{b}$	$n(\mathbf{a} + \mathbf{b}) + m\mathbf{c}$	$-p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$				
$(h\bar{h}l)$	$\mathbf{a} + \mathbf{b}$	$n(\mathbf{b} - \mathbf{a}) - m\mathbf{c}$	$p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$				
$(\bar{h}\bar{h}l)$	$\mathbf{a} + \mathbf{b}$	$n(\mathbf{b} - \mathbf{a}) + m\mathbf{c}$	$-p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$				
		n odd	m even				
			q odd				
			m odd				
			q odd				
			m odd				
		p odd	q even				
						$p211$	L08
						$p2_111$ ($\mathbf{b}'/4$)	L09
						$p1$	L01
				$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$	L08
						$p2_111$	L09
						$p1$	L01
l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$							

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}				
$(mn0)$	\mathbf{c}	$n\mathbf{a} - m\mathbf{b}$	$p\mathbf{a} + q\mathbf{b}$	$P211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p211$	L08
$(\bar{m}n0)$	\mathbf{c}	$m\mathbf{a} + n\mathbf{b}$	$-q\mathbf{a} + p\mathbf{b}$				
$(\bar{m}\bar{n}0)$	\mathbf{c}	$n\mathbf{a} + m\mathbf{b}$	$-p\mathbf{a} + q\mathbf{b}$				
$(nm0)$	\mathbf{c}	$m\mathbf{a} - n\mathbf{b}$	$q\mathbf{a} + p\mathbf{b}$				
$(0mn)$	\mathbf{a}	$n\mathbf{b} - m\mathbf{c}$	$p\mathbf{b} + q\mathbf{c}$	$P2_111$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2_111$	L09
$(0\bar{m}n)$	\mathbf{a}	$n\mathbf{b} + m\mathbf{c}$	$-p\mathbf{b} + q\mathbf{c}$				
$(\mathbf{b}/4)$						$p1$	L01
$(m0n)$	\mathbf{b}	$m\mathbf{c} - n\mathbf{a}$	$q\mathbf{c} + p\mathbf{a}$	$P2_111$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2_111$	L09
$(m0\bar{n})$	\mathbf{b}	$m\mathbf{c} + n\mathbf{a}$	$-q\mathbf{c} + p\mathbf{a}$				
$(\mathbf{a}/4)$						$p1$	L01
(hhl)	$\mathbf{a} - \mathbf{b}$	$n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$	$p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$	$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$	L10
$(\bar{h}hl)$	$\mathbf{a} - \mathbf{b}$	$n(\mathbf{a} + \mathbf{b}) + m\mathbf{c}$	$-p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$				
$(h\bar{h}l)$	$\mathbf{a} + \mathbf{b}$	$n(\mathbf{b} - \mathbf{a}) - m\mathbf{c}$	$p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$				
$(\bar{h}\bar{h}l)$	$\mathbf{a} + \mathbf{b}$	$n(\mathbf{b} - \mathbf{a}) + m\mathbf{c}$	$-p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$				
		n odd	m even				
			q odd				
			m odd				
			q odd				
			m odd				
		p odd	q even				
				$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$	L08
				$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_111$ ($\mathbf{b}'/4$)	L09
				$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p1$	L01
				$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$	L08
				$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_111$	L09
				$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p1$	L01
l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$							

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$							
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}										
$(mn0)$	\mathbf{c}	$n\mathbf{a} - m\mathbf{b}$	$p\mathbf{a} + q\mathbf{b}$	$P2_111$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [$s\mathbf{d}, -s\mathbf{d}$]	$p2_111$	L09						
$(\bar{n}m0)$	\mathbf{c}	$m\mathbf{a} + n\mathbf{b}$	$-q\mathbf{a} + p\mathbf{b}$				L01						
$(\bar{m}n0)$	\mathbf{c}	$n\mathbf{a} + m\mathbf{b}$	$-p\mathbf{a} + q\mathbf{b}$										
$(nm0)$	\mathbf{c}	$m\mathbf{a} - n\mathbf{b}$	$q\mathbf{a} + p\mathbf{b}$										
$(0mn)$	\mathbf{a}	$n\mathbf{b} - m\mathbf{c}$	$p\mathbf{b} + q\mathbf{c}$	$P211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [$s\mathbf{d}, -s\mathbf{d}$]	$p211$	L08						
$(0\bar{m}n)$	\mathbf{a}	$n\mathbf{b} + m\mathbf{c}$	$-p\mathbf{b} + q\mathbf{c}$				L01						
$(m0n)$	\mathbf{b}	$m\mathbf{c} - n\mathbf{a}$	$q\mathbf{c} + p\mathbf{a}$	$P211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [$s\mathbf{d}, -s\mathbf{d}$]	$p211$	L08						
$(m0\bar{n})$	\mathbf{b}	$m\mathbf{c} + n\mathbf{a}$	$-q\mathbf{c} + p\mathbf{a}$				L01						
(hhl)	$\mathbf{a} - \mathbf{b}$	$n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$	$p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$	$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [$s\mathbf{d}, -s\mathbf{d}$]	$c211$	L10						
$(\bar{h}hl)$	$\mathbf{a} - \mathbf{b}$	$n(\mathbf{a} + \mathbf{b}) + m\mathbf{c}$	$-p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$				$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}1$	L01			
$(c/8)$			n odd m even								$p211$	$p2_111$ ($\mathbf{b}'/4$)	L08
			q odd								$p2_111$ ($\mathbf{b}'/4$)	$p1$	L09
			m odd					$p211$	$p211$	L08			
			q odd					$p211$	$p2_111$	L09			
			m odd				p odd	$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$	L08		
			q even								$p2_111$	$p1$	L09
							$p1$				$p1$	L01	
(hhl)	$\mathbf{a} + \mathbf{b}$	$n(\mathbf{b} - \mathbf{a}) - m\mathbf{c}$	$p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$				$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [$s\mathbf{d}, -s\mathbf{d}$]	$c211$	L10			
$(\bar{h}hl)$	$\mathbf{a} + \mathbf{b}$	$n(\mathbf{b} - \mathbf{a}) + m\mathbf{c}$	$-p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$							$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}1$	L01
$(3c/8)$			n odd m even										
			q odd		$p2_111$ ($\mathbf{b}'/4$)	$p1$							L09
			m odd		$p211$	$p211$				L08			
			q odd		$p211$	$p2_111$				L09			
			m odd	p odd	$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$				$p211$	L08		
			q even								$p2_111$	$p1$	L09
				$p1$							$p1$	L01	
l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$													

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$		
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}					
$(mn0)$ $(\bar{m}n0)$ $(\bar{m}n0)$ $(nm0)$	\mathbf{c} \mathbf{c} \mathbf{c} \mathbf{c}	$n\mathbf{a} - m\mathbf{b}$ $m\mathbf{a} + n\mathbf{b}$ $n\mathbf{a} + m\mathbf{b}$ $m\mathbf{a} - n\mathbf{b}$	$p\mathbf{a} + q\mathbf{b}$ $-q\mathbf{a} + p\mathbf{b}$ $-p\mathbf{a} + q\mathbf{b}$ $q\mathbf{a} + p\mathbf{b}$	$P2_111$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2_111$ $p1$	L09 L01	
$(0mn)$ $(0\bar{m}n)$ $(\mathbf{b}/4 + 3\mathbf{c}/8)$	\mathbf{a} \mathbf{a}	$n\mathbf{b} - m\mathbf{c}$ $n\mathbf{b} + m\mathbf{c}$	$p\mathbf{b} + q\mathbf{c}$ $-p\mathbf{b} + q\mathbf{c}$	$P2_111$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2_111$ $p1$	L09 L01	
$(m0n)$ $(m0\bar{n})$ $(\mathbf{a}/4 + \mathbf{c}/8)$	\mathbf{b} \mathbf{b}	$m\mathbf{c} - n\mathbf{a}$ $m\mathbf{c} + n\mathbf{a}$	$q\mathbf{c} + p\mathbf{a}$ $-q\mathbf{c} + p\mathbf{a}$	$P2_111$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2_111$ $p1$	L09 L01	
(hhl) $(\bar{h}hl)$ $(\mathbf{c}/4)$	$\mathbf{a} - \mathbf{b}$ $\mathbf{a} - \mathbf{b}$	$n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$ $n(\mathbf{a} + \mathbf{b}) + m\mathbf{c}$	$p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$ $-p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$	n odd m even q odd m odd q odd	$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$ $\widehat{p}1$	L10 L01
					$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111 (\mathbf{b}'/4)$ $p1$	L08 L09 L01
					$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111$ $p1$	L08 L09 L01
					$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$ $\widehat{p}1$	L10 L01
					$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111 (\mathbf{b}'/4)$ $p1$	L08 L09 L01
					$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111$ $p1$	L08 L09 L01
(hhl) $(\bar{h}hl)$	$\mathbf{a} + \mathbf{b}$ $\mathbf{a} + \mathbf{b}$	$n(\mathbf{b} - \mathbf{a}) - m\mathbf{c}$ $n(\mathbf{b} - \mathbf{a}) + m\mathbf{c}$	$p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$ $-p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$	n odd m even q odd m odd q odd	$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$ $\widehat{p}1$	L10 L01
					$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111 (\mathbf{b}'/4)$ $p1$	L08 L09 L01
					$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111$ $p1$	L08 L09 L01
					$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$ $\widehat{p}1$	L10 L01
					$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111 (\mathbf{b}'/4)$ $p1$	L08 L09 L01
					$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111$ $p1$	L08 L09 L01
l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$								

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
$(mn0)$ $(\bar{m}n0)$ $(\bar{m}n0)$ $(nm0)$	\mathbf{c} $n\mathbf{a} - m\mathbf{b}$ $p\mathbf{a} + q\mathbf{b}$ \mathbf{c} $m\mathbf{a} + n\mathbf{b}$ $-q\mathbf{a} + p\mathbf{b}$ \mathbf{c} $n\mathbf{a} + m\mathbf{b}$ $-p\mathbf{a} + q\mathbf{b}$ \mathbf{c} $m\mathbf{a} - n\mathbf{b}$ $q\mathbf{a} + p\mathbf{b}$	$P211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p211$ $p1$	L08 L01
$(0mn)$ $(0\bar{m}n)$ $(m0n)$ $(m0\bar{n})$	\mathbf{a} $n\mathbf{b} - m\mathbf{c}$ $p\mathbf{b} + q\mathbf{c}$ \mathbf{a} $n\mathbf{b} + m\mathbf{c}$ $-p\mathbf{b} + q\mathbf{c}$ \mathbf{b} $m\mathbf{c} - n\mathbf{a}$ $q\mathbf{c} + p\mathbf{a}$ \mathbf{b} $m\mathbf{c} + n\mathbf{a}$ $-q\mathbf{c} + p\mathbf{a}$	$P211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p211$ $p1$	L08 L01
(hhl) $(\bar{h}hl)$ $(h\bar{h}l)$ $(\bar{h}hl)$ $(c/4)$	$\mathbf{a} - \mathbf{b}$ $n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$ $p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$ $\mathbf{a} - \mathbf{b}$ $n(\mathbf{a} + \mathbf{b}) + m\mathbf{c}$ $-p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$ $\mathbf{a} + \mathbf{b}$ $n(\mathbf{b} - \mathbf{a}) - m\mathbf{c}$ $p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$ $\mathbf{a} + \mathbf{b}$ $n(\mathbf{b} - \mathbf{a}) + m\mathbf{c}$ $-p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$ n odd m even q odd m odd q odd m odd p odd q even	$C211$ $I211$ $B211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$ $[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$ $[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$c211$ $\widehat{p}1$ $p211$ $p2_111 (\mathbf{b}'/4)$ $p1$ $p211$ $p2_111$ $p1$	L10 L01 L08 L09 L01 L08 L09 L01
l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$					

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}				
$(mn0)$	\mathbf{c}	$n\mathbf{a} - m\mathbf{b}$	$p\mathbf{a} + q\mathbf{b}$	$P211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p211$	L08
$(\bar{m}n0)$	\mathbf{c}	$m\mathbf{a} + n\mathbf{b}$	$-q\mathbf{a} + p\mathbf{b}$				
$(\bar{m}\bar{n}0)$	\mathbf{c}	$n\mathbf{a} + m\mathbf{b}$	$-p\mathbf{a} + q\mathbf{b}$				
$(nm0)$	\mathbf{c}	$m\mathbf{a} - n\mathbf{b}$	$q\mathbf{a} + p\mathbf{b}$				
$(0mn)$	\mathbf{a}	$n\mathbf{b} - m\mathbf{c}$	$p\mathbf{b} + q\mathbf{c}$	$P2_111$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2_111$	L09
$(0\bar{m}n)$	\mathbf{a}	$n\mathbf{b} + m\mathbf{c}$	$-p\mathbf{b} + q\mathbf{c}$				
$(\mathbf{b} + \mathbf{c})/4$						$p1$	L01
$(m0n)$	\mathbf{b}	$m\mathbf{c} - n\mathbf{a}$	$q\mathbf{c} + p\mathbf{a}$	$P2_111$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2_111$	L09
$(m0\bar{n})$	\mathbf{b}	$m\mathbf{c} + n\mathbf{a}$	$-q\mathbf{c} + p\mathbf{a}$				
$(\mathbf{a} + \mathbf{c})/4$						$p1$	L01
(hhl)	$\mathbf{a} - \mathbf{b}$	$n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$	$p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$	$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$	L10
$(\bar{h}hl)$	$\mathbf{a} - \mathbf{b}$	$n(\mathbf{a} + \mathbf{b}) + m\mathbf{c}$	$-p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$				
$(h\bar{h}l)$	$\mathbf{a} + \mathbf{b}$	$n(\mathbf{b} - \mathbf{a}) - m\mathbf{c}$	$p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$				
$(\bar{h}\bar{h}l)$	$\mathbf{a} + \mathbf{b}$	$n(\mathbf{b} - \mathbf{a}) + m\mathbf{c}$	$-p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$				
		n odd	m even				
			q odd				
			m odd				
			q odd				
			m odd				
		p odd	q even				
				$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111$ $p1$	L08 L09 L01
l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$							

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}				
$(mn0)$ $(\bar{n}m0)$ $(\bar{m}n0)$ $(nm0)$	\mathbf{c} \mathbf{c} \mathbf{c} \mathbf{c}	$n\mathbf{a} - m\mathbf{b}$ $m\mathbf{a} + n\mathbf{b}$ $n\mathbf{a} + m\mathbf{b}$ $m\mathbf{a} - n\mathbf{b}$	$p\mathbf{a} + q\mathbf{b}$ $-q\mathbf{a} + p\mathbf{b}$ $-p\mathbf{a} + q\mathbf{b}$ $q\mathbf{a} + p\mathbf{b}$	$P2_111$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2_111$ $p1$	L09 L01
$(0mn)$ $(0\bar{m}n)$ $(c/4)$	\mathbf{a} \mathbf{a}	$n\mathbf{b} - m\mathbf{c}$ $n\mathbf{b} + m\mathbf{c}$	$p\mathbf{b} + q\mathbf{c}$ $-p\mathbf{b} + q\mathbf{c}$	$P211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p211$ $p1$	L08 L01
$(m0n)$ $(m0\bar{n})$	\mathbf{b} \mathbf{b}	$m\mathbf{c} - n\mathbf{a}$ $m\mathbf{c} + n\mathbf{a}$	$q\mathbf{c} + p\mathbf{a}$ $-q\mathbf{c} + p\mathbf{a}$	$P211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p211$ $p1$	L08 L01
(hhl) $(\bar{h}h\bar{l})$ $(3c/8)$	$\mathbf{a} - \mathbf{b}$ $\mathbf{a} - \mathbf{b}$	$n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$ $n(\mathbf{a} + \mathbf{b}) + m\mathbf{c}$	$p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$ $-p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$ n odd m even q odd m odd q odd m odd p odd q even	$C211$ $I211$ $B211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$ $[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$ $[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$c211$ $\hat{p}1$ $p211$ $p2_111 (\mathbf{b}'/4)$ $p1$ $p211$ $p2_111$ $p1$	L10 L01 L08 L09 L01 L08 L09 L01
(hhl) $(\bar{h}h\bar{l})$	$\mathbf{a} + \mathbf{b}$ $\mathbf{a} + \mathbf{b}$	$n(\mathbf{b} - \mathbf{a}) - m\mathbf{c}$ $n(\mathbf{b} - \mathbf{a}) + m\mathbf{c}$	$p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$ $-p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$ n odd m even q odd m odd q odd m odd p odd q even	$C211$ $I211$ $B211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$ $[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$ $[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$c211$ $\hat{p}1$ $p211$ $p2_111 (\mathbf{b}'/4)$ $p1$ $p211$ $p2_111$ $p1$	L10 L01 L08 L09 L01 L08 L09 L01
l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$							

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
$(mn0)$ $(\bar{n}m0)$ $(\bar{m}n0)$ $(nm0)$	\mathbf{c} $n\mathbf{a} - m\mathbf{b}$ $p\mathbf{a} + q\mathbf{b}$ \mathbf{c} $m\mathbf{a} + n\mathbf{b}$ $-q\mathbf{a} + p\mathbf{b}$ \mathbf{c} $n\mathbf{a} + m\mathbf{b}$ $-p\mathbf{a} + q\mathbf{b}$ \mathbf{c} $m\mathbf{a} - n\mathbf{b}$ $q\mathbf{a} + p\mathbf{b}$	$P2_111$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2_111$ $p1$	L09 L01
$(0mn)$ $(0\bar{m}n)$ $(\mathbf{b}/4 + 3\mathbf{c}/8)$	\mathbf{a} $n\mathbf{b} - m\mathbf{c}$ $p\mathbf{b} + q\mathbf{c}$ \mathbf{a} $n\mathbf{b} + m\mathbf{c}$ $-p\mathbf{b} + q\mathbf{c}$	$P2_111$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2_111$ $p1$	L09 L01
$(m0n)$ $(m0\bar{n})$ $(\mathbf{a}/4 + \mathbf{c}/8)$	\mathbf{b} $m\mathbf{c} - n\mathbf{a}$ $q\mathbf{c} + p\mathbf{a}$ \mathbf{b} $m\mathbf{c} + n\mathbf{a}$ $-q\mathbf{c} + p\mathbf{a}$	$P2_111$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2_111$ $p1$	L09 L01
(hhl) $(\bar{h}hl)$ $(\mathbf{c}/4)$	$\mathbf{a} - \mathbf{b}$ $n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$ $p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$ $\mathbf{a} - \mathbf{b}$ $n(\mathbf{a} + \mathbf{b}) + m\mathbf{c}$ $-p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$	$C211$ $I211$ $B211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$ $[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$ $[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$c211$ $\hat{p}1$ $p211$ $p2_111 (\mathbf{b}'/4)$ $p1$ $p211$ $p2_111$ $p1$	L10 L01 L08 L09 L01 L08 L09 L01
(hhl) $(\bar{h}hl)$	$\mathbf{a} + \mathbf{b}$ $n(\mathbf{b} - \mathbf{a}) - m\mathbf{c}$ $p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$ $\mathbf{a} + \mathbf{b}$ $n(\mathbf{b} - \mathbf{a}) + m\mathbf{c}$ $-p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$	$C211$ $I211$ $B211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$ $[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$ $[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$c211$ $\hat{p}1$ $p211$ $p2_111 (\mathbf{b}'/4)$ $p1$ $p211$ $p2_111$ $p1$	L10 L01 L08 L09 L01 L08 L09 L01
$l \text{ odd} \Rightarrow n = l, m = 2h; l \text{ even} \Rightarrow n = l/2, m = h$					

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group a' b' d	Scanning group \mathcal{H}	Linear orbit sd	Sectional layer group $\mathcal{L}(sd)$
(<i>mn0</i>) ($\bar{m}n0$) ($\bar{m}n0$) (<i>nm0</i>)	c <i>na - mb</i> <i>pa + qb</i> c <i>ma + nb</i> $-qa + pb$ c <i>na + mb</i> $-pa + qb$ c <i>ma - nb</i> <i>qa + pb</i>			
	<i>n</i> odd <i>m</i> even <i>p</i> even <i>q</i> odd or <i>n</i> even <i>m</i> odd <i>p</i> odd <i>q</i> even <i>p</i> odd <i>q</i> odd	<i>I</i> 211	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p</i> 211 L08 <i>p</i> 2 ₁ 11 (b' /4) L09 <i>p</i> 1 L01
	<i>n</i> odd <i>m</i> odd	<i>B</i> 211	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p</i> 211 L08 <i>p</i> 2 ₁ 11 L09 <i>p</i> 1 L01
		<i>C</i> 211	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	<i>c</i> 211 L10 $\hat{p}1$ L01
(<i>0mn</i>) (<i>0m̄n</i>) (<i>m0n</i>) (<i>m0n̄</i>)	a <i>nb - mc</i> <i>pb + qc</i> a <i>nb + mc</i> $-pb + qc$ b <i>mc - na</i> <i>qc + pa</i> b <i>mc + na</i> $-qc + pa$			
	<i>n</i> odd <i>m</i> even <i>p</i> even <i>q</i> odd or <i>n</i> even <i>m</i> odd <i>p</i> odd <i>q</i> even <i>p</i> odd <i>q</i> odd	<i>I</i> 211	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p</i> 211 L08 <i>p</i> 2 ₁ 11 (b' /4) L09 <i>p</i> 1 L01
	<i>n</i> odd <i>m</i> odd	<i>B</i> 211	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p</i> 211 L08 <i>p</i> 2 ₁ 11 L09 <i>p</i> 1 L01
		<i>C</i> 211	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	<i>c</i> 211 L10 $\hat{p}1$ L01

Continued

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group a' b' d	Scanning group \mathcal{H}	Linear orbit sd	Sectional layer group $\mathcal{L}(s\mathbf{d})$		
<p>(<i>hhl</i>) (\overline{hhl})</p>	<p>a - b $n\hat{\mathbf{a}} - m\mathbf{c}$ $p\hat{\mathbf{a}} + q\mathbf{c}$ a - b $n\hat{\mathbf{a}} + m\mathbf{c}$ $-p\hat{\mathbf{a}} + q\mathbf{c}$ <i>n</i> odd <i>q</i> odd <i>p</i> even</p>	<i>B</i> 211	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p</i> 211 L08 <i>p</i> 2 ₁ 11 L09 <i>p</i> 1 L01		
		<i>C</i> 211	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	<i>c</i> 211 L10 $\hat{p}1$ L01		
		<i>I</i> 211	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p</i> 211 L08 <i>p</i> 2 ₁ 11 (b' /4) L09 <i>p</i> 1 L01		
		$\hat{\mathbf{a}} = (\mathbf{a} + \mathbf{b} + \mathbf{c})/2$				
		<p>(\overline{hhl}) (<i>hhl</i>)</p>	<p>a + b $n\hat{\mathbf{a}} - m\mathbf{c}$ $p\hat{\mathbf{a}} + q\mathbf{c}$ a + b $n\hat{\mathbf{a}} + m\mathbf{c}$ $-p\hat{\mathbf{a}} + q\mathbf{c}$ <i>n</i> odd <i>q</i> odd <i>p</i> even</p>	<i>B</i> 211	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p</i> 211 L08 <i>p</i> 2 ₁ 11 L09 <i>p</i> 1 L01
				<i>C</i> 211	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	<i>c</i> 211 L10 $\hat{p}1$ L01
	<i>I</i> 211			$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p</i> 211 L08 <i>p</i> 2 ₁ 11 (b' /4) L09 <i>p</i> 1 L01	
	$\hat{\mathbf{a}} = (\mathbf{b} - \mathbf{a} + \mathbf{c})/2$					
	<i>l</i> odd $\Rightarrow n = 2l, m = 2h + l; l$ even $\Rightarrow n = l, m = h + l/2$					

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group a' b' d	Scanning group \mathcal{H}	Linear orbit sd	Sectional layer group $\mathcal{L}(\mathbf{sd})$		
<p>(<i>mn</i>0) ($\bar{n}m$0) ($\overline{m}n$0) (<i>nm</i>0)</p>	<p>c <i>na - mb</i> <i>pa + qb</i> c <i>ma + nb</i> -<i>qa + pb</i> c <i>na + mb</i> -<i>pa + qb</i> c <i>ma - nb</i> <i>qa + pb</i></p>	<i>I</i> 211	<p>$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$</p>	<p><i>p</i>211 L08 <i>p</i>2₁11 (b'/4) L09 <i>p</i>1 L01</p>		
	<p><i>n</i> odd <i>m</i> even <i>p</i> even <i>q</i> odd</p>					
	<p>or</p>					
	<p><i>n</i> even <i>m</i> odd <i>p</i> odd <i>q</i> even <i>p</i> odd <i>q</i> odd</p>					
	<p><i>n</i> odd <i>m</i> odd</p>					
	<p><i>B</i>211</p>				<p>$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$</p>	<p><i>p</i>211 L08 <i>p</i>2₁11 L09 <i>p</i>1 L01</p>
	<p><i>C</i>211</p>				<p>$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$</p>	<p><i>c</i>211 L10 \widehat{p}1 L01</p>
	<p><i>n</i> odd <i>m</i> odd</p>					
	<p>(<i>0mn</i>) (<i>0$\bar{m}n$</i>) (b/4 + c/8)</p>				<p>a <i>nb - mc</i> <i>pb + qc</i> a <i>nb + mc</i> -<i>pb + qc</i></p>	<i>I</i> 211
<p><i>n</i> odd <i>m</i> even <i>p</i> even <i>q</i> odd</p>						
<p>or</p>						
<p><i>n</i> even <i>m</i> odd <i>p</i> odd <i>q</i> even <i>p</i> odd <i>q</i> odd</p>						
<p><i>n</i> odd <i>m</i> odd</p>						
<p><i>B</i>211</p>	<p>$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$</p>	<p><i>p</i>211 L08 <i>p</i>2₁11 L09 <i>p</i>1 L01</p>				
<p><i>C</i>211</p>	<p>$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$</p>	<p><i>c</i>211 L10 \widehat{p}1 L01</p>				
<p><i>n</i> odd <i>m</i> odd</p>						
<p>(<i>m</i>0<i>n</i>) (<i>m</i>0\bar{n}) (a/4 + 3c/8)</p>	<p>b <i>mc - na</i> <i>qc + pa</i> b <i>mc + na</i> -<i>qc + pa</i></p>	<i>I</i> 211	<p>$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$</p>	<p><i>p</i>211 L08 <i>p</i>2₁11 (b'/4) L09 <i>p</i>1 L01</p>		
<p><i>n</i> odd <i>m</i> even <i>p</i> even <i>q</i> odd</p>						
<p>or</p>						
<p><i>n</i> even <i>m</i> odd <i>p</i> odd <i>q</i> even <i>p</i> odd <i>q</i> odd</p>						
<p><i>n</i> odd <i>m</i> odd</p>						
<p><i>B</i>211</p>	<p>$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$</p>				<p><i>p</i>211 L08 <i>p</i>2₁11 L09 <i>p</i>1 L01</p>	
<p><i>C</i>211</p>	<p>$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$</p>				<p><i>c</i>211 L10 \widehat{p}1 L01</p>	
<p><i>n</i> odd <i>m</i> odd</p>						

Continued

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$
(hhl) $(\bar{h}hl)$	$\mathbf{a} - \mathbf{b}$ $n\hat{\mathbf{a}} - m\mathbf{c}$ $p\hat{\mathbf{a}} + q\mathbf{c}$ $\mathbf{a} - \mathbf{b}$ $n\hat{\mathbf{a}} + m\mathbf{c}$ $-p\hat{\mathbf{a}} + q\mathbf{c}$ <i>n</i> odd <i>p</i> even <i>q</i> odd <i>n</i> even <i>m</i> odd <i>p</i> odd <i>n</i> odd <i>p</i> odd	$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111$ L09 $p1$ L01
		$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$ L10 $\hat{p}1$ L01
		$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111 (\mathbf{b}'/4)$ L09 $p1$ L01
	$\hat{\mathbf{a}} = (\mathbf{a} + \mathbf{b} + \mathbf{c})/2$			
$(\bar{h}\bar{h}l)$ $(\bar{h}hl)$	$\mathbf{a} + \mathbf{b}$ $n\hat{\mathbf{a}} - m\mathbf{c}$ $p\hat{\mathbf{a}} + q\mathbf{c}$ $\mathbf{a} + \mathbf{b}$ $n\hat{\mathbf{a}} + m\mathbf{c}$ $-p\hat{\mathbf{a}} + q\mathbf{c}$ <i>n</i> odd <i>p</i> even <i>q</i> odd <i>n</i> even <i>m</i> odd <i>p</i> odd <i>n</i> odd <i>p</i> odd	$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111$ L09 $p1$ L01
		$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$ L10 $\hat{p}1$ L01
		$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111 (\mathbf{b}'/4)$ L09 $p1$ L01
	$\hat{\mathbf{a}} = (\mathbf{b} - \mathbf{a} + \mathbf{c})/2$			
l odd $\Rightarrow n = 2l, m = 2h + l; l$ even $\Rightarrow n = l, m = h + l/2$				

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}				
$(mn0)$	\mathbf{c}	$n\mathbf{a} - m\mathbf{b}$	$p\mathbf{a} + q\mathbf{b}$	$P211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p211$	L08
$(\bar{n}m0)$	\mathbf{c}	$m\mathbf{a} + n\mathbf{b}$	$-q\mathbf{a} + p\mathbf{b}$				
$(\bar{m}n0)$	\mathbf{c}	$n\mathbf{a} + m\mathbf{b}$	$-p\mathbf{a} + q\mathbf{b}$				
$(nm0)$	\mathbf{c}	$m\mathbf{a} - n\mathbf{b}$	$q\mathbf{a} + p\mathbf{b}$				
$(0mn)$	\mathbf{a}	$n\mathbf{b} - m\mathbf{c}$	$p\mathbf{b} + q\mathbf{c}$	$Pm11$	$s\mathbf{d}$	$pm11$	L11
$(0\bar{m}n)$	\mathbf{a}	$n\mathbf{b} + m\mathbf{c}$	$-p\mathbf{b} + q\mathbf{c}$				
$(m0n)$	\mathbf{b}	$m\mathbf{c} - n\mathbf{a}$	$q\mathbf{c} + p\mathbf{a}$				
$(m0\bar{n})$	\mathbf{b}	$m\mathbf{c} + n\mathbf{a}$	$-q\mathbf{c} + p\mathbf{a}$				
(hhl)	$\mathbf{a} - \mathbf{b}$	$n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$	$p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$	$Cm11$	$s\mathbf{d}$	$cm11$	L13
$(\bar{h}hl)$	$\mathbf{a} - \mathbf{b}$	$n(\mathbf{a} + \mathbf{b}) + m\mathbf{c}$	$-p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$				
$(h\bar{h}l)$	$\mathbf{a} + \mathbf{b}$	$n(\mathbf{b} - \mathbf{a}) - m\mathbf{c}$	$p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$				
$(\bar{h}\bar{h}l)$	$\mathbf{a} + \mathbf{b}$	$n(\mathbf{b} - \mathbf{a}) + m\mathbf{c}$	$-p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$				
		n odd	m even				
			q odd				
			m odd	$Im11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pm11$	L11
			q odd				
			m odd	$Bm11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pm11$	L11
			p odd				
			q even				
l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$							

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
$(mn0)$ $(\bar{n}m0)$ $(\bar{m}n0)$ $(nm0)$	\mathbf{c} $n\mathbf{a} - m\mathbf{b}$ $p\mathbf{a} + q\mathbf{b}$ \mathbf{c} $m\mathbf{a} + n\mathbf{b}$ $-q\mathbf{a} + p\mathbf{b}$ \mathbf{c} $n\mathbf{a} + m\mathbf{b}$ $-p\mathbf{a} + q\mathbf{b}$ \mathbf{c} $m\mathbf{a} - n\mathbf{b}$ $q\mathbf{a} + p\mathbf{b}$	$P211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p211$ $p1$	L08 L01
$(0mn)$ $(0\bar{m}n)$ $(\mathbf{a}/4)$	\mathbf{a} $n\mathbf{b} - m\mathbf{c}$ $p\mathbf{b} + q\mathbf{c}$ \mathbf{a} $n\mathbf{b} + m\mathbf{c}$ $-p\mathbf{b} + q\mathbf{c}$ n odd m even q odd m odd q odd m odd p odd q even	$Pb11$ $Pn11$ $Pc11$	$s\mathbf{d}$ $[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$ $[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11$ $p1$ $p1$	L12 L01 L01
$(m0n)$ $(m0\bar{n})$ $(\mathbf{b}/4)$	\mathbf{b} $m\mathbf{c} - n\mathbf{a}$ $q\mathbf{c} + p\mathbf{a}$ \mathbf{b} $m\mathbf{c} + n\mathbf{a}$ $-q\mathbf{c} + p\mathbf{a}$ n odd p even q odd n even m odd p odd n odd p odd	$Pc11$ $Pb11$ $Pn11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$ $s\mathbf{d}$ $[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$p1$ $pb11$ $p1$	L01 L12 L01
(hhl) $(\bar{h}hl)$ $(\mathbf{a} - \mathbf{b})/4$	$\mathbf{a} - \mathbf{b}$ $n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$ $p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$ $\mathbf{a} - \mathbf{b}$ $n(\mathbf{a} + \mathbf{b}) + m\mathbf{c}$ $-p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$ n odd m even q odd m odd q odd m odd p odd q even	$Cm11$ $Im11$ $Bm11$	$s\mathbf{d}$ $[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$ $[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$cm11$ $pm11$ $pm11$	L13 L11 L11
(hhl) $(\bar{h}hl)$ $(\mathbf{a} + \mathbf{b})/4$	$\mathbf{a} + \mathbf{b}$ $n(\mathbf{b} - \mathbf{a}) - m\mathbf{c}$ $p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$ $\mathbf{a} + \mathbf{b}$ $n(\mathbf{b} - \mathbf{a}) + m\mathbf{c}$ $-p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$ n odd m even q odd m odd q odd m odd p odd q even	$Cm11$ $Im11$ $Bm11$	$s\mathbf{d}$ $[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$ $[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$cm11$ $pm11$ $pm11$	L13 L11 L11
l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$					

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$
$(mn0)$ $(\bar{n}m0)$ $(\bar{m}n0)$ $(nm0)$	\mathbf{c} $n\mathbf{a} - m\mathbf{b}$ $p\mathbf{a} + q\mathbf{b}$ \mathbf{c} $m\mathbf{a} + n\mathbf{b}$ $-q\mathbf{a} + p\mathbf{b}$ \mathbf{c} $n\mathbf{a} + m\mathbf{b}$ $-p\mathbf{a} + q\mathbf{b}$ \mathbf{c} $m\mathbf{a} - n\mathbf{b}$ $q\mathbf{a} + p\mathbf{b}$	$P211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p211$ L08 $p1$ L01
$(0mn)$ $(0\bar{m}n)$	\mathbf{a} $n\mathbf{b} - m\mathbf{c}$ $p\mathbf{b} + q\mathbf{c}$ \mathbf{a} $n\mathbf{b} + m\mathbf{c}$ $-p\mathbf{b} + q\mathbf{c}$	$Pc11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$p1$ L01
	n odd p even q odd n even m odd	$Pb11$	$s\mathbf{d}$	$pb11$ L12
	p odd n odd p odd	$Pn11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$p1$ L01
(hhl) $(\bar{h}hl)$	\mathbf{b} $m\mathbf{c} - n\mathbf{a}$ $q\mathbf{c} + p\mathbf{a}$ \mathbf{b} $m\mathbf{c} + n\mathbf{a}$ $-q\mathbf{c} + p\mathbf{a}$	$Pb11$	$s\mathbf{d}$	$pb11$ L12
	n odd m even q odd m odd	$Pn11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$p1$ L01
	q odd m odd p odd q even	$Pc11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$p1$ L01
(hhl) $(\bar{h}hl)$ $(h\bar{h}l)$ $(\bar{h}\bar{h}l)$	$\mathbf{a} - \mathbf{b}$ $n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$ $p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$ $\mathbf{a} - \mathbf{b}$ $n(\mathbf{a} + \mathbf{b}) + m\mathbf{c}$ $-p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$ $\mathbf{a} + \mathbf{b}$ $n(\mathbf{b} - \mathbf{a}) - m\mathbf{c}$ $p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$ $\mathbf{a} + \mathbf{b}$ $n(\mathbf{b} - \mathbf{a}) + m\mathbf{c}$ $-p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$	$Cm11$	$s\mathbf{d}$	$cm11$ L13
	n odd m even q odd m odd	$Im11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pm11$ L11
	q odd m odd p odd q even	$Bm11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pm11$ L11
l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$				

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$
$(mn0)$ $(\bar{n}m0)$ $(\bar{n}\bar{m}0)$ $(nm0)$	\mathbf{c} $n\mathbf{a} - m\mathbf{b}$ $p\mathbf{a} + q\mathbf{b}$ \mathbf{c} $m\mathbf{a} + n\mathbf{b}$ $-q\mathbf{a} + p\mathbf{b}$ \mathbf{c} $n\mathbf{a} + m\mathbf{b}$ $-p\mathbf{a} + q\mathbf{b}$ \mathbf{c} $m\mathbf{a} - n\mathbf{b}$ $q\mathbf{a} + p\mathbf{b}$	$P211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p211$ L08 $p1$ L01
$(0mn)$ $(0\bar{m}n)$ $(m0n)$ $(m0\bar{n})$	\mathbf{a} $n\mathbf{b} - m\mathbf{c}$ $p\mathbf{b} + q\mathbf{c}$ \mathbf{a} $n\mathbf{b} + m\mathbf{c}$ $-p\mathbf{b} + q\mathbf{c}$ \mathbf{b} $m\mathbf{c} - n\mathbf{a}$ $q\mathbf{c} + p\mathbf{a}$ \mathbf{b} $m\mathbf{c} + n\mathbf{a}$ $-q\mathbf{c} + p\mathbf{a}$ n odd m even p even q odd or n even m odd p odd q even p odd q odd n odd m odd	$Pn11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$p1$ L01
		$Pc11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$p1$ L01
		$Pb11$	$s\mathbf{d}$	$pb11$ L12
(hhl) $(\bar{h}\bar{h}l)$ $(h\bar{h}l)$ $(\bar{h}hl)$	$\mathbf{a} - \mathbf{b}$ $n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$ $p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$ $\mathbf{a} - \mathbf{b}$ $n(\mathbf{a} + \mathbf{b}) + m\mathbf{c}$ $-p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$ $\mathbf{a} + \mathbf{b}$ $n(\mathbf{b} - \mathbf{a}) - m\mathbf{c}$ $p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$ $\mathbf{a} + \mathbf{b}$ $n(\mathbf{b} - \mathbf{a}) + m\mathbf{c}$ $-p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$ n odd m even q odd m odd q odd m odd p odd q even	$Cm11$	$s\mathbf{d}$	$cm11$ L13
		$Im11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pm11$ L11
		$Bm11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pm11$ L11
l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$				

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}				
$(mn0)$	\mathbf{c}	$n\mathbf{a} - m\mathbf{b}$	$p\mathbf{a} + q\mathbf{b}$	$P211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p211$	L08
$(\bar{n}m0)$	\mathbf{c}	$m\mathbf{a} + n\mathbf{b}$	$-q\mathbf{a} + p\mathbf{b}$				
$(\bar{m}n0)$	\mathbf{c}	$n\mathbf{a} + m\mathbf{b}$	$-p\mathbf{a} + q\mathbf{b}$				
$(nm0)$	\mathbf{c}	$m\mathbf{a} - n\mathbf{b}$	$q\mathbf{a} + p\mathbf{b}$				
$(0mn)$	\mathbf{a}	$n\mathbf{b} - m\mathbf{c}$	$p\mathbf{b} + q\mathbf{c}$	$Pc11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$p1$	L01
$(0\bar{m}n)$	\mathbf{a}	$n\mathbf{b} + m\mathbf{c}$	$-p\mathbf{b} + q\mathbf{c}$				
			n odd p even n even p odd n odd p odd				
$(m0n)$	\mathbf{b}	$m\mathbf{c} - n\mathbf{a}$	$q\mathbf{c} + p\mathbf{a}$	$Pb11$	$s\mathbf{d}$	$pb11$	L12
$(m0\bar{n})$	\mathbf{b}	$m\mathbf{c} + n\mathbf{a}$	$-q\mathbf{c} + p\mathbf{a}$				
			n odd m even q odd m odd q odd m odd p odd q even				
(hhl)	$\mathbf{a} - \mathbf{b}$	$n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$	$p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$	$Cc11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$	L01
$(\bar{h}hl)$	$\mathbf{a} - \mathbf{b}$	$n(\mathbf{a} + \mathbf{b}) + m\mathbf{c}$	$-p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$				
$(h\bar{h}l)$	$\mathbf{a} + \mathbf{b}$	$n(\mathbf{b} - \mathbf{a}) - m\mathbf{c}$	$p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$				
$(\bar{h}\bar{h}l)$	$\mathbf{a} + \mathbf{b}$	$n(\mathbf{b} - \mathbf{a}) + m\mathbf{c}$	$-p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$				
			n odd p even n even p odd n even p odd n odd p even n odd p odd n odd p odd				
			m even q odd m odd q even m odd q odd m odd q odd m even q odd m even q even				
				$Bb11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11$	L12
				$Ib11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11$	L12
				$Ic11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$	L12
				$Bn11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$	L12
				$Cn11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$	L01

l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$					
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}								
$(mn0)$	\mathbf{c}	$n\mathbf{a} - m\mathbf{b}$	$p\mathbf{a} + q\mathbf{b}$	$P211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p211$	L08				
$(\bar{n}m0)$	\mathbf{c}	$m\mathbf{a} + n\mathbf{b}$	$-q\mathbf{a} + p\mathbf{b}$				L01				
$(\bar{m}n0)$	\mathbf{c}	$n\mathbf{a} + m\mathbf{b}$	$-p\mathbf{a} + q\mathbf{b}$								
$(nm0)$	\mathbf{c}	$m\mathbf{a} - n\mathbf{b}$	$q\mathbf{a} + p\mathbf{b}$								
$(0mn)$	\mathbf{a}	$n\mathbf{b} - m\mathbf{c}$	$p\mathbf{b} + q\mathbf{c}$	$Pn11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$p1$	L01				
$(0\bar{m}n)$	\mathbf{a}	$n\mathbf{b} + m\mathbf{c}$	$-p\mathbf{b} + q\mathbf{c}$								
$(m0n)$	\mathbf{b}	$m\mathbf{c} - n\mathbf{a}$	$q\mathbf{c} + p\mathbf{a}$								
$(m0\bar{n})$	\mathbf{b}	$m\mathbf{c} + n\mathbf{a}$	$-q\mathbf{c} + p\mathbf{a}$								
			n odd m even p even q odd								
			or n even m odd p odd q even								
			p odd q odd n odd m odd								
				$Pc11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$p1$	L01				
				$Pb11$	$s\mathbf{d}$	$pb11$	L12				
(hhl)	$\mathbf{a} - \mathbf{b}$	$n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$	$p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$	$Cc11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$	L01				
$(\bar{h}hl)$	$\mathbf{a} - \mathbf{b}$	$n(\mathbf{a} + \mathbf{b}) + m\mathbf{c}$	$-p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$								
$(\mathbf{a} - \mathbf{b})/4$			n odd m even p even q odd n even m odd p odd q even n even m odd p odd q odd n odd m odd p even q odd n odd m odd p odd q even n odd m even p odd q odd								
								$Bb11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11$	L12
								$Ib11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11$	L12
								$Ic11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$	L12
								$Bn11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$	L12
								$Cn11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$	L01
$(h\bar{h}l)$	$\mathbf{a} + \mathbf{b}$	$n(\mathbf{b} - \mathbf{a}) - m\mathbf{c}$	$p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$					$Cc11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$	L01
$(\bar{h}hl)$	$\mathbf{a} + \mathbf{b}$	$n(\mathbf{b} - \mathbf{a}) + m\mathbf{c}$	$-p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$								
$(\mathbf{a} + \mathbf{b})/4$			n odd m even p even q odd n even m odd p odd q even n even m odd p odd q odd n odd m odd p even q odd n odd m odd p odd q even n odd m even p odd q odd								
				$Bb11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11$	L12				
				$Ib11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11$	L12				
				$Ic11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$	L12				
				$Bn11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$	L12				
				$Cn11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$	L01				

 l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
$(mn0)$ $(\bar{m}n0)$ $(\bar{m}n0)$ $(nm0)$	\mathbf{c} $n\mathbf{a} - m\mathbf{b}$ $p\mathbf{a} + q\mathbf{b}$ \mathbf{c} $m\mathbf{a} + n\mathbf{b}$ $-q\mathbf{a} + p\mathbf{b}$ \mathbf{c} $n\mathbf{a} + m\mathbf{b}$ $-p\mathbf{a} + q\mathbf{b}$ \mathbf{c} $m\mathbf{a} - n\mathbf{b}$ $q\mathbf{a} + p\mathbf{b}$	$P211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p211$ $p1$	L08 L01
$(0mn)$ $(0\bar{m}n)$ $(m0n)$ $(m0\bar{n})$	\mathbf{a} $n\mathbf{b} - m\mathbf{c}$ $p\mathbf{b} + q\mathbf{c}$ \mathbf{a} $n\mathbf{b} + m\mathbf{c}$ $-p\mathbf{b} + q\mathbf{c}$ \mathbf{b} $m\mathbf{c} - n\mathbf{a}$ $q\mathbf{c} + p\mathbf{a}$ \mathbf{b} $m\mathbf{c} + n\mathbf{a}$ $-q\mathbf{c} + p\mathbf{a}$	$Pm11$	$s\mathbf{d}$	$pm11$	L11
(hhl) $(\bar{h}hl)$ $(h\bar{h}l)$ $(\bar{h}\bar{h}l)$	$\mathbf{a} - \mathbf{b}$ $n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$ $p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$ $\mathbf{a} - \mathbf{b}$ $n(\mathbf{a} + \mathbf{b}) + m\mathbf{c}$ $-p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$ $\mathbf{a} + \mathbf{b}$ $n(\mathbf{b} - \mathbf{a}) - m\mathbf{c}$ $p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$ $\mathbf{a} + \mathbf{b}$ $n(\mathbf{b} - \mathbf{a}) + m\mathbf{c}$ $-p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$				
	n odd m even p even q odd n even m odd p odd q even n even m odd p odd q odd n odd m odd p even q odd n odd m odd p odd q even n odd m even p odd q odd	$Cc11$ $Bb11$ $Ib11$ $Ic11$ $Bn11$ $Cn11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$ $[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$ $[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$ $[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$ $[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$ $[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$ $pb11$ $pb11$ $pb11 (\mathbf{a}'/4)$ $pb11 (\mathbf{a}'/4)$ $\hat{p}1$	L01 L12 L12 L12 L12 L01
l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$					

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
$(mn0)$ $(\bar{n}m0)$ $(\bar{m}n0)$ $(nm0)$	\mathbf{c} $n\mathbf{a} - m\mathbf{b}$ $p\mathbf{a} + q\mathbf{b}$ \mathbf{c} $m\mathbf{a} + n\mathbf{b}$ $-q\mathbf{a} + p\mathbf{b}$ \mathbf{c} $n\mathbf{a} + m\mathbf{b}$ $-p\mathbf{a} + q\mathbf{b}$ \mathbf{c} $m\mathbf{a} - n\mathbf{b}$ $q\mathbf{a} + p\mathbf{b}$	$P211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p211$ $p1$	L08 L01
$(0mn)$ $(0\bar{m}n)$ $(\mathbf{a}/4)$	\mathbf{a} $n\mathbf{b} - m\mathbf{c}$ $p\mathbf{b} + q\mathbf{c}$ \mathbf{a} $n\mathbf{b} + m\mathbf{c}$ $-p\mathbf{b} + q\mathbf{c}$ n odd m even q odd m odd q odd m odd p odd q even	$Pb11$ $Pn11$ $Pc11$	$s\mathbf{d}$ $[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$ $[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11$ $p1$ $p1$	L12 L01 L01
$(m0n)$ $(m0\bar{n})$ $(\mathbf{b}/4)$	\mathbf{b} $m\mathbf{c} - n\mathbf{a}$ $q\mathbf{c} + p\mathbf{a}$ \mathbf{b} $m\mathbf{c} + n\mathbf{a}$ $-q\mathbf{c} + p\mathbf{a}$ n odd p even q odd n even m odd p odd n odd p odd	$Pc11$ $Pb11$ $Pn11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$ $s\mathbf{d}$ $[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$p1$ $pb11$ $p1$	L01 L12 L01
(hhl) $(\bar{h}hl)$ $(\mathbf{a} - \mathbf{b})/4$	$\mathbf{a} - \mathbf{b}$ $n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$ $p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$ $\mathbf{a} - \mathbf{b}$ $n(\mathbf{a} + \mathbf{b}) + m\mathbf{c}$ $-p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$ n odd m even p even q odd n even m odd p odd q even n even m odd p odd q odd n odd m odd p even q odd n odd m odd p odd q even n odd m even p odd q odd	$Cc11$ $Bb11$ $Ib11$ $Ic11$ $Bn11$ $Cn11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$ $[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$ $[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$ $[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$ $[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$ $[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$ $pb11$ $pb11$ $pb11 (\mathbf{a}'/4)$ $pb11 (\mathbf{a}'/4)$ $\hat{p}1$	L01 L12 L12 L12 L12 L01
$(h\bar{h}l)$ $(\bar{h}hl)$ $(\mathbf{a} + \mathbf{b})/4$	$\mathbf{a} + \mathbf{b}$ $n(\mathbf{b} - \mathbf{a}) - m\mathbf{c}$ $p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$ $\mathbf{a} + \mathbf{b}$ $n(\mathbf{b} - \mathbf{a}) + m\mathbf{c}$ $-p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$ n odd m even p even q odd n even m odd p odd q even n even m odd p odd q odd n odd m odd p even q odd n odd m odd p odd q even n odd m even p odd q odd	$Cc11$ $Bb11$ $Ib11$ $Ic11$ $Bn11$ $Cn11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$ $[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$ $[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$ $[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$ $[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$ $[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$ $pb11$ $pb11$ $pb11 (\mathbf{a}'/4)$ $pb11 (\mathbf{a}'/4)$ $\hat{p}1$	L01 L12 L12 L12 L12 L01
l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$					

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit \mathbf{sd}	Sectional layer group $\mathcal{L}(\mathbf{sd})$
$(mn0)$ $(\bar{m}n0)$ $(\bar{m}\bar{n}0)$ $(nm0)$	\mathbf{c} $n\mathbf{a} - m\mathbf{b}$ $p\mathbf{a} + q\mathbf{b}$	$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111$ ($\mathbf{b}'/4$) L09 $p1$ L01
	\mathbf{c} $m\mathbf{a} + n\mathbf{b}$ $-q\mathbf{a} + p\mathbf{b}$			
	\mathbf{c} $n\mathbf{a} + m\mathbf{b}$ $-p\mathbf{a} + q\mathbf{b}$			
	\mathbf{c} $m\mathbf{a} - n\mathbf{b}$ $q\mathbf{a} + p\mathbf{b}$			
	n odd m even p even q odd or n even m odd p odd q even p odd q odd	$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111$ L09 $p1$ L01
	n odd m odd	$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[\mathbf{sd}, -\mathbf{sd}]$	$c211$ L10 $\hat{p}1$ L01
$(0mn)$ $(0\bar{m}n)$ $(m0n)$ $(m0\bar{n})$	\mathbf{a} $n\mathbf{b} - m\mathbf{c}$ $p\mathbf{b} + q\mathbf{c}$	$Im11$	$[\mathbf{sd}, (s + \frac{1}{2})\mathbf{d}]$	$pm11$ L11
	\mathbf{a} $n\mathbf{b} + m\mathbf{c}$ $-p\mathbf{b} + q\mathbf{c}$			
	\mathbf{b} $m\mathbf{c} - n\mathbf{a}$ $q\mathbf{c} + p\mathbf{a}$			
	\mathbf{b} $m\mathbf{c} + n\mathbf{a}$ $-q\mathbf{c} + p\mathbf{a}$			
	n odd m even p even q odd or n even m odd p odd q even p odd q odd n odd m odd	$Bm11$	$[\mathbf{sd}, (s + \frac{1}{2})\mathbf{d}]$	$pm11$ L11
	n odd m odd	$Cm11$	\mathbf{sd}	$cm11$ L13
(hhl) $(\bar{h}hl)$	$\mathbf{a} - \mathbf{b}$ $n\hat{\mathbf{a}} - m\mathbf{c}$ $p\hat{\mathbf{a}} + q\mathbf{c}$	$Bm11$	$[\mathbf{sd}, (s + \frac{1}{2})\mathbf{d}]$	$pm11$ L11
	$\mathbf{a} - \mathbf{b}$ $n\hat{\mathbf{a}} + m\mathbf{c}$ $-p\hat{\mathbf{a}} + q\mathbf{c}$			
	n odd p even q odd			
	n even m odd p odd			
	n odd m odd p odd	$Cm11$	\mathbf{sd}	$cm11$ L13
	n odd m odd p odd	$Im11$	$[\mathbf{sd}, (s + \frac{1}{2})\mathbf{d}]$	$pm11$ L11
	$\hat{\mathbf{a}} = (\mathbf{a} + \mathbf{b} + \mathbf{c})/2$			
$(h\bar{h}l)$ $(\bar{h}hl)$	$\mathbf{a} + \mathbf{b}$ $n\hat{\mathbf{a}} - m\mathbf{c}$ $p\hat{\mathbf{a}} + q\mathbf{c}$	$Bm11$	$[\mathbf{sd}, (s + \frac{1}{2})\mathbf{d}]$	$pm11$ L11
	$\mathbf{a} + \mathbf{b}$ $n\hat{\mathbf{a}} + m\mathbf{c}$ $-p\hat{\mathbf{a}} + q\mathbf{c}$			
	n odd p even q odd			
	n even m odd p odd			
	n odd m odd p odd	$Cm11$	\mathbf{sd}	$cm11$ L13
	n odd m odd p odd	$Im11$	$[\mathbf{sd}, (s + \frac{1}{2})\mathbf{d}]$	$pm11$ L11
	$\hat{\mathbf{a}} = (\mathbf{b} - \mathbf{a} + \mathbf{c})/2$			
l odd $\Rightarrow n = 2l, m = 2h + l; l$ even $\Rightarrow n = l, m = h + l/2$				

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$										
$(mn0)$ $(\bar{m}n0)$ $(\bar{m}\bar{n}0)$ $(nm0)$	\mathbf{c} $n\mathbf{a} - m\mathbf{b}$ $p\mathbf{a} + q\mathbf{b}$ \mathbf{c} $m\mathbf{a} + n\mathbf{b}$ $-q\mathbf{a} + p\mathbf{b}$ \mathbf{c} $n\mathbf{a} + m\mathbf{b}$ $-p\mathbf{a} + q\mathbf{b}$ \mathbf{c} $m\mathbf{a} - n\mathbf{b}$ $q\mathbf{a} + p\mathbf{b}$	$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111 (\mathbf{b}'/4)$ L09 $p1$ L01										
					n odd m even p even q odd or n even m odd p odd q even p odd q odd	$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111$ L09 $p1$ L01						
						$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$ L10 $\hat{p}1$ L01						
						n odd m odd								
					$(0mn)$ $(0\bar{m}\bar{n})$	\mathbf{a} $n\mathbf{b} - m\mathbf{c}$ $p\mathbf{b} + q\mathbf{c}$ \mathbf{a} $n\mathbf{b} + m\mathbf{c}$ $-p\mathbf{b} + q\mathbf{c}$	$Ic11$ $Ib11$ $Bb11$ $Cc11$ $Cn11$ $Bn11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$ L12 $pb11$ L12 $pb11$ L12 $\hat{p}1$ L01 $\hat{p}1$ L01 $pb11 (\mathbf{a}'/4)$ L12					
										n odd m even p even q odd n even m odd p odd q even n even m odd p odd q odd n odd m odd p even q odd n odd m odd p odd q even n odd m even p odd q odd				
											n odd m even p even q odd n even m odd p odd q even n even m odd p odd q odd n odd m odd p even q odd n odd m odd p odd q even n odd m even p odd q odd	$Ib11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11$ L12
												$Ic11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$ L12
												$Bn11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$ L12
$Cn11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$ L01												
$Cc11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$ L01												
$Bb11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11$ L12												
$(m0n)$ $(m0\bar{n})$	\mathbf{b} $m\mathbf{c} - n\mathbf{a}$ $q\mathbf{c} + p\mathbf{a}$ \mathbf{b} $m\mathbf{c} + n\mathbf{a}$ $-q\mathbf{c} + p\mathbf{a}$	$Ib11$ $Ic11$ $Bn11$ $Cn11$ $Cc11$ $Bb11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11$ L12 $pb11 (\mathbf{a}'/4)$ L12 $pb11 (\mathbf{a}'/4)$ L12 $\hat{p}1$ L01 $\hat{p}1$ L01 $pb11$ L12										
											n odd m even p even q odd n even m odd p odd q even n even m odd p odd q odd n odd m odd p even q odd n odd m odd p odd q even n odd m even p odd q odd			
										n odd m even p even q odd n even m odd p odd q even n even m odd p odd q odd n odd m odd p even q odd n odd m odd p odd q even n odd m even p odd q odd				

Continued

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
(hhl) ($\bar{h}hl$) ($\mathbf{a}/2$ or $\mathbf{b}/2$)	$\mathbf{a} - \mathbf{b}$ $n\hat{\mathbf{a}} - m\mathbf{c}$ $p\hat{\mathbf{a}} + q\mathbf{c}$	$Bm11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pm11$ L11	
	$\mathbf{a} - \mathbf{b}$ $n\hat{\mathbf{a}} + m\mathbf{c}$ $-p\hat{\mathbf{a}} + q\mathbf{c}$				n odd q odd
					p even m odd
					n even m odd
	p odd	$Im11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pm11$ L11	
	p odd				
	$\hat{\mathbf{a}} = (\mathbf{a} + \mathbf{b} + \mathbf{c})/2$				
$(\bar{h}\bar{h}l)$ ($\bar{h}hl$) ($\mathbf{a}/2$ or $\mathbf{b}/2$)	$\mathbf{a} + \mathbf{b}$ $n\hat{\mathbf{a}} - m\mathbf{c}$ $p\hat{\mathbf{a}} + q\mathbf{c}$	$Bm11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pm11$ L11	
	$\mathbf{a} + \mathbf{b}$ $n\hat{\mathbf{a}} + m\mathbf{c}$ $-p\hat{\mathbf{a}} + q\mathbf{c}$				n odd q odd
					p even m odd
					n even m odd
	p odd	$Im11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pm11$ L11	
	p odd				
	$\hat{\mathbf{a}} = (\mathbf{b} - \mathbf{a} + \mathbf{c})/2$				
l odd $\Rightarrow n = 2l, m = 2h + l; l$ even $\Rightarrow n = l, m = h + l/2$					

Orientation orbit (hkl)	Conventional basis of the scanning group $\mathbf{a}' \quad \mathbf{b}' \quad \mathbf{d}$	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$
$(mn0)$ $(\bar{m}n0)$ $(\bar{m}\bar{n}0)$ $(nm0)$	$\mathbf{c} \quad n\mathbf{a} - m\mathbf{b} \quad p\mathbf{a} + q\mathbf{b}$ $\mathbf{c} \quad m\mathbf{a} + n\mathbf{b} \quad -q\mathbf{a} + p\mathbf{b}$ $\mathbf{c} \quad n\mathbf{a} + m\mathbf{b} \quad -p\mathbf{a} + q\mathbf{b}$ $\mathbf{c} \quad m\mathbf{a} - n\mathbf{b} \quad q\mathbf{a} + p\mathbf{b}$			
	n odd m even p even q odd or n even m odd p odd q even p odd q odd	$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111 (\mathbf{b}'/4)$ L09 $p1$ L01
	n odd m odd	$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111$ L09 $p1$ L01
		$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$ L10 $\hat{p}1$ L01
$(0mn)$ $(0\bar{m}n)$ $(m0n)$ $(m0\bar{n})$	$\mathbf{a} \quad n\mathbf{b} - m\mathbf{c} \quad p\mathbf{b} + q\mathbf{c}$ $\mathbf{a} \quad n\mathbf{b} + m\mathbf{c} \quad -p\mathbf{b} + q\mathbf{c}$ $\mathbf{b} \quad m\mathbf{c} - n\mathbf{a} \quad q\mathbf{c} + p\mathbf{a}$ $\mathbf{b} \quad m\mathbf{c} + n\mathbf{a} \quad -q\mathbf{c} + p\mathbf{a}$			
	n odd m even p even q odd or n even m odd p odd q even p odd q odd	$Im11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pm11$ L11
	n odd m odd	$Bm11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pm11$ L11
		$Cm11$	$s\mathbf{d}$	$cm11$ L13

Continued

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$
(hhl) $(\bar{h}hl)$ $(\mathbf{a} - \mathbf{b})/8$	$\mathbf{a} - \mathbf{b}$ $n\hat{\mathbf{a}} - mc$ $p\hat{\mathbf{a}} + qc$	$Bn11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$ L12
	$\mathbf{a} - \mathbf{b}$ $n\hat{\mathbf{a}} + mc$ $-p\hat{\mathbf{a}} + qc$			
	n odd m even			
	p even q odd			
	n even m odd			
	p odd q even			
	n even m odd			
	p odd q odd			
	n odd m odd			
	p even q odd			
$(\bar{h}\bar{h}l)$ $(\bar{h}hl)$ $3(\mathbf{a} + \mathbf{b})/8$	$\hat{\mathbf{a}} = (\mathbf{a} + \mathbf{b} + \mathbf{c})/2$	$Bn11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$ L12
	$\mathbf{a} + \mathbf{b}$ $n\hat{\mathbf{a}} - mc$ $p\hat{\mathbf{a}} + qc$			
	$\mathbf{a} + \mathbf{b}$ $n\hat{\mathbf{a}} + mc$ $-p\hat{\mathbf{a}} + qc$			
	n odd m even			
	p even q odd			
	n even m odd			
	p odd q even			
	n even m odd			
	p odd q odd			
	n odd m odd			
p even q odd				
$(\bar{h}\bar{h}l)$ $(\bar{h}hl)$ $3(\mathbf{a} + \mathbf{b})/8$	$\hat{\mathbf{a}} = (\mathbf{b} - \mathbf{a} + \mathbf{c})/2$	$Cn11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$ L01
	$\mathbf{a} + \mathbf{b}$ $n\hat{\mathbf{a}} - mc$ $p\hat{\mathbf{a}} + qc$			
	$\mathbf{a} + \mathbf{b}$ $n\hat{\mathbf{a}} + mc$ $-p\hat{\mathbf{a}} + qc$			
	n odd m even			
	p even q odd			
	n even m odd			
	p odd q even			
	n even m odd			
	p odd q odd			
	n odd m odd			
p even q odd				
$(\bar{h}\bar{h}l)$ $(\bar{h}hl)$ $3(\mathbf{a} + \mathbf{b})/8$	$\hat{\mathbf{a}} = (\mathbf{b} - \mathbf{a} + \mathbf{c})/2$	$Cc11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$ L01
	$\mathbf{a} + \mathbf{b}$ $n\hat{\mathbf{a}} - mc$ $p\hat{\mathbf{a}} + qc$			
	$\mathbf{a} + \mathbf{b}$ $n\hat{\mathbf{a}} + mc$ $-p\hat{\mathbf{a}} + qc$			
	n odd m even			
	p even q odd			
	n even m odd			
	p odd q even			
	n even m odd			
	p odd q odd			
	n odd m odd			
p even q odd				
$(\bar{h}\bar{h}l)$ $(\bar{h}hl)$ $3(\mathbf{a} + \mathbf{b})/8$	$\hat{\mathbf{a}} = (\mathbf{b} - \mathbf{a} + \mathbf{c})/2$	$Bb11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11$ L12
	$\mathbf{a} + \mathbf{b}$ $n\hat{\mathbf{a}} - mc$ $p\hat{\mathbf{a}} + qc$			
	$\mathbf{a} + \mathbf{b}$ $n\hat{\mathbf{a}} + mc$ $-p\hat{\mathbf{a}} + qc$			
	n odd m even			
	p even q odd			
	n even m odd			
	p odd q even			
	n even m odd			
	p odd q odd			
	n odd m odd			
p even q odd				
$(\bar{h}\bar{h}l)$ $(\bar{h}hl)$ $3(\mathbf{a} + \mathbf{b})/8$	$\hat{\mathbf{a}} = (\mathbf{b} - \mathbf{a} + \mathbf{c})/2$	$Ib11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11$ L12
	$\mathbf{a} + \mathbf{b}$ $n\hat{\mathbf{a}} - mc$ $p\hat{\mathbf{a}} + qc$			
	$\mathbf{a} + \mathbf{b}$ $n\hat{\mathbf{a}} + mc$ $-p\hat{\mathbf{a}} + qc$			
	n odd m even			
	p even q odd			
	n even m odd			
	p odd q even			
	n even m odd			
	p odd q odd			
	n odd m odd			
p even q odd				
$(\bar{h}\bar{h}l)$ $(\bar{h}hl)$ $3(\mathbf{a} + \mathbf{b})/8$	$\hat{\mathbf{a}} = (\mathbf{b} - \mathbf{a} + \mathbf{c})/2$	$Ic11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$ L12
	$\mathbf{a} + \mathbf{b}$ $n\hat{\mathbf{a}} - mc$ $p\hat{\mathbf{a}} + qc$			
	$\mathbf{a} + \mathbf{b}$ $n\hat{\mathbf{a}} + mc$ $-p\hat{\mathbf{a}} + qc$			
	n odd m even			
	p even q odd			
	n even m odd			
	p odd q even			
	n even m odd			
	p odd q odd			
	n odd m odd			
p even q odd				
l odd $\Rightarrow n = 2l, m = 2h + l; l$ even $\Rightarrow n = l, m = h + l/2$				

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$
$(mn0)$ $(\bar{n}m0)$ $(\bar{m}n0)$ $(nm0)$	\mathbf{c} $n\mathbf{a} - m\mathbf{b}$ $p\mathbf{a} + q\mathbf{b}$ \mathbf{c} $m\mathbf{a} + n\mathbf{b}$ $-q\mathbf{a} + p\mathbf{b}$ \mathbf{c} $n\mathbf{a} + m\mathbf{b}$ $-p\mathbf{a} + q\mathbf{b}$ \mathbf{c} $m\mathbf{a} - n\mathbf{b}$ $q\mathbf{a} + p\mathbf{b}$	$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111 (\mathbf{b}'/4)$ L09 $p1$ L01
	n odd m even p even q odd or n even m odd p odd q even p odd q odd	$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111$ L09 $p1$ L01
	n odd m odd	$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$ L10 $\hat{p}1$ L01
$(0mn)$ $(0\bar{m}\bar{n})$	\mathbf{a} $n\mathbf{b} - m\mathbf{c}$ $p\mathbf{b} + q\mathbf{c}$ \mathbf{a} $n\mathbf{b} + m\mathbf{c}$ $-p\mathbf{b} + q\mathbf{c}$	$Ic11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$ L12
	n odd m even p even q odd n even m odd p odd q even n even m odd p odd q odd n odd m odd p even q odd n odd m odd p odd q even n odd m even p odd q odd	$Ib11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11$ L12
		$Bb11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11$ L12
		$Cc11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$ L01
		$Cn11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$ L01
		$Bn11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$ L12
$(m0n)$ $(m0\bar{n})$	\mathbf{b} $m\mathbf{c} - n\mathbf{a}$ $q\mathbf{c} + p\mathbf{a}$ \mathbf{b} $m\mathbf{c} + n\mathbf{a}$ $-q\mathbf{c} + p\mathbf{a}$	$Ib11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11$ L12
	n odd m even p even q odd n even m odd p odd q even n even m odd p odd q odd n odd m odd p even q odd n odd m odd p odd q even n odd m even p odd q odd	$Ic11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$ L12
		$Bn11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$ L12
		$Cn11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$ L01
		$Cc11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$ L01
		$Bb11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11$ L12

Continued

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$
(hhl) $(\bar{h}hl)$ $3(\mathbf{a} - \mathbf{b})/8$	$\mathbf{a} - \mathbf{b}$ $n\hat{\mathbf{a}} - m\mathbf{c}$ $p\hat{\mathbf{a}} + q\mathbf{c}$	$Bn11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$ L12
	$\mathbf{a} - \mathbf{b}$ $n\hat{\mathbf{a}} + m\mathbf{c}$ $-p\hat{\mathbf{a}} + q\mathbf{c}$			
	n odd m even			
	p even q odd			
	n even m odd			
	p odd q even			
	n even m odd			
	p odd q odd			
	n odd m odd			
	p even q odd			
	$Cn11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$	L01
	$Cc11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$	L01
	$Bb11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11$	L12
	$Ib11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11$	L12
	$Ic11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$	L12
	$\hat{\mathbf{a}} = (\mathbf{a} + \mathbf{b} + \mathbf{c})/2$			
$(\bar{h}\bar{h}l)$ $(\bar{h}hl)$ $(\mathbf{a} + \mathbf{b})/8$	$\mathbf{a} + \mathbf{b}$ $n\hat{\mathbf{a}} - m\mathbf{c}$ $p\hat{\mathbf{a}} + q\mathbf{c}$	$Bn11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$ L12
	$\mathbf{a} + \mathbf{b}$ $n\hat{\mathbf{a}} + m\mathbf{c}$ $-p\hat{\mathbf{a}} + q\mathbf{c}$			
	n odd m even			
	p even q odd			
	n even m odd			
	p odd q even			
	n even m odd			
	p odd q odd			
	n odd m odd			
	p even q odd			
	$Cn11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$	L01
	$Cc11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$	L01
	$Bb11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11$	L12
	$Ib11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11$	L12
	$Ic11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$	L12
	$\hat{\mathbf{a}} = (\mathbf{b} - \mathbf{a} + \mathbf{c})/2$			
l odd $\Rightarrow n = 2l, m = 2h + l; l$ even $\Rightarrow n = l, m = h + l/2$				

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}				
(<i>mn0</i>)	\mathbf{c}	$n\mathbf{a} - m\mathbf{b}$	$p\mathbf{a} + q\mathbf{b}$	<i>P211</i>	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [$s\mathbf{d}, -s\mathbf{d}$]	<i>p211</i>	L08
($\bar{1}\bar{m}0$)	\mathbf{c}	$m\mathbf{a} + n\mathbf{b}$	$-q\mathbf{a} + p\mathbf{b}$				
($\bar{m}n0$)	\mathbf{c}	$n\mathbf{a} + m\mathbf{b}$	$-p\mathbf{a} + q\mathbf{b}$				
(<i>nm0</i>)	\mathbf{c}	$m\mathbf{a} - n\mathbf{b}$	$q\mathbf{a} + p\mathbf{b}$				
(<i>0mn</i>)	\mathbf{a}	$n\mathbf{b} - m\mathbf{c}$	$p\mathbf{b} + q\mathbf{c}$	<i>P211</i>	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [$s\mathbf{d}, -s\mathbf{d}$]	<i>p211</i>	L08
($0\bar{m}\bar{n}$)	\mathbf{a}	$n\mathbf{b} + m\mathbf{c}$	$-p\mathbf{b} + q\mathbf{c}$				
(<i>mOn</i>)	\mathbf{b}	$m\mathbf{c} - n\mathbf{a}$	$q\mathbf{c} + p\mathbf{a}$				
(<i>mO\bar{n}</i>)	\mathbf{b}	$m\mathbf{c} + n\mathbf{a}$	$-q\mathbf{c} + p\mathbf{a}$				
(<i>hhl</i>)	$\mathbf{a} - \mathbf{b}$	$n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$	$p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$	<i>Cm11</i>	$s\mathbf{d}$	<i>cm11</i>	L13
($\bar{h}\bar{h}l$)	$\mathbf{a} - \mathbf{b}$	$n(\mathbf{a} + \mathbf{b}) + m\mathbf{c}$	$-p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$				
(<i>hhl</i>)	$\mathbf{a} + \mathbf{b}$	$n(\mathbf{b} - \mathbf{a}) - m\mathbf{c}$	$p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$				
($\bar{h}\bar{h}l$)	$\mathbf{a} + \mathbf{b}$	$n(\mathbf{b} - \mathbf{a}) + m\mathbf{c}$	$-p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$	<i>Im11</i>	[$s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}$]	<i>pm11</i>	L11
			n odd m even q odd m odd q odd m odd p odd q even	<i>Bm11</i>	[$s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}$]	<i>pm11</i>	L11
l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$							

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}				
$(mn0)$	\mathbf{c}	$n\mathbf{a} - m\mathbf{b}$	$p\mathbf{a} + q\mathbf{b}$	$P211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p211$	L08
$(\bar{m}n0)$	\mathbf{c}	$m\mathbf{a} + n\mathbf{b}$	$-q\mathbf{a} + p\mathbf{b}$				
$(\bar{m}\bar{n}0)$	\mathbf{c}	$n\mathbf{a} + m\mathbf{b}$	$-p\mathbf{a} + q\mathbf{b}$				
$(nm0)$	\mathbf{c}	$m\mathbf{a} - n\mathbf{b}$	$q\mathbf{a} + p\mathbf{b}$				
$(0mn)$	\mathbf{a}	$n\mathbf{b} - m\mathbf{c}$	$p\mathbf{b} + q\mathbf{c}$	$P211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p211$	L08
$(0\bar{m}n)$	\mathbf{a}	$n\mathbf{b} + m\mathbf{c}$	$-p\mathbf{b} + q\mathbf{c}$				
$(m0n)$	\mathbf{b}	$m\mathbf{c} - n\mathbf{a}$	$q\mathbf{c} + p\mathbf{a}$				
$(m0\bar{n})$	\mathbf{b}	$m\mathbf{c} + n\mathbf{a}$	$-q\mathbf{c} + p\mathbf{a}$				
$(c/4)$							
(hhl)	$\mathbf{a} - \mathbf{b}$	$n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$	$p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$	$Cc11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$	L01
$(\bar{h}hl)$	$\mathbf{a} - \mathbf{b}$	$n(\mathbf{a} + \mathbf{b}) + m\mathbf{c}$	$-p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$				
$(h\bar{h}l)$	$\mathbf{a} + \mathbf{b}$	$n(\mathbf{b} - \mathbf{a}) - m\mathbf{c}$	$p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$				
$(\bar{h}\bar{h}l)$	$\mathbf{a} + \mathbf{b}$	$n(\mathbf{b} - \mathbf{a}) + m\mathbf{c}$	$-p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$				
		n odd m even					
		p even q odd					
		n even m odd					
		p odd q even					
		n even m odd					
		p odd q odd					
		n odd m odd					
		p even q odd					
		n odd m odd					
		p odd q even					
		n odd m even					
		p odd q odd					
				$Bb11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11$	L12
				$Ib11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11$	L12
				$Ic11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$	L12
				$Bn11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$	L12
				$Cn11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$	L01

l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}				
$(mn0)$	\mathbf{c}	$n\mathbf{a} - m\mathbf{b}$	$p\mathbf{a} + q\mathbf{b}$	$P211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p211$	L08
$(\bar{m}n0)$	\mathbf{c}	$m\mathbf{a} + n\mathbf{b}$	$-q\mathbf{a} + p\mathbf{b}$				
$(\bar{m}\bar{n}0)$	\mathbf{c}	$n\mathbf{a} + m\mathbf{b}$	$-p\mathbf{a} + q\mathbf{b}$				
$(nm0)$	\mathbf{c}	$m\mathbf{a} - n\mathbf{b}$	$q\mathbf{a} + p\mathbf{b}$				
$(0mn)$	\mathbf{a}	$n\mathbf{b} - m\mathbf{c}$	$p\mathbf{b} + q\mathbf{c}$	$P2_111$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2_111$	L09
$(0\bar{m}n)$	\mathbf{a}	$n\mathbf{b} + m\mathbf{c}$	$-p\mathbf{b} + q\mathbf{c}$				
$(\mathbf{b}/4)$						$p1$	L01
$(m0n)$	\mathbf{b}	$m\mathbf{c} - n\mathbf{a}$	$q\mathbf{c} + p\mathbf{a}$	$P2_111$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2_111$	L09
$(m0\bar{n})$	\mathbf{b}	$m\mathbf{c} + n\mathbf{a}$	$-q\mathbf{c} + p\mathbf{a}$				
$(\mathbf{a}/4)$						$p1$	L01
(hhl)	$\mathbf{a} - \mathbf{b}$	$n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$	$p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$	$Cm11$	$s\mathbf{d}$	$cm11$	L13
$(\bar{h}hl)$	$\mathbf{a} - \mathbf{b}$	$n(\mathbf{a} + \mathbf{b}) + m\mathbf{c}$	$-p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$				
$(\mathbf{a} - \mathbf{b})/4$			n odd m even				
			q odd				
			m odd				
			q odd				
			m odd				
			p odd q even	$Bm11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pm11$	L11
(hhl)	$\mathbf{a} + \mathbf{b}$	$n(\mathbf{b} - \mathbf{a}) - m\mathbf{c}$	$p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$	$Cm11$	$s\mathbf{d}$	$cm11$	L13
$(\bar{h}hl)$	$\mathbf{a} + \mathbf{b}$	$n(\mathbf{b} - \mathbf{a}) + m\mathbf{c}$	$-p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$				
$(\mathbf{a} + \mathbf{b})/4$			n odd m even				
			q odd				
			m odd				
			q odd				
			m odd				
			p odd q even	$Bm11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pm11$	L11

l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$				
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}							
$(mn0)$	\mathbf{c}	$n\mathbf{a} - m\mathbf{b}$	$p\mathbf{a} + q\mathbf{b}$	$P211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [$s\mathbf{d}, -s\mathbf{d}$]	$p211$	L08			
$(\bar{n}m0)$	\mathbf{c}	$m\mathbf{a} + n\mathbf{b}$	$-q\mathbf{a} + p\mathbf{b}$				L01			
$(\bar{m}n0)$	\mathbf{c}	$n\mathbf{a} + m\mathbf{b}$	$-p\mathbf{a} + q\mathbf{b}$							
$(nm0)$	\mathbf{c}	$m\mathbf{a} - n\mathbf{b}$	$q\mathbf{a} + p\mathbf{b}$							
$(0mn)$	\mathbf{a}	$n\mathbf{b} - m\mathbf{c}$	$p\mathbf{b} + q\mathbf{c}$	$P2_111$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [$s\mathbf{d}, -s\mathbf{d}$]	$p2_111$	L09			
$(0\bar{m}n)$ $(\mathbf{b} + \mathbf{c})/4$	\mathbf{a}	$n\mathbf{b} + m\mathbf{c}$	$-p\mathbf{b} + q\mathbf{c}$				L01			
$(m0n)$	\mathbf{b}	$m\mathbf{c} - n\mathbf{a}$	$q\mathbf{c} + p\mathbf{a}$	$P2_111$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [$s\mathbf{d}, -s\mathbf{d}$]	$p2_111$	L09			
$(m0\bar{n})$ $(\mathbf{a} + \mathbf{c})/4$	\mathbf{b}	$m\mathbf{c} + n\mathbf{a}$	$-q\mathbf{c} + p\mathbf{a}$				L01			
(hhl)	$\mathbf{a} - \mathbf{b}$	$n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$	$p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$	$Cc11$	[$s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}$]	$\hat{p}1$	L01			
$(\bar{h}hl)$	$\mathbf{a} - \mathbf{b}$	$n(\mathbf{a} + \mathbf{b}) + m\mathbf{c}$	$-p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$				$Bb11$	[$s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}$]	$pb11$	L12
$(\mathbf{a} - \mathbf{b})/4$			n odd m even p even q odd n even m odd p odd q even n even m odd p odd q odd n odd m odd p even q odd n odd m odd p odd q even n odd m even p odd q odd				$Ib11$	[$s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}$]	$pb11$	L12
							$Ic11$	[$s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}$]	$pb11 (\mathbf{a}'/4)$	L12
							$Bn11$	[$s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}$]	$pb11 (\mathbf{a}'/4)$	L12
							$Cn11$	[$s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}$]	$\hat{p}1$	L01
$(h\bar{h}l)$	$\mathbf{a} + \mathbf{b}$	$n(\mathbf{b} - \mathbf{a}) - m\mathbf{c}$	$p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$				$Cc11$	[$s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}$]	$\hat{p}1$	L01
$(\bar{h}hl)$	$\mathbf{a} + \mathbf{b}$	$n(\mathbf{b} - \mathbf{a}) + m\mathbf{c}$	$-p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$							$Bb11$
$(\mathbf{a} + \mathbf{b})/4$			n odd m even p even q odd n even m odd p odd q even n even m odd p odd q odd n odd m odd p even q odd n odd m odd p odd q even n odd m even p odd q odd	$Ib11$	[$s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}$]	$pb11$				L12
				$Ic11$	[$s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}$]	$pb11 (\mathbf{a}'/4)$				L12
				$Bn11$	[$s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}$]	$pb11 (\mathbf{a}'/4)$				L12
				$Cn11$	[$s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}$]	$\hat{p}1$				L01

l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}				
$(mn0)$	\mathbf{c}	$n\mathbf{a} - m\mathbf{b}$	$p\mathbf{a} + q\mathbf{b}$	$P211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [$s\mathbf{d}, -s\mathbf{d}$]	$p211$	L08
$(\bar{n}m0)$	\mathbf{c}	$m\mathbf{a} + n\mathbf{b}$	$-q\mathbf{a} + p\mathbf{b}$				
$(\bar{m}n0)$	\mathbf{c}	$n\mathbf{a} + m\mathbf{b}$	$-p\mathbf{a} + q\mathbf{b}$				
$(nm0)$	\mathbf{c}	$m\mathbf{a} - n\mathbf{b}$	$q\mathbf{a} + p\mathbf{b}$				
$(0mn)$	\mathbf{a}	$n\mathbf{b} - m\mathbf{c}$	$p\mathbf{b} + q\mathbf{c}$	$Pm11$	$s\mathbf{d}$	$pm11$	L11
$(0\bar{m}n)$	\mathbf{a}	$n\mathbf{b} + m\mathbf{c}$	$-p\mathbf{b} + q\mathbf{c}$				
$(m0n)$	\mathbf{b}	$m\mathbf{c} - n\mathbf{a}$	$q\mathbf{c} + p\mathbf{a}$				
$(m0\bar{n})$	\mathbf{b}	$m\mathbf{c} + n\mathbf{a}$	$-q\mathbf{c} + p\mathbf{a}$				
(hhl)	$\mathbf{a} - \mathbf{b}$	$n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$	$p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$	$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [$s\mathbf{d}, -s\mathbf{d}$]	$c211$	L10
$(\bar{h}hl)$	$\mathbf{a} - \mathbf{b}$	$n(\mathbf{a} + \mathbf{b}) + m\mathbf{c}$	$-p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$				
$(h\bar{h}l)$	$\mathbf{a} + \mathbf{b}$	$n(\mathbf{b} - \mathbf{a}) - m\mathbf{c}$	$p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$				
$(\bar{h}\bar{h}l)$	$\mathbf{a} + \mathbf{b}$	$n(\mathbf{b} - \mathbf{a}) + m\mathbf{c}$	$-p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$				
		n odd	m even				
			q odd				
			m odd				
			q odd				
		p odd	m odd	$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	$p211$	L08
			q even		$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	$p211$	L09
					$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	$p1$	L01
l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$							

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
$(mn0)$ $(\bar{n}m0)$ $(\bar{m}n0)$ $(nm0)$	\mathbf{c} $n\mathbf{a} - m\mathbf{b}$ $p\mathbf{a} + q\mathbf{b}$ \mathbf{c} $m\mathbf{a} + n\mathbf{b}$ $-q\mathbf{a} + p\mathbf{b}$ \mathbf{c} $n\mathbf{a} + m\mathbf{b}$ $-p\mathbf{a} + q\mathbf{b}$ \mathbf{c} $m\mathbf{a} - n\mathbf{b}$ $q\mathbf{a} + p\mathbf{b}$	$P211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p211$ $p1$	L08 L01
$(0mn)$ $(0\bar{m}n)$	$\mathbf{a} + \mathbf{b}$ $n(\mathbf{b} - \mathbf{a}) - m\mathbf{c}$ $p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$ $\mathbf{a} + \mathbf{b}$ $n(\mathbf{b} - \mathbf{a}) + m\mathbf{c}$ $-p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$ n odd p even q odd n even m odd p odd n odd p odd	$Pc11$ $Pb11$ $Pn11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$ $s\mathbf{d}$ $[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$p1$ $pb11$ $p1$	L01 L12 L01
(hhl) $(\bar{h}hl)$	$\mathbf{a} + \mathbf{b}$ $n(\mathbf{b} - \mathbf{a}) - m\mathbf{c}$ $p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$ $\mathbf{a} + \mathbf{b}$ $n(\mathbf{b} - \mathbf{a}) + m\mathbf{c}$ $-p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$ n odd m even q odd m odd q odd m odd p odd q even	$Pb11$ $Pn11$ $Pc11$	$s\mathbf{d}$ $[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$ $[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11$ $p1$ $p1$	L12 L01 L01
(hhl) $(\bar{h}hl)$ $(h\bar{h}l)$ $(\bar{h}\bar{h}l)$ $(c/4)$	$\mathbf{a} - \mathbf{b}$ $n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$ $p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$ $\mathbf{a} - \mathbf{b}$ $n(\mathbf{a} + \mathbf{b}) + m\mathbf{c}$ $-p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$ $\mathbf{a} + \mathbf{b}$ $n(\mathbf{b} - \mathbf{a}) - m\mathbf{c}$ $p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$ $\mathbf{a} + \mathbf{b}$ $n(\mathbf{b} - \mathbf{a}) + m\mathbf{c}$ $-p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$ n odd m even q odd m odd q odd m odd p odd q even	$C211$ $I211$ $B211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$ $[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$ $[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$c211$ $\hat{p}1$ $p211$ $p2_111 (\mathbf{b}'/4)$ $p1$ $p211$ $p2_111$ $p1$	L10 L01 L08 L09 L01 L08 L09 L01
l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$					

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}				
$(mn0)$	\mathbf{c}	$n\mathbf{a} - m\mathbf{b}$	$p\mathbf{a} + q\mathbf{b}$	$P211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [$s\mathbf{d}, -s\mathbf{d}$]	$p211$	L08
$(\bar{n}m0)$	\mathbf{c}	$m\mathbf{a} + n\mathbf{b}$	$-q\mathbf{a} + p\mathbf{b}$				
$(\bar{m}n0)$	\mathbf{c}	$n\mathbf{a} + m\mathbf{b}$	$-p\mathbf{a} + q\mathbf{b}$				
$(nm0)$	\mathbf{c}	$m\mathbf{a} - n\mathbf{b}$	$q\mathbf{a} + p\mathbf{b}$				
$(0mn)$	\mathbf{a}	$n\mathbf{b} - m\mathbf{c}$	$p\mathbf{b} + q\mathbf{c}$	$Pb11$	$s\mathbf{d}$	$pb11$	L12
$(0\bar{m}n)$		$n\mathbf{b} + m\mathbf{c}$	$-p\mathbf{b} + q\mathbf{c}$				
$(\mathbf{a}/4)$							
				$Pn11$	[$s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}$]	$p1$	L01
				$Pc11$	[$s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}$]	$p1$	L01
			p odd q even				
$(m0n)$	\mathbf{b}	$m\mathbf{c} - n\mathbf{a}$	$q\mathbf{c} + p\mathbf{a}$	$Pc11$	[$s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}$]	$p1$	L01
$(m0\bar{n})$		$m\mathbf{c} + n\mathbf{a}$	$-q\mathbf{c} + p\mathbf{a}$				
$(\mathbf{b}/4)$							
				$Pb11$	$s\mathbf{d}$	$pb11$	L12
				$Pn11$	[$s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}$]	$p1$	L01
(hhl)	$\mathbf{a} - \mathbf{b}$	$n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$	$p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$	$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [$s\mathbf{d}, -s\mathbf{d}$]	$c211$	L10
$(\bar{h}hl)$		$n(\mathbf{a} + \mathbf{b}) + m\mathbf{c}$	$-p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$				
$(\mathbf{a} + \mathbf{b})/4$			n odd m even q odd m odd q odd	$I211$	[$0\mathbf{d}, \frac{1}{2}\mathbf{d}$] [$\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	$p211$ $p2_111$ ($\mathbf{b}'/4$) $p1$	L08 L09 L01
			m odd	$B211$	[$0\mathbf{d}, \frac{1}{2}\mathbf{d}$] [$\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	$p211$ $p2_111$ $p1$	L08 L09 L01
			p odd q even				
(hhl)	$\mathbf{a} + \mathbf{b}$	$n(\mathbf{b} - \mathbf{a}) - m\mathbf{c}$	$p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$	$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [$s\mathbf{d}, -s\mathbf{d}$]	$c211$	L10
$(\bar{h}hl)$		$n(\mathbf{b} - \mathbf{a}) + m\mathbf{c}$	$-p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$				
$(\mathbf{a} - \mathbf{b})/4$			n odd m even q odd m odd q odd	$I211$	[$0\mathbf{d}, \frac{1}{2}\mathbf{d}$] [$\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	$p211$ $p2_111$ ($\mathbf{b}'/4$) $p1$	L08 L09 L01
			m odd	$B211$	[$0\mathbf{d}, \frac{1}{2}\mathbf{d}$] [$\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	$p211$ $p2_111$ $p1$	L08 L09 L01
			p odd q even				
l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$							

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}				
(<i>mn</i> 0)	\mathbf{c}	$n\mathbf{a} - m\mathbf{b}$	$p\mathbf{a} + q\mathbf{b}$	<i>P</i> 211	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [$s\mathbf{d}, -s\mathbf{d}$]	<i>p</i> 211	L08
(\bar{m} <i>n</i> 0)	\mathbf{c}	$m\mathbf{a} + n\mathbf{b}$	$-q\mathbf{a} + p\mathbf{b}$				
(\bar{m} \bar{n} 0)	\mathbf{c}	$n\mathbf{a} + m\mathbf{b}$	$-p\mathbf{a} + q\mathbf{b}$				
(<i>nm</i> 0)	\mathbf{c}	$m\mathbf{a} - n\mathbf{b}$	$q\mathbf{a} + p\mathbf{b}$				
(<i>0mn</i>)	\mathbf{a}	$n\mathbf{b} - m\mathbf{c}$	$p\mathbf{b} + q\mathbf{c}$	<i>P</i> <i>n</i> 11	[$s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}$]	<i>p</i> 1	L01
($0\bar{m}\bar{n}$)			$-p\mathbf{b} + q\mathbf{c}$				
(a/4)			<i>n</i> odd <i>m</i> even				
			<i>p</i> even <i>q</i> odd				
	or						
	<i>n</i> even <i>m</i> odd						
			<i>p</i> odd <i>q</i> even	<i>P</i> <i>c</i> 11	[$s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}$]	<i>p</i> 1	L01
			<i>p</i> odd <i>q</i> odd				
			<i>n</i> odd <i>m</i> odd				
(<i>m</i> 0 <i>n</i>)	\mathbf{b}	$m\mathbf{c} - n\mathbf{a}$	$q\mathbf{c} + p\mathbf{a}$	<i>P</i> <i>n</i> 11	[$s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}$]	<i>p</i> 1	L01
(<i>m</i> 0 \bar{n})			$-q\mathbf{c} + p\mathbf{a}$				
(b/4)			<i>n</i> odd <i>m</i> even				
			<i>p</i> even <i>q</i> odd				
	or						
	<i>n</i> even <i>m</i> odd						
			<i>p</i> odd <i>q</i> even	<i>P</i> <i>c</i> 11	[$s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}$]	<i>p</i> 1	L01
			<i>p</i> odd <i>q</i> odd				
			<i>n</i> odd <i>m</i> odd				
(<i>hhl</i>)	$\mathbf{a} - \mathbf{b}$	$n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$	$p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$	<i>C</i> 211	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [$s\mathbf{d}, -s\mathbf{d}$]	<i>c</i> 211	L10
($\bar{h}\bar{h}l$)			$-p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$				
(a + b + c)/4			<i>n</i> odd <i>m</i> even				
			<i>q</i> odd				
	<i>m</i> odd						
	<i>q</i> odd						
			<i>m</i> odd	<i>I</i> 211	[$0\mathbf{d}, \frac{1}{2}\mathbf{d}$] [$\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	<i>p</i> 211	L08
			<i>m</i> odd				
			<i>q</i> odd				
			<i>p</i> odd <i>q</i> even	<i>B</i> 211	[$0\mathbf{d}, \frac{1}{2}\mathbf{d}$] [$\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	<i>p</i> 211	L08
			<i>p</i> 2 ₁ 11				
			<i>p</i> 1				
(<i>hhl</i>)	$\mathbf{a} + \mathbf{b}$	$n(\mathbf{b} - \mathbf{a}) - m\mathbf{c}$	$p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$	<i>C</i> 211	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [$s\mathbf{d}, -s\mathbf{d}$]	<i>c</i> 211	L10
($\bar{h}\bar{h}l$)			$-p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$				
(a - b + c)/4			<i>n</i> odd <i>m</i> even				
			<i>q</i> odd				
	<i>m</i> odd						
	<i>q</i> odd						
			<i>m</i> odd	<i>I</i> 211	[$0\mathbf{d}, \frac{1}{2}\mathbf{d}$] [$\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	<i>p</i> 211	L08
			<i>m</i> odd				
			<i>q</i> odd				
			<i>p</i> odd <i>q</i> even	<i>B</i> 211	[$0\mathbf{d}, \frac{1}{2}\mathbf{d}$] [$\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	<i>p</i> 211	L08
			<i>p</i> 2 ₁ 11				
			<i>p</i> 1				

l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group a' b' d	Scanning group \mathcal{H}	Linear orbit sd	Sectional layer group $\mathcal{L}(\mathbf{sd})$	
(<i>mn0</i>) ($\bar{1}\bar{m}0$) ($\bar{m}n0$) (<i>nm0</i>)	c <i>na - mb</i> <i>pa + qb</i> c <i>ma + nb</i> $-qa + pb$ c <i>na + mb</i> $-pa + qb$ c <i>ma - nb</i> <i>qa + pb</i>	<i>I211</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p211</i> L08 <i>p2₁11</i> (b' /4) L09 <i>p1</i> L01	
<i>n odd</i> <i>m even</i> <i>p even</i> <i>q odd</i> or <i>n even</i> <i>m odd</i> <i>p odd</i> <i>q even</i> <i>p odd</i> <i>q odd</i>	<i>B211</i>			$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p211</i> L08 <i>p2₁11</i> L09 <i>p1</i> L01
<i>n odd</i> <i>m odd</i>	<i>C211</i>			$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	<i>c211</i> L10 $\widehat{p}1$ L01
(<i>0mn</i>) ($0\bar{m}n$) (<i>m0n</i>) ($m0\bar{n}$)	a <i>nb - mc</i> <i>pb + qc</i> a <i>nb + mc</i> $-pb + qc$ b <i>mc - na</i> <i>qc + pa</i> b <i>mc + na</i> $-qc + pa$	<i>Im11</i>	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	<i>pm11</i> L11	
<i>n odd</i> <i>m even</i> <i>p even</i> <i>q odd</i> or <i>n even</i> <i>m odd</i> <i>p odd</i> <i>q even</i> <i>p odd</i> <i>q odd</i>	<i>Bm11</i>			$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	<i>pm11</i> L11
<i>n odd</i> <i>m odd</i>	<i>Cm11</i>			sd	<i>cm11</i> L13

Continued

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group a' b' d	Scanning group \mathcal{H}	Linear orbit sd	Sectional layer group $\mathcal{L}(s\mathbf{d})$			
(hhl) $(\bar{h}hl)$	$\mathbf{a} - \mathbf{b}$ $n\hat{\mathbf{a}} - m\mathbf{c}$ $p\hat{\mathbf{a}} + q\mathbf{c}$ $\mathbf{a} - \mathbf{b}$ $n\hat{\mathbf{a}} + m\mathbf{c}$ $-p\hat{\mathbf{a}} + q\mathbf{c}$ <i>n</i> odd <i>p</i> even <i>q</i> odd	<i>B</i> 211	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p</i> 211 L08 <i>p</i> 2 ₁ 11 L09 <i>p</i> 1 L01			
		<i>C</i> 211	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	<i>c</i> 211 L10 $\hat{p}1$ L01			
		<i>I</i> 211	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p</i> 211 L08 <i>p</i> 2 ₁ 11 (b' /4) L09 <i>p</i> 1 L01			
		$\hat{\mathbf{a}} = (\mathbf{a} + \mathbf{b} + \mathbf{c})/2$					
		$(h\bar{h}l)$ $(\bar{h}hl)$	$\mathbf{a} + \mathbf{b}$ $n\hat{\mathbf{a}} - m\mathbf{c}$ $p\hat{\mathbf{a}} + q\mathbf{c}$ $\mathbf{a} + \mathbf{b}$ $n\hat{\mathbf{a}} + m\mathbf{c}$ $-p\hat{\mathbf{a}} + q\mathbf{c}$ <i>n</i> odd <i>p</i> even <i>q</i> odd	<i>B</i> 211	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p</i> 211 L08 <i>p</i> 2 ₁ 11 L09 <i>p</i> 1 L01	
				<i>C</i> 211	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	<i>c</i> 211 L10 $\hat{p}1$ L01	
	<i>I</i> 211			$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p</i> 211 L08 <i>p</i> 2 ₁ 11 (b' /4) L09 <i>p</i> 1 L01		
	$\hat{\mathbf{a}} = (\mathbf{b} - \mathbf{a} + \mathbf{c})/2$						
	<i>l</i> odd $\Rightarrow n = 2l, m = 2h + l$; <i>l</i> even $\Rightarrow n = l, m = h + l/2$						

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group a' b' d	Scanning group \mathcal{H}	Linear orbit sd	Sectional layer group $\mathcal{L}(sd)$									
(<i>mn0</i>) ($\bar{m}n0$) ($\bar{m}\bar{n}0$) (<i>nm0</i>)	$na - mb$ $pa + qb$ $ma + nb$ $-qa + pb$ $na + mb$ $-pa + qb$ $ma - nb$ $qa + pb$	$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111 (\mathbf{b}'/4)$ L09 $p1$ L01									
					n odd m even p even q odd or n even m odd p odd q even p odd q odd	$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111$ L09 $p1$ L01					
									n odd m odd	$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$ L10 $\hat{p}1$ L01	
													$(0mn)$ $(0\bar{m}n)$
					n odd m even p even q odd n even m odd p odd q even	$Ib11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11$ L12					
									n even m odd p odd q odd	$Bb11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11$ L12	
					n odd m odd p even q odd	$Cc11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$ L01					
									n odd m odd p odd q even	$Cn11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$ L01	
					n odd m even p odd q odd	$Bn11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$ L12					
$(m0n)$ $(m0\bar{n})$	$mc - na$ $qc + pa$ $mc + na$ $-qc + pa$	$Ib11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11$ L12									
					n odd m even p even q odd n even m odd p odd q even	$Ic11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$ L12					
									n even m odd p odd q odd	$Bn11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$ L12	
					n odd m odd p even q odd	$Cn11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$ L01					
									n odd m odd p odd q even	$Cc11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$ L01	
					n odd m even p odd q odd	$Bb11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11$ L12					

Continued

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$			
(hhl) $(\bar{h}hl)$ $(c/4)$	$\mathbf{a} - \mathbf{b}$ $n\hat{\mathbf{a}} - m\mathbf{c}$ $p\hat{\mathbf{a}} + q\mathbf{c}$ $\mathbf{a} - \mathbf{b}$ $n\hat{\mathbf{a}} + m\mathbf{c}$ $-p\hat{\mathbf{a}} + q\mathbf{c}$ n odd q odd p even n even m odd p odd n odd p odd	$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111$ L09 $p1$ L01			
		$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$ L10 $\hat{p}1$ L01			
		$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111$ ($\mathbf{b}'/4$) L09 $p1$ L01			
		$\hat{\mathbf{a}} = (\mathbf{a} + \mathbf{b} + \mathbf{c})/2$					
		$(h\bar{h}l)$ $(\bar{h}hl)$ $(c/4)$	$\mathbf{a} + \mathbf{b}$ $n\hat{\mathbf{a}} - m\mathbf{c}$ $p\hat{\mathbf{a}} + q\mathbf{c}$ $\mathbf{a} + \mathbf{b}$ $n\hat{\mathbf{a}} + m\mathbf{c}$ $-p\hat{\mathbf{a}} + q\mathbf{c}$ n odd q odd p even n even m odd p odd n odd p odd	$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111$ L09 $p1$ L01	
				$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$ L10 $\hat{p}1$ L01	
				$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111$ ($\mathbf{b}'/4$) L09 $p1$ L01	
				$\hat{\mathbf{a}} = (\mathbf{b} - \mathbf{a} + \mathbf{c})/2$			
				l odd $\Rightarrow n = 2l, m = 2h + l; l$ even $\Rightarrow n = l, m = h + l/2$			

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
$(mn0)$ $(\bar{n}m0)$ $(\bar{m}n0)$ $(nm0)$	\mathbf{c} $n\mathbf{a} - m\mathbf{b}$ $p\mathbf{a} + q\mathbf{b}$ \mathbf{c} $m\mathbf{a} + n\mathbf{b}$ $-q\mathbf{a} + p\mathbf{b}$ \mathbf{c} $n\mathbf{a} + m\mathbf{b}$ $-p\mathbf{a} + q\mathbf{b}$ \mathbf{c} $m\mathbf{a} - n\mathbf{b}$ $q\mathbf{a} + p\mathbf{b}$	$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111$ ($\mathbf{b}'/4$) L09 $p1$ L01	
n odd m even p even q odd	$B211$			$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111$ L09 $p1$ L01
n even m odd p odd q even p odd q odd					$C211$
n odd m odd					
$(0mn)$ $(0\bar{m}n)$ $(m0n)$ $(m0\bar{n})$	\mathbf{a} $n\mathbf{b} - m\mathbf{c}$ $p\mathbf{b} + q\mathbf{c}$ \mathbf{a} $n\mathbf{b} + m\mathbf{c}$ $-p\mathbf{b} + q\mathbf{c}$ \mathbf{b} $m\mathbf{c} - n\mathbf{a}$ $q\mathbf{c} + p\mathbf{a}$ \mathbf{b} $m\mathbf{c} + n\mathbf{a}$ $-q\mathbf{c} + p\mathbf{a}$	$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111$ ($\mathbf{b}'/4$) L09 $p1$ L01	
n odd m even p even q odd	$B211$			$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111$ L09 $p1$ L01
n even m odd p odd q even p odd q odd					$C211$
n odd m odd					

Continued

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$		
(hhl) ($\bar{h}\bar{h}l$)	$\mathbf{a} - \mathbf{b}$ $n\hat{\mathbf{a}} - m\mathbf{c}$ $p\hat{\mathbf{a}} + q\mathbf{c}$ $\mathbf{a} - \mathbf{b}$ $n\hat{\mathbf{a}} + m\mathbf{c}$ $-p\hat{\mathbf{a}} + q\mathbf{c}$ <i>n</i> odd <i>q</i> odd <i>p</i> even <i>m</i> odd <i>n</i> even <i>p</i> odd <i>n</i> odd <i>p</i> odd	$Bm11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pm11$ L11		
		$Cm11$	$s\mathbf{d}$	$cm11$ L13		
		$Im11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pm11$ L11		
		$\hat{\mathbf{a}} = (\mathbf{a} + \mathbf{b} + \mathbf{c})/2$				
		(h $\bar{h}l$) ($\bar{h}hl$)	$\mathbf{a} + \mathbf{b}$ $n\hat{\mathbf{a}} - m\mathbf{c}$ $p\hat{\mathbf{a}} + q\mathbf{c}$ $\mathbf{a} + \mathbf{b}$ $n\hat{\mathbf{a}} + m\mathbf{c}$ $-p\hat{\mathbf{a}} + q\mathbf{c}$ <i>n</i> odd <i>q</i> odd <i>p</i> even <i>m</i> odd <i>n</i> even <i>p</i> odd <i>n</i> odd <i>p</i> odd	$Bm11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pm11$ L11
				$Cm11$	$s\mathbf{d}$	$cm11$ L13
$Im11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$			$pm11$ L11		
$\hat{\mathbf{a}} = (\mathbf{b} - \mathbf{a} + \mathbf{c})/2$						
l odd $\Rightarrow n = 2l, m = 2h + l; l$ even $\Rightarrow n = l, m = h + l/2$						

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group a' b' d	Scanning group \mathcal{H}	Linear orbit sd	Sectional layer group $\mathcal{L}(sd)$					
$(mn0)$ $(\bar{n}m0)$ $(\bar{m}n0)$ $(nm0)$	\mathbf{c} $n\mathbf{a} - m\mathbf{b}$ $p\mathbf{a} + q\mathbf{b}$ \mathbf{c} $m\mathbf{a} + n\mathbf{b}$ $-q\mathbf{a} + p\mathbf{b}$ \mathbf{c} $n\mathbf{a} + m\mathbf{b}$ $-p\mathbf{a} + q\mathbf{b}$ \mathbf{c} $m\mathbf{a} - n\mathbf{b}$ $q\mathbf{a} + p\mathbf{b}$	$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111 (\mathbf{b}'/4)$ L09 $p1$ L01					
				or n even m odd p odd q even p odd q odd	$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111$ L09 $p1$ L01		
					n odd m odd	$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$ L10 $\hat{p}1$ L01	
		$(0mn)$ $(0\bar{m}n)$ $(\mathbf{b}/4 + \mathbf{c}/8)$	\mathbf{a} $n\mathbf{b} - m\mathbf{c}$ $p\mathbf{b} + q\mathbf{c}$ \mathbf{a} $n\mathbf{b} + m\mathbf{c}$ $-p\mathbf{b} + q\mathbf{c}$	$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111 (\mathbf{b}'/4)$ L09 $p1$ L01			
						or n even m odd p odd q even p odd q odd	$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111$ L09 $p1$ L01
							n odd m odd	$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$
$(m0n)$ $(m0\bar{n})$ $(\mathbf{a}/4 + 3\mathbf{c}/8)$	\mathbf{b} $m\mathbf{c} - n\mathbf{a}$ $q\mathbf{c} + p\mathbf{a}$ \mathbf{b} $m\mathbf{c} + n\mathbf{a}$ $-q\mathbf{c} + p\mathbf{a}$			$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111 (\mathbf{b}'/4)$ L09 $p1$ L01			
						or n even m odd p odd q even p odd q odd	$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111$ L09 $p1$ L01
							n odd m odd	$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$

Continued

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$
(hhl) $(\bar{h}hl)$	$\mathbf{a} - \mathbf{b}$ $n\hat{\mathbf{a}} - m\mathbf{c}$ $p\hat{\mathbf{a}} + q\mathbf{c}$	$Bn11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$ L12
	$\mathbf{a} - \mathbf{b}$ $n\hat{\mathbf{a}} + m\mathbf{c}$ $-p\hat{\mathbf{a}} + q\mathbf{c}$			
	n odd m even			
	p even q odd			
	n even m odd			
	p odd q even			
	n even m odd			
	p odd q odd			
	n odd m odd			
	p even q odd			
n odd m odd				
p odd q even				
n odd m even				
p odd q odd				
$\hat{\mathbf{a}} = (\mathbf{a} + \mathbf{b} + \mathbf{c})/2$				
$(h\bar{h}l)$ $(\bar{h}hl)$	$\mathbf{a} + \mathbf{b}$ $n\hat{\mathbf{a}} - m\mathbf{c}$ $p\hat{\mathbf{a}} + q\mathbf{c}$	$Bn11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$ L12
	$\mathbf{a} + \mathbf{b}$ $n\hat{\mathbf{a}} + m\mathbf{c}$ $-p\hat{\mathbf{a}} + q\mathbf{c}$			
	n odd m even			
	p even q odd			
	n even m odd			
	p odd q even			
	n even m odd			
	p odd q odd			
	n odd m odd			
	p even q odd			
n odd m odd				
p odd q even				
n odd m even				
p odd q odd				
$\hat{\mathbf{a}} = (\mathbf{b} - \mathbf{a} + \mathbf{c})/2$				
l odd $\Rightarrow n = 2l, m = 2h + l; l$ even $\Rightarrow n = l, m = h + l/2$				

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$					
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}								
$(mn0)$	\mathbf{c}	$n\mathbf{a} - m\mathbf{b}$	$p\mathbf{a} + q\mathbf{b}$	$P2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [$s\mathbf{d}, -s\mathbf{d}$]	$p2/m11$	L14				
$(\bar{m}n0)$	\mathbf{c}	$m\mathbf{a} + n\mathbf{b}$	$-q\mathbf{a} + p\mathbf{b}$								
$(\bar{m}\bar{n}0)$	\mathbf{c}	$n\mathbf{a} + m\mathbf{b}$	$-p\mathbf{a} + q\mathbf{b}$								
$(nm0)$	\mathbf{c}	$m\mathbf{a} - n\mathbf{b}$	$q\mathbf{a} + p\mathbf{b}$								
$(0mn)$	\mathbf{a}	$n\mathbf{b} - m\mathbf{c}$	$p\mathbf{b} + q\mathbf{c}$	$P2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [$s\mathbf{d}, -s\mathbf{d}$]	$p2/m11$	L14				
$(0\bar{m}n)$	\mathbf{a}	$n\mathbf{b} + m\mathbf{c}$	$-p\mathbf{b} + q\mathbf{c}$								
$(m0n)$	\mathbf{b}	$m\mathbf{c} - n\mathbf{a}$	$q\mathbf{c} + p\mathbf{a}$								
$(m0\bar{n})$	\mathbf{b}	$m\mathbf{c} + n\mathbf{a}$	$-q\mathbf{c} + p\mathbf{a}$								
(hhl)	$\mathbf{a} - \mathbf{b}$	$n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$	$p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$	$C2/m11$ $I2/m11$ $B2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [$s\mathbf{d}, -s\mathbf{d}$] $[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$ $[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$c2/m11$ $cm11$ $p2/m11$ $p2_1/m11 [(a' + b')/4]$ $pm11$ $p2/m11$ $p2_1/m11 (a'/4)$ $pm11$	L18 L13 L14 L15 L11 L14 L15 L11				
$(\bar{h}hl)$	$\mathbf{a} - \mathbf{b}$	$n(\mathbf{a} + \mathbf{b}) + m\mathbf{c}$	$-p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$								
$(h\bar{h}l)$	$\mathbf{a} + \mathbf{b}$	$n(\mathbf{b} - \mathbf{a}) - m\mathbf{c}$	$p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$								
$(\bar{h}\bar{h}l)$	$\mathbf{a} + \mathbf{b}$	$n(\mathbf{b} - \mathbf{a}) + m\mathbf{c}$	$-p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$								
			n odd m even								
			q odd								
			m odd								
			q odd								
			m odd								
			p odd q even								
l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$											

$$\mathcal{G} = P_{mcc}^4 \frac{2}{2} \frac{2}{2}$$

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$		
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}					
(<i>mn0</i>) ($\bar{n}m0$) ($\bar{m}n0$) (<i>nm0</i>)	\mathbf{c} \mathbf{c} \mathbf{c} \mathbf{c}	$n\mathbf{a} - m\mathbf{b}$ $m\mathbf{a} + n\mathbf{b}$ $n\mathbf{a} + m\mathbf{b}$ $m\mathbf{a} - n\mathbf{b}$	$p\mathbf{a} + q\mathbf{b}$ $-q\mathbf{a} + p\mathbf{b}$ $-p\mathbf{a} + q\mathbf{b}$ $q\mathbf{a} + p\mathbf{b}$	$P2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [$s\mathbf{d}, -s\mathbf{d}$]	$p2/m11$ $pm11$	L14 L11	
(<i>0mn</i>) ($0\bar{m}n$)	\mathbf{a} \mathbf{a}	$n\mathbf{b} - m\mathbf{c}$ $n\mathbf{b} + m\mathbf{c}$	$p\mathbf{b} + q\mathbf{c}$ $-p\mathbf{b} + q\mathbf{c}$	$P2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ [$\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	$p\bar{1}$ $p211$ $p1$	L02 L08 L01	
			n odd p even	q odd	$P2/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [$s\mathbf{d}, -s\mathbf{d}$]	$p2/b11$ $pb11$	L16 L12
			n even p odd	m odd	$P2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ [$\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	$p\bar{1}$ $p211 (\mathbf{b}'/4)$ $p1$	L02 L08 L01
(<i>m0n</i>) ($m0\bar{n}$)	\mathbf{b} \mathbf{b}	$m\mathbf{c} - n\mathbf{a}$ $m\mathbf{c} + n\mathbf{a}$	$q\mathbf{c} + p\mathbf{a}$ $-q\mathbf{c} + p\mathbf{a}$	$P2/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [$s\mathbf{d}, -s\mathbf{d}$]	$p2/b11$ $pb11$	L16 L12	
			n odd	m even q odd	$P2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ [$\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	$p\bar{1}$ $p211 (\mathbf{b}'/4)$ $p1$	L02 L08 L01
			m odd p odd	q even	$P2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ [$\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	$p\bar{1}$ $p211$ $p1$	L02 L08 L01
(<i>hhl</i>) ($\bar{h}hl$) ($h\bar{h}l$) ($\bar{h}\bar{h}l$)	$\mathbf{a} - \mathbf{b}$ $\mathbf{a} - \mathbf{b}$ $\mathbf{a} + \mathbf{b}$ $\mathbf{a} + \mathbf{b}$	$n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$ $n(\mathbf{a} + \mathbf{b}) + m\mathbf{c}$ $n(\mathbf{b} - \mathbf{a}) - m\mathbf{c}$ $n(\mathbf{b} - \mathbf{a}) + m\mathbf{c}$	$p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$ $-p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$ $p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$ $-p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$	$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ [$\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	$\widehat{p}\bar{1}$ $c211$ $\widehat{p}1$	L02 L10 L01	
			n odd p even	m even q odd	$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ [$\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	$p2/b11$ $p2_1/b11 (\mathbf{a}'/4)$ $pb11$	L16 L17 L12
			n even p odd	m odd q even	$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ [$\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	$p2/b11$ $p2_1/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ $pb11$	L16 L17 L12
			n odd p even	m odd q odd	$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ [$\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	$p2_1/b11$ $p2/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ $pb11 (\mathbf{a}'/4)$	L17 L16 L12
			n odd p odd	m odd q even	$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ [$\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	$p2_1/b11$ $p2/b11 (\mathbf{a}'/4)$ $pb11 (\mathbf{a}'/4)$	L17 L16 L12
			n odd p odd	m even q odd	$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ [$\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	$\widehat{p}\bar{1}$ $c211 (\mathbf{b}'/4)$ $\widehat{p}1$	L02 L10 L01

l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}				
$(mn0)$ $(\bar{n}m0)$ $(\bar{m}n0)$ $(nm0)$ $(\mathbf{a} + \mathbf{b})/4$	\mathbf{c}	$n\mathbf{a} - m\mathbf{b}$	$p\mathbf{a} + q\mathbf{b}$	$P2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$	L02
	\mathbf{c}	$m\mathbf{a} + n\mathbf{b}$	$-q\mathbf{a} + p\mathbf{b}$				L08
	\mathbf{c}	$n\mathbf{a} + m\mathbf{b}$	$-p\mathbf{a} + q\mathbf{b}$				L01
	\mathbf{c}	$m\mathbf{a} - n\mathbf{b}$	$q\mathbf{a} + p\mathbf{b}$				
			n odd m even				
			p even q odd				
		or					
		n even m odd					
		p odd q even					
		p odd q odd					
		n odd m odd					
			$P2/c11$			$p\bar{1}$	L02
						$p211$	L08
						$p1$	L01
				$P2/b11$		$p2/b11$	L16
						$pb11$	L12
$(0mn)$ $(0\bar{m}n)$ $(\mathbf{a} + \mathbf{b})/4$	\mathbf{a}	$n\mathbf{b} - m\mathbf{c}$	$p\mathbf{b} + q\mathbf{c}$	$P2/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2/b11$	L16
	\mathbf{a}	$n\mathbf{b} + m\mathbf{c}$	$-p\mathbf{b} + q\mathbf{c}$				L12
			n odd m even				
			q odd				
			m odd				
			q odd				
		m odd					
		p odd q even					
			$P2/n11$			$p\bar{1}$	L02
						$p211$	L08
						$p1$	L01
				$P2/c11$		$p\bar{1}$	L02
						$p211$	L08
						$p1$	L01
$(m0n)$ $(m0\bar{n})$ $(\mathbf{a} + \mathbf{b})/4$	\mathbf{b}	$m\mathbf{c} - n\mathbf{a}$	$q\mathbf{c} + p\mathbf{a}$	$P2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$	L02
	\mathbf{b}	$m\mathbf{c} + n\mathbf{a}$	$-q\mathbf{c} + p\mathbf{a}$				L08
			n odd				
			p even q odd				
			n even m odd				
			p odd				
		n odd					
		p odd					
			$P2/b11$			$p2/b11$	L16
						$pb11$	L12
			$P2/n11$			$p\bar{1}$	L02
						$p211$	L08
						$p1$	L01

Continued

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$				
(hhl) $(\bar{h}hl)$ $(\mathbf{a} - \mathbf{b})/4$	$\mathbf{a} - \mathbf{b}$ $n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$ $p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$ $\mathbf{a} - \mathbf{b}$ $n(\mathbf{a} + \mathbf{b}) + m\mathbf{c}$ $-p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$ <div style="text-align: right;"> n odd m even q odd m odd q odd m odd p odd q even </div>	$C2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c2/m11$ L18 $cm11$ L13				
		$I2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ L14 $p2_1/m11 [(\mathbf{a}' + \mathbf{b}')/4]$ L15 $pm11$ L11				
		$B2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ L14 $p2_1/m11 (\mathbf{a}'/4)$ L15 $pm11$ L11				
		$(\bar{h}\bar{h}l)$ $(\bar{h}hl)$ $(\mathbf{a} + \mathbf{b})/4$	$\mathbf{a} + \mathbf{b}$ $n(\mathbf{b} - \mathbf{a}) - m\mathbf{c}$ $p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$ $\mathbf{a} + \mathbf{b}$ $n(\mathbf{b} - \mathbf{a}) + m\mathbf{c}$ $-p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$ <div style="text-align: right;"> n odd m even q odd m odd q odd m odd p odd q even </div>	$C2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c2/m11$ L18 $cm11$ L13		
				$I2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ L14 $p2_1/m11 [(\mathbf{a}' + \mathbf{b}')/4]$ L15 $pm11$ L11		
				$B2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ L14 $p2_1/m11 (\mathbf{a}'/4)$ L15 $pm11$ L11		
				l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$				

Continued

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}			
$(mn0)$	\mathbf{c}	$n\mathbf{a} - m\mathbf{b}$	$p\mathbf{a} + q\mathbf{b}$	$P2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ L02 $p211 (\mathbf{b}'/4)$ L08 $p1$ L01
$(\bar{n}m0)$	\mathbf{c}	$m\mathbf{a} + n\mathbf{b}$	$-q\mathbf{a} + p\mathbf{b}$			
$(\bar{m}n0)$	\mathbf{c}	$n\mathbf{a} + m\mathbf{b}$	$-p\mathbf{a} + q\mathbf{b}$			
$(nm0)$	\mathbf{c}	$m\mathbf{a} - n\mathbf{b}$	$q\mathbf{a} + p\mathbf{b}$			
		n odd	m even			
		p even	q odd			
		or				
		n even	m odd	$P2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ L02 $p211$ L08 $p1$ L01
		p odd	q even			
		p odd	q odd			
		n odd	m odd	$P2/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2/b11$ L16 $pb11$ L12
$(0mn)$	\mathbf{a}	$n\mathbf{b} - m\mathbf{c}$	$p\mathbf{b} + q\mathbf{c}$	$P2/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2/b11$ L16 $pb11$ L12
$(0\bar{m}n)$	\mathbf{a}	$n\mathbf{b} + m\mathbf{c}$	$-p\mathbf{b} + q\mathbf{c}$			
		n odd	m even			
			q odd	$P2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ L02 $p211 (\mathbf{b}'/4)$ L08 $p1$ L01
			m odd			
			q odd			
			m odd	$P2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ L02 $p211$ L08 $p1$ L01
		p odd	q even			
			q even			
$(m0n)$	\mathbf{b}	$m\mathbf{c} - n\mathbf{a}$	$q\mathbf{c} + p\mathbf{a}$	$P2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ L02 $p211$ L08 $p1$ L01
$(m0\bar{n})$	\mathbf{b}	$m\mathbf{c} + n\mathbf{a}$	$-q\mathbf{c} + p\mathbf{a}$			
		n odd				
		p even	q odd			
		n even	m odd			
		p odd				
		n odd		$P2/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2/b11$ L16 $pb11$ L12
		p odd				
		n odd				
		p odd		$P2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ L02 $p211 (\mathbf{b}'/4)$ L08 $p1$ L01

Continued

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$		
(hhl) $(\bar{h}hl)$ $(\mathbf{a}/2 \text{ or } \mathbf{b}/2)$	$\mathbf{a} - \mathbf{b}$ $n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$ $p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$ $\mathbf{a} - \mathbf{b}$ $n(\mathbf{a} + \mathbf{b}) + m\mathbf{c}$ $-p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$ <div style="text-align: right;"> n odd m even q odd m odd q odd m odd p odd q even </div>	$C2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c2/m11$ L18 $cm11$ L13		
		$I2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ L14 $p2_1/m11 [(\mathbf{a}' + \mathbf{b}')/4]$ L15 $pm11$ L11		
		$B2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ L14 $p2_1/m11 (\mathbf{a}'/4)$ L15 $pm11$ L11		
		$(h\bar{h}l)$ $(\bar{h}hl)$	$\mathbf{a} + \mathbf{b}$ $n(\mathbf{b} - \mathbf{a}) - m\mathbf{c}$ $p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$ $\mathbf{a} + \mathbf{b}$ $n(\mathbf{b} - \mathbf{a}) + m\mathbf{c}$ $-p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$ <div style="text-align: right;"> n odd m even q odd m odd q odd m odd p odd q even </div>	$C2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c2/m11$ L18 $cm11$ L13
				$I2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ L14 $p2_1/m11 [(\mathbf{a}' + \mathbf{b}')/4]$ L15 $pm11$ L11
				$B2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ L14 $p2_1/m11 (\mathbf{a}'/4)$ L15 $pm11$ L11
l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$						

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$					
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}								
$(mn0)$ $(\bar{n}m0)$ $(\bar{m}n0)$ $(nm0)$ $(\mathbf{a} + \mathbf{b} + \mathbf{c})/4$	\mathbf{c}	$n\mathbf{a} - m\mathbf{b}$	$p\mathbf{a} + q\mathbf{b}$	$P2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p211 (\mathbf{b}'/4)$ $p1$	L02				
	\mathbf{c}	$m\mathbf{a} + n\mathbf{b}$	$-q\mathbf{a} + p\mathbf{b}$				n odd m even	L08			
	\mathbf{c}	$n\mathbf{a} + m\mathbf{b}$	$-p\mathbf{a} + q\mathbf{b}$				p even q odd	L01			
	\mathbf{c}	$m\mathbf{a} - n\mathbf{b}$	$q\mathbf{a} + p\mathbf{b}$				or				
							n even m odd				
							p odd q even				
							p odd q odd				
								$P2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p211$ $p1$	L02 L08 L01
							n odd m odd	$P2/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2/b11$ $pb11$	L16 L12
$(0mn)$ $(0\bar{m}n)$ $(m0n)$ $(m0\bar{n})$ $(\mathbf{a} + \mathbf{b} + \mathbf{c})/4$	\mathbf{a}	$n\mathbf{b} - m\mathbf{c}$	$p\mathbf{b} + q\mathbf{c}$	$P2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p211 (\mathbf{b}'/4)$ $p1$	L02				
	\mathbf{a}	$n\mathbf{b} + m\mathbf{c}$	$-p\mathbf{b} + q\mathbf{c}$				n odd m even	L08			
	\mathbf{b}	$m\mathbf{c} - n\mathbf{a}$	$q\mathbf{c} + p\mathbf{a}$				p even q odd	L01			
	\mathbf{b}	$m\mathbf{c} + n\mathbf{a}$	$-q\mathbf{c} + p\mathbf{a}$				or				
							n even m odd				
							p odd q even				
							p odd q odd				
								$P2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p211$ $p1$	L02 L08 L01
							n odd m odd	$P2/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2/b11$ $pb11$	L16 L12

Continued

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group a' b' d	Scanning group \mathcal{H}	Linear orbit sd	Sectional layer group $\mathcal{L}(\mathbf{sd})$					
(\overline{hhl}) (hhl) $(\mathbf{a} - \mathbf{b} + \mathbf{c})/4$	$\mathbf{a} - \mathbf{b}$ $n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$ $p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$ $\mathbf{a} - \mathbf{b}$ $n(\mathbf{a} + \mathbf{b}) + m\mathbf{c}$ $-p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$								
	n odd m even					$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$\widehat{p}\overline{1}$	L02
	p even q odd						$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$c211$	L10
							$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}1$	L01
	n even m odd					$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2/b11$	L16
	p odd q even						$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2_1/b11 (\mathbf{a}'/4)$	L17
							$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11$	L12
	n even m odd					$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2/b11$	L16
	p odd q odd						$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2_1/b11 [(\mathbf{a}' + \mathbf{b}')/4]$	L17
							$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11$	L12
	n odd m odd					$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2_1/b11$	L17
	p even q odd						$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2/b11 [(\mathbf{a}' + \mathbf{b}')/4]$	L16
							$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$	L12
	n odd m odd					$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2_1/b11$	L17
p odd q even		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2/b11 (\mathbf{a}'/4)$	L16					
		$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$	L12					
n odd m even	$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$\widehat{p}\overline{1}$	L02					
p odd q odd		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$c211 (\mathbf{b}'/4)$	L10					
		$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}1$	L01					
(\overline{hhl}) (hhl) $(\mathbf{a} + \mathbf{b} + \mathbf{c})/4$	$\mathbf{a} + \mathbf{b}$ $n(\mathbf{b} - \mathbf{a}) - m\mathbf{c}$ $p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$ $\mathbf{a} + \mathbf{b}$ $n(\mathbf{b} - \mathbf{a}) + m\mathbf{c}$ $-p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$								
	n odd m even					$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$\widehat{p}\overline{1}$	L02
	p even q odd						$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$c211$	L10
							$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}1$	L01
	n even m odd					$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2/b11$	L16
	p odd q even						$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2_1/b11 (\mathbf{a}'/4)$	L17
							$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11$	L12
	n even m odd					$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2/b11$	L16
	p odd q odd						$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2_1/b11 [(\mathbf{a}' + \mathbf{b}')/4]$	L17
							$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11$	L12
	n odd m odd					$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2_1/b11$	L17
	p even q odd						$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2/b11 [(\mathbf{a}' + \mathbf{b}')/4]$	L16
							$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$	L12
	n odd m odd					$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2_1/b11$	L17
p odd q even		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2/b11 (\mathbf{a}'/4)$	L16					
		$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$	L12					
n odd m even	$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$\widehat{p}\overline{1}$	L02					
p odd q odd		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$c211 (\mathbf{b}'/4)$	L10					
		$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}1$	L01					

l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$

Continued

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}				
$(mn0)$	\mathbf{c}	$n\mathbf{a} - m\mathbf{b}$	$p\mathbf{a} + q\mathbf{b}$	$P2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p211 (\mathbf{b}'/4)$ $p1$	L02
$(\bar{n}m0)$	\mathbf{c}	$m\mathbf{a} + n\mathbf{b}$	$-q\mathbf{a} + p\mathbf{b}$				L08
$(\bar{m}n0)$	\mathbf{c}	$n\mathbf{a} + m\mathbf{b}$	$-p\mathbf{a} + q\mathbf{b}$				L01
$(nm0)$	\mathbf{c}	$m\mathbf{a} - n\mathbf{b}$	$q\mathbf{a} + p\mathbf{b}$				
		n odd	m even				
		p even	q odd				
		or					
		n even	m odd				
		p odd	q even				
		p odd	q odd	$P2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p211$ $p1$	L02 L08 L01
		n odd	m odd	$P2/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2/b11$ $pb11$	L16 L12
$(0mn)$	\mathbf{a}	$n\mathbf{b} - m\mathbf{c}$	$p\mathbf{b} + q\mathbf{c}$	$P2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p211 (\mathbf{b}'/4)$ $p1$	L02
$(0\bar{m}n)$	\mathbf{a}	$n\mathbf{b} + m\mathbf{c}$	$-p\mathbf{b} + q\mathbf{c}$				L08
$(m0n)$	\mathbf{b}	$m\mathbf{c} - n\mathbf{a}$	$q\mathbf{c} + p\mathbf{a}$				L01
$(m0\bar{n})$	\mathbf{b}	$m\mathbf{c} + n\mathbf{a}$	$-q\mathbf{c} + p\mathbf{a}$				
		n odd	m even				
		p even	q odd				
		or					
		n even	m odd				
		p odd	q even				
		p odd	q odd	$P2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p211$ $p1$	L02 L08 L01
		n odd	m odd	$P2/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2/b11$ $pb11$	L16 L12

Continued

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$			
(hhl) $(\bar{h}hl)$ ($\mathbf{a}/2$ or $\mathbf{b}/2$)	$\mathbf{a} - \mathbf{b}$ $n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$ $p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$	$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}\bar{1}$ $c211$ $\widehat{p}1$	L02		
	$\mathbf{a} - \mathbf{b}$ $n(\mathbf{a} + \mathbf{b}) + m\mathbf{c}$ $-p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$				L10		
	n odd m even				L01		
	p even q odd						
	n even m odd				$B2/b11$	$p2/b11$	L16
	p odd q even				$p2_1/b11$ ($\mathbf{a}'/4$)	L17	
					$pb11$	L12	
	n even m odd				$I2/b11$	$p2/b11$	L16
	p odd q odd				$p2_1/b11$ [$(\mathbf{a}' + \mathbf{b}')/4$]	L17	
					$pb11$	L12	
	n odd m odd				$I2/c11$	$p2_1/b11$	L17
	p even q odd				$p2/b11$ [$(\mathbf{a}' + \mathbf{b}')/4$]	L16	
					$pb11$ ($\mathbf{a}'/4$)	L12	
	n odd m odd				$B2/n11$	$p2_1/b11$	L17
p odd q even	$p2/b11$ ($\mathbf{a}'/4$)	L16					
	$pb11$ ($\mathbf{a}'/4$)	L12					
n odd m even	$C2/n11$	$\widehat{p}\bar{1}$	L02				
p odd q odd	$c211$ ($\mathbf{b}'/4$)	L10					
	$\widehat{p}1$	L01					
(hhl) $(\bar{h}hl)$	$\mathbf{a} + \mathbf{b}$ $n(\mathbf{b} - \mathbf{a}) - m\mathbf{c}$ $p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$	$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}\bar{1}$ $c211$ $\widehat{p}1$	L02		
	$\mathbf{a} + \mathbf{b}$ $n(\mathbf{b} - \mathbf{a}) + m\mathbf{c}$ $-p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$				L10		
	n odd m even				L01		
	p even q odd						
	n even m odd				$B2/b11$	$p2/b11$	L16
	p odd q even				$p2_1/b11$ ($\mathbf{a}'/4$)	L17	
					$pb11$	L12	
	n even m odd				$I2/b11$	$p2/b11$	L16
	p odd q odd				$p2_1/b11$ [$(\mathbf{a}' + \mathbf{b}')/4$]	L17	
					$pb11$	L12	
	n odd m odd				$I2/c11$	$p2_1/b11$	L17
	p even q odd				$p2/b11$ [$(\mathbf{a}' + \mathbf{b}')/4$]	L16	
					$pb11$ ($\mathbf{a}'/4$)	L12	
	n odd m odd				$B2/n11$	$p2_1/b11$	L17
p odd q even	$p2/b11$ ($\mathbf{a}'/4$)	L16					
	$pb11$ ($\mathbf{a}'/4$)	L12					
n odd m even	$C2/n11$	$\widehat{p}\bar{1}$	L02				
p odd q odd	$c211$ ($\mathbf{b}'/4$)	L10					
	$\widehat{p}1$	L01					

l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$

$$\mathcal{G} = P_m^4 \frac{2_1}{b} \frac{2}{m}$$

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}				
(<i>mn0</i>)	\mathbf{c}	$n\mathbf{a} - m\mathbf{b}$	$p\mathbf{a} + q\mathbf{b}$	$P2_1/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [$s\mathbf{d}, -s\mathbf{d}$]	$p2_1/m11$	L14
($\bar{n}m0$)	\mathbf{c}	$m\mathbf{a} + n\mathbf{b}$	$-q\mathbf{a} + p\mathbf{b}$				
($\bar{m}n0$)	\mathbf{c}	$n\mathbf{a} + m\mathbf{b}$	$-p\mathbf{a} + q\mathbf{b}$				
(<i>nm0</i>)	\mathbf{c}	$m\mathbf{a} - n\mathbf{b}$	$q\mathbf{a} + p\mathbf{b}$				
(<i>0mn</i>)	\mathbf{a}	$n\mathbf{b} - m\mathbf{c}$	$p\mathbf{b} + q\mathbf{c}$	$P2_1/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [$s\mathbf{d}, -s\mathbf{d}$]	$p2_1/b11$	L17
($0\bar{m}n$)		$n\mathbf{b} + m\mathbf{c}$	$-p\mathbf{b} + q\mathbf{c}$				
			q odd	$P2_1/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ [$\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	$p\bar{1}$	L02
			m odd				
			q odd	$P2_1/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ [$\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	$p\bar{1}$	L02
			p odd q even				
(<i>m0n</i>)	\mathbf{b}	$m\mathbf{c} - n\mathbf{a}$	$q\mathbf{c} + p\mathbf{a}$	$P2_1/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ [$\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	$p\bar{1}$	L02
($m0\bar{n}$)		$m\mathbf{c} + n\mathbf{a}$	$-q\mathbf{c} + p\mathbf{a}$				
			p even q odd	$P2_1/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [$s\mathbf{d}, -s\mathbf{d}$]	$p2_1/b11$	L17
			n even m odd				
			p odd	$P2_1/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ [$\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	$p\bar{1}$	L02
			n odd				
			p odd	$P2_1/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ [$\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	$p2_111$ ($\mathbf{b}'/4$)	L09
			p odd				
			p odd	$P2_1/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ [$\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	$p\bar{1}$	L02
			p odd				
			p odd	$P2_1/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ [$\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	$p2_111$ ($\mathbf{b}'/4$)	L09
			p odd				
			p odd	$P2_1/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ [$\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	$p\bar{1}$	L02
			p odd				
(<i>hhl</i>)	$\mathbf{a} - \mathbf{b}$	$n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$	$p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$	$C2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [$s\mathbf{d}, -s\mathbf{d}$]	$c2/m11$	L18
($\bar{h}hl$)		$n(\mathbf{a} + \mathbf{b}) + m\mathbf{c}$	$-p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$				
(<i>hhl</i>)		$n(\mathbf{b} - \mathbf{a}) - m\mathbf{c}$	$p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$				
($\bar{h}hl$)		$n(\mathbf{b} - \mathbf{a}) + m\mathbf{c}$	$-p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$				
($\mathbf{a}/2$ or $\mathbf{b}/2$)			n odd m even	$I2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ [$\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	$p2_1/m11$	L14
			q odd				
			m odd	$B2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ [$\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	$p2_1/m11$	L14
			q odd				
			m odd	$B2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ [$\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	$p2_1/m11$ ($\mathbf{a}'/4$)	L15
			p odd q even				
			p odd	$B2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ [$\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	$pm11$	L11
			q even				
l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$							

$$\mathcal{G} = P \frac{4}{m} \frac{2_1}{n} \frac{2}{c}$$

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}				
$(mn0)$	\mathbf{c}	$n\mathbf{a} - m\mathbf{b}$	$p\mathbf{a} + q\mathbf{b}$	$P2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [$s\mathbf{d}, -s\mathbf{d}$]	$p2/m11$	L14
$(\bar{n}m0)$	\mathbf{c}	$m\mathbf{a} + n\mathbf{b}$	$-q\mathbf{a} + p\mathbf{b}$				L11
$(\bar{m}n0)$	\mathbf{c}	$n\mathbf{a} + m\mathbf{b}$	$-p\mathbf{a} + q\mathbf{b}$				
$(nm0)$	\mathbf{c}	$m\mathbf{a} - n\mathbf{b}$	$q\mathbf{a} + p\mathbf{b}$				
$(0mn)$	\mathbf{a}	$n\mathbf{b} - m\mathbf{c}$	$p\mathbf{b} + q\mathbf{c}$	$P2_1/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ [$\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	$p\bar{1}$ $p2_111 (\mathbf{b}'/4)$ $p1$	L02
$(0\bar{m}n)$		$n\mathbf{b} + m\mathbf{c}$	$-p\mathbf{b} + q\mathbf{c}$				L09
$(m0n)$		$m\mathbf{c} - n\mathbf{a}$	$q\mathbf{c} + p\mathbf{a}$				L01
$(m0\bar{n})$		$m\mathbf{c} + n\mathbf{a}$	$-q\mathbf{c} + p\mathbf{a}$				
		n odd	m even				
		p even	q odd				
		or					
		n even	m odd				
		p odd	q even				
		p odd	q odd	$P2_1/c11$	[$0\mathbf{d}, \frac{1}{2}\mathbf{d}$] [$\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	$p\bar{1}$ $p2_111$ $p1$	L02 L09 L01
		n odd	m odd	$P2_1/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [$s\mathbf{d}, -s\mathbf{d}$]	$p2_1/b11$ $pb11 (\mathbf{a}'/4)$	L17 L12
(hhl)	$\mathbf{a} - \mathbf{b}$	$n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$	$p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$	$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ [$\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	$\widehat{p}\bar{1}$ $c211$ $\widehat{p}1$	L02
$(\bar{h}hl)$		$n(\mathbf{a} + \mathbf{b}) + m\mathbf{c}$	$-p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$				L10
$(h\bar{h}l)$		$n(\mathbf{b} - \mathbf{a}) - m\mathbf{c}$	$p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$				L01
$(\bar{h}\bar{h}l)$		$n(\mathbf{b} - \mathbf{a}) + m\mathbf{c}$	$-p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$				
$(\mathbf{a}/2$ or $\mathbf{b}/2)$		n odd	m even				
		p even	q odd				
		n even	m odd	$B2/b11$	[$0\mathbf{d}, \frac{1}{2}\mathbf{d}$] [$\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	$p2/b11$ $p2_1/b11 (\mathbf{a}'/4)$ $pb11$	L16 L17 L12
		p odd	q even				
		n even	m odd	$I2/b11$	[$0\mathbf{d}, \frac{1}{2}\mathbf{d}$] [$\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	$p2/b11$ $p2_1/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ $pb11$	L16 L17 L12
		p odd	q odd				
		n odd	m odd	$I2/c11$	[$0\mathbf{d}, \frac{1}{2}\mathbf{d}$] [$\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	$p2_1/b11$ $p2/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ $pb11 (\mathbf{a}'/4)$	L17 L16 L12
		p even	q odd				
		n odd	m odd	$B2/n11$	[$0\mathbf{d}, \frac{1}{2}\mathbf{d}$] [$\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	$p2_1/b11$ $p2/b11 (\mathbf{a}'/4)$ $pb11 (\mathbf{a}'/4)$	L17 L16 L12
		p odd	q even				
		n odd	m even	$C2/n11$	[$0\mathbf{d}, \frac{1}{2}\mathbf{d}$] [$\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	$\widehat{p}\bar{1}$ $c211 (\mathbf{b}'/4)$ $\widehat{p}1$	L02 L10 L01
		p odd	q odd				
l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$							

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}				
$(mn0)$ $(\bar{n}m0)$ $(\bar{m}n0)$ $(nm0)$ $(\mathbf{a} + \mathbf{b})/4$	\mathbf{c} \mathbf{c} \mathbf{c} \mathbf{c}	$n\mathbf{a} - m\mathbf{b}$ $m\mathbf{a} + n\mathbf{b}$ $n\mathbf{a} + m\mathbf{b}$ $m\mathbf{a} - n\mathbf{b}$	$p\mathbf{a} + q\mathbf{b}$ $-q\mathbf{a} + p\mathbf{b}$ $-p\mathbf{a} + q\mathbf{b}$ $q\mathbf{a} + p\mathbf{b}$	$P2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p211 (\mathbf{b}'/4)$ $p1$	L02 L08 L01
			$n \text{ odd } \quad m \text{ even}$ $p \text{ even } \quad q \text{ odd}$ or $n \text{ even } \quad m \text{ odd}$ $p \text{ odd } \quad q \text{ even}$ $p \text{ odd } \quad q \text{ odd}$	$P2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p211$ $p1$	L02 L08 L01
			$n \text{ odd } \quad m \text{ odd}$	$P2/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2/b11$ $pb11$	L16 L12
$(0mn)$ $(0\bar{m}n)$ $(m0n)$ $(m0\bar{n})$ $(\mathbf{a} + \mathbf{b})/4$	\mathbf{a} \mathbf{a} \mathbf{b} \mathbf{b}	$n\mathbf{b} - m\mathbf{c}$ $n\mathbf{b} + m\mathbf{c}$ $m\mathbf{c} - n\mathbf{a}$ $m\mathbf{c} + n\mathbf{a}$	$p\mathbf{b} + q\mathbf{c}$ $-p\mathbf{b} + q\mathbf{c}$ $q\mathbf{c} + p\mathbf{a}$ $-q\mathbf{c} + p\mathbf{a}$	$P2_1/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2_1/m11$ $pm11 (\mathbf{a}'/4)$	L15 L11
(hhl) $(\bar{h}\bar{h}l)$ $(\mathbf{a} - \mathbf{b})/4$	$\mathbf{a} - \mathbf{b}$ $\mathbf{a} - \mathbf{b}$	$n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$ $n(\mathbf{a} + \mathbf{b}) + m\mathbf{c}$	$p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$ $-p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$	$C2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c2/m11$ $cm11$	L18 L13
			$n \text{ odd } \quad m \text{ even}$ $q \text{ odd}$ $m \text{ odd}$ $q \text{ odd}$	$I2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ $p2_1/m11 [(\mathbf{a}' + \mathbf{b}')/4]$ $pm11$	L14 L15 L11
			$m \text{ odd}$ $p \text{ odd } \quad q \text{ even}$	$B2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ $p2_1/m11 (\mathbf{a}'/4)$ $pm11$	L14 L15 L11
$(\bar{h}\bar{h}l)$ $(\bar{h}hl)$ $(\mathbf{a} + \mathbf{b})/4$	$\mathbf{a} + \mathbf{b}$ $\mathbf{a} + \mathbf{b}$	$n(\mathbf{b} - \mathbf{a}) - m\mathbf{c}$ $n(\mathbf{b} - \mathbf{a}) + m\mathbf{c}$	$p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$ $-p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$	$C2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c2/m11$ $cm11$	L18 L13
			$n \text{ odd } \quad m \text{ even}$ $q \text{ odd}$ $m \text{ odd}$ $q \text{ odd}$	$I2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ $p2_1/m11 [(\mathbf{a}' + \mathbf{b}')/4]$ $pm11$	L14 L15 L11
			$m \text{ odd}$ $p \text{ odd } \quad q \text{ even}$	$B2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ $p2_1/m11 (\mathbf{a}'/4)$ $pm11$	L14 L15 L11
$l \text{ odd} \Rightarrow n = l, m = 2h; l \text{ even} \Rightarrow n = l/2, m = h$							

Continued

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$				
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}							
$(mn0)$	\mathbf{c}	$n\mathbf{a} - m\mathbf{b}$	$p\mathbf{a} + q\mathbf{b}$	$P2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p211 (\mathbf{b}'/4)$ $p1$	L02			
$(\bar{n}m0)$	\mathbf{c}	$m\mathbf{a} + n\mathbf{b}$	$-q\mathbf{a} + p\mathbf{b}$				L08			
$(\bar{m}n0)$	\mathbf{c}	$n\mathbf{a} + m\mathbf{b}$	$-p\mathbf{a} + q\mathbf{b}$				L01			
$(nm0)$	\mathbf{c}	$m\mathbf{a} - n\mathbf{b}$	$q\mathbf{a} + p\mathbf{b}$							
		n odd	m even							
		p even	q odd							
		or								
		n even	m odd	$P2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p211$ $p1$	L02			
		p odd	q even				L08			
		p odd	q odd				L01			
		n odd	m odd	$P2/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2/b11$ $pb11$	L16 L12			
$(0mn)$	\mathbf{a}	$n\mathbf{b} - m\mathbf{c}$	$p\mathbf{b} + q\mathbf{c}$	$P2_1/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2_1/m11$ $pm11 (\mathbf{a}'/4)$	L15			
$(0\bar{m}n)$	\mathbf{a}	$n\mathbf{b} + m\mathbf{c}$	$-p\mathbf{b} + q\mathbf{c}$				L11			
$(m0n)$	\mathbf{b}	$m\mathbf{c} - n\mathbf{a}$	$q\mathbf{c} + p\mathbf{a}$							
$(m0\bar{n})$	\mathbf{b}	$m\mathbf{c} + n\mathbf{a}$	$-q\mathbf{c} + p\mathbf{a}$							
(hhl)	$\mathbf{a} - \mathbf{b}$	$n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$	$p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$	$C2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c2/m11$ $cm11$	L18			
$(\bar{h}hl)$	$\mathbf{a} - \mathbf{b}$	$n(\mathbf{a} + \mathbf{b}) + m\mathbf{c}$	$-p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$				L13			
		n odd	m even				$I2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ $p2_1/m11 [(\mathbf{a}' + \mathbf{b}')/4]$ $pm11$	L14
			q odd							L15
		m odd	q odd				$B2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ $p2_1/m11 (\mathbf{a}'/4)$ $pm11$	L11
		m odd	q even							L14
		p odd	q even	L15						
		p odd	q even				L11			
$(h\bar{h}l)$	$\mathbf{a} + \mathbf{b}$	$n(\mathbf{b} - \mathbf{a}) - m\mathbf{c}$	$p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$	$C2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c2/m11$ $cm11$	L18			
$(\bar{h}hl)$	$\mathbf{a} + \mathbf{b}$	$n(\mathbf{b} - \mathbf{a}) + m\mathbf{c}$	$-p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$				L13			
		n odd	m even				$I2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ $p2_1/m11 [(\mathbf{a}' + \mathbf{b}')/4]$ $pm11$	L14
			q odd							L15
		m odd	q odd				$B2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ $p2_1/m11 (\mathbf{a}'/4)$ $pm11$	L11
		m odd	q even							L14
		p odd	q even	L15						
		p odd	q even				L11			
l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$										

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$				
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}							
$(mn0)$ $(\bar{n}m0)$ $(\bar{m}n0)$ $(nm0)$ $(\mathbf{a} + \mathbf{b})/4$	\mathbf{c}	$n\mathbf{a} - m\mathbf{b}$	$p\mathbf{a} + q\mathbf{b}$	$P2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$	L02			
	\mathbf{c}	$m\mathbf{a} + n\mathbf{b}$	$-q\mathbf{a} + p\mathbf{b}$				$p211 (\mathbf{b}'/4)$	L08		
	\mathbf{c}	$n\mathbf{a} + m\mathbf{b}$	$-p\mathbf{a} + q\mathbf{b}$				$p1$	L01		
	\mathbf{c}	$m\mathbf{a} - n\mathbf{b}$	$q\mathbf{a} + p\mathbf{b}$							
			n odd m even							
			p even q odd							
			or							
			n even m odd							
			p odd q even							
		p odd q odd	$P2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$	L02				
					$p211$	L08				
					$p1$	L01				
		n odd m odd	$P2/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2/b11$	L16				
					$pb11$	L12				
$(0mn)$ $(0\bar{m}n)$ $(\mathbf{a} + \mathbf{b})/4$	\mathbf{a}	$n\mathbf{b} - m\mathbf{c}$	$p\mathbf{b} + q\mathbf{c}$	$P2_1/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$	L02			
	\mathbf{a}	$n\mathbf{b} + m\mathbf{c}$	$-p\mathbf{b} + q\mathbf{c}$				$p2_111$	L09		
			n odd				$p1$	L01		
			p even q odd							
			n even m odd				$P2_1/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2_1/b11$	L17
			p odd					$pb11 (\mathbf{a}'/4)$	L12	
			n odd				$P2_1/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$	L02
			p odd					$p2_111 (\mathbf{b}'/4)$	L09	
								$p1$	L01	
$(m0n)$ $(m0\bar{n})$ $(\mathbf{a} + \mathbf{b})/4$	\mathbf{b}	$m\mathbf{c} - n\mathbf{a}$	$q\mathbf{c} + p\mathbf{a}$	$P2_1/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2_1/b11$	L17			
	\mathbf{b}	$m\mathbf{c} + n\mathbf{a}$	$-q\mathbf{c} + p\mathbf{a}$				$pb11 (\mathbf{a}'/4)$	L12		
			n odd m even							
			q odd				$P2_1/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$	L02
			m odd					$p2_111 (\mathbf{b}'/4)$	L09	
			q odd					$p1$	L01	
			m odd				$P2_1/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$	L02
			p odd q even					$p2_111$	L09	
				$p1$	L01					

Continued

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}				
(hhl) $(\bar{h}hl)$ $(\mathbf{a} - \mathbf{b})/4$	$\mathbf{a} - \mathbf{b}$	$n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$	$p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$	$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}\bar{1}$ $c211$ $\widehat{p}1$	L02
	$\mathbf{a} - \mathbf{b}$	$n(\mathbf{a} + \mathbf{b}) + m\mathbf{c}$	$-p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$				L10
			n odd m even				L01
			p even q odd				
			n even m odd				L16
			p odd q even				L17
							L12
			n even m odd				L16
			p odd q odd				L17
							L12
			n odd m odd				L17
			p even q odd				L16
			L12				
		n odd m odd	L17				
		p odd q even	L16				
			L12				
		n odd m even	L02				
		p odd q odd	L10				
			L01				
(hhl) $(\bar{h}hl)$ $(\mathbf{a} + \mathbf{b})/4$	$\mathbf{a} + \mathbf{b}$	$n(\mathbf{b} - \mathbf{a}) - m\mathbf{c}$	$p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$	$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}\bar{1}$ $c211$ $\widehat{p}1$	L02
	$\mathbf{a} + \mathbf{b}$	$n(\mathbf{b} - \mathbf{a}) + m\mathbf{c}$	$-p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$				L10
			n odd m even				L01
			p even q odd				
			n even m odd				L16
			p odd q even				L17
							L12
			n even m odd				L16
			p odd q odd				L17
							L12
			n odd m odd				L17
			p even q odd				L16
			L12				
		n odd m odd	L17				
		p odd q even	L16				
			L12				
		n odd m even	L02				
		p odd q odd	L10				
			L01				

l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$

Continued

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}				
$(mn0)$ $(\bar{n}m0)$ $(\bar{m}n0)$ $(nm0)$	\mathbf{c} \mathbf{c} \mathbf{c} \mathbf{c}	$n\mathbf{a} - m\mathbf{b}$ $m\mathbf{a} + n\mathbf{b}$ $n\mathbf{a} + m\mathbf{b}$ $m\mathbf{a} - n\mathbf{b}$	$p\mathbf{a} + q\mathbf{b}$ $-q\mathbf{a} + p\mathbf{b}$ $-p\mathbf{a} + q\mathbf{b}$ $q\mathbf{a} + p\mathbf{b}$	$P2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p211 (\mathbf{b}'/4)$ $p1$	L02
		n odd m even p even q odd or n even m odd p odd q even p odd q odd	L08				
		n odd m odd	L01				
				$P2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p211$ $p1$	L02 L08 L01
				$P2/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2/b11$ $pb11$	L16 L12
$(0mn)$ $(0\bar{m}n)$	\mathbf{a} \mathbf{a}	$n\mathbf{b} - m\mathbf{c}$ $n\mathbf{b} + m\mathbf{c}$	$p\mathbf{b} + q\mathbf{c}$ $-p\mathbf{b} + q\mathbf{c}$	$P2_1/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p2_111$ $p1$	L02
		n odd p even q odd n even m odd p odd	L09				
		n odd m odd p odd	L01				
				$P2_1/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2_1/b11$ $pb11 (\mathbf{a}'/4)$	L17 L12
				$P2_1/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p2_111 (\mathbf{b}'/4)$ $p1$	L02 L09 L01
$(m0n)$ $(m0\bar{n})$	\mathbf{b} \mathbf{b}	$m\mathbf{c} - n\mathbf{a}$ $m\mathbf{c} + n\mathbf{a}$	$q\mathbf{c} + p\mathbf{a}$ $-q\mathbf{c} + p\mathbf{a}$	$P2_1/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2_1/b11$ $pb11 (\mathbf{a}'/4)$	L17
		n odd m even q odd m odd q odd	L12				
		m odd q odd	L02				
				$P2_1/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p2_111 (\mathbf{b}'/4)$ $p1$	L02 L09 L01
				$P2_1/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p2_111$ $p1$	L02 L09 L01

Continued

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}				
(hhl) $(\bar{h}hl)$	$\mathbf{a} - \mathbf{b}$	$n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$	$p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$	$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}\bar{1}$ $c211$ $\widehat{p}1$	L02
	$\mathbf{a} - \mathbf{b}$	$n(\mathbf{a} + \mathbf{b}) + m\mathbf{c}$	$-p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$				L10
			n odd m even				L01
			p even q odd				
			n even m odd				L16
			p odd q even				L17
							L12
			n even m odd				L16
			p odd q odd				L17
							L12
			p odd q odd				L17
			p even q odd				L16
			L12				
		n odd m odd	L17				
		p odd q even	L16				
			L12				
		n odd m even	L02				
		p odd q odd	L10				
			L01				
(hhl) $(\bar{h}hl)$ $(\mathbf{a}/2 \text{ or } \mathbf{b}/2)$	$\mathbf{a} + \mathbf{b}$	$n(\mathbf{b} - \mathbf{a}) - m\mathbf{c}$	$p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$	$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}\bar{1}$ $c211$ $\widehat{p}1$	L02
	$\mathbf{a} + \mathbf{b}$	$n(\mathbf{b} - \mathbf{a}) + m\mathbf{c}$	$-p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$				L10
			n odd m even				L01
			p even q odd				
			n even m odd				L16
			p odd q even				L17
							L12
			n even m odd				L16
			p odd q odd				L17
							L12
			n odd m odd				L17
			p even q odd				L16
			L12				
		n odd m odd	L17				
		p odd q even	L16				
			L12				
		n odd m even	L02				
		p odd q odd	L10				
			L01				

l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$

$$\mathcal{G} = P_{m m c}^{4_2 2 2}$$

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$				
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}							
(<i>mn0</i>)	\mathbf{c}	$n\mathbf{a} - m\mathbf{b}$	$p\mathbf{a} + q\mathbf{b}$	$P2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [$s\mathbf{d}, -s\mathbf{d}$]	$p2/m11$	L14			
($\bar{m}n0$)	\mathbf{c}	$m\mathbf{a} + n\mathbf{b}$	$-q\mathbf{a} + p\mathbf{b}$				L11			
($\bar{m}\bar{n}0$)	\mathbf{c}	$n\mathbf{a} + m\mathbf{b}$	$-p\mathbf{a} + q\mathbf{b}$							
(<i>nm0</i>)	\mathbf{c}	$m\mathbf{a} - n\mathbf{b}$	$q\mathbf{a} + p\mathbf{b}$							
(<i>0mn</i>)	\mathbf{a}	$n\mathbf{b} - m\mathbf{c}$	$p\mathbf{b} + q\mathbf{c}$	$P2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [$s\mathbf{d}, -s\mathbf{d}$]	$p2/m11$	L14			
($0\bar{m}n$)	\mathbf{a}	$n\mathbf{b} + m\mathbf{c}$	$-p\mathbf{b} + q\mathbf{c}$				L11			
(<i>m0n</i>)	\mathbf{b}	$m\mathbf{c} - n\mathbf{a}$	$q\mathbf{c} + p\mathbf{a}$							
($m0\bar{n}$)	\mathbf{b}	$m\mathbf{c} + n\mathbf{a}$	$-q\mathbf{c} + p\mathbf{a}$							
(<i>hhl</i>)	$\mathbf{a} - \mathbf{b}$	$n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$	$p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$	$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ [$\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	$\widehat{p}\bar{1}$	L02			
($\bar{h}hl$)	$\mathbf{a} - \mathbf{b}$	$n(\mathbf{a} + \mathbf{b}) + m\mathbf{c}$	$-p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$				L10			
(<i>hhl</i>)	$\mathbf{a} + \mathbf{b}$	$n(\mathbf{b} - \mathbf{a}) - m\mathbf{c}$	$p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$				L01			
($\bar{h}hl$)	$\mathbf{a} + \mathbf{b}$	$n(\mathbf{b} - \mathbf{a}) + m\mathbf{c}$	$-p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$							
		n odd m even					$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2/b11$	L16
		p even q odd						[$\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}$]	$p2_1/b11 (\mathbf{a}'/4)$	L17
								[$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	$pb11$	L12
		n even m odd					$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2/b11$	L16
		p odd q even						[$\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}$]	$p2_1/b11 [(\mathbf{a}' + \mathbf{b}')/4]$	L17
								[$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	$pb11$	L12
		n even m odd					$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2_1/b11$	L17
		p odd q odd						[$\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}$]	$p2/b11 [(\mathbf{a}' + \mathbf{b}')/4]$	L16
								[$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	$pb11 (\mathbf{a}'/4)$	L12
		n odd m odd					$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2_1/b11$	L17
		p odd q even						[$\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}$]	$p2/b11 (\mathbf{a}'/4)$	L16
								[$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	$pb11 (\mathbf{a}'/4)$	L12
		n odd m even		$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$\widehat{p}\bar{1}$	L02			
		p odd q odd			[$\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}$]	$c211 (\mathbf{b}'/4)$	L10			
					[$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	$\widehat{p}1$	L01			

l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
$(mn0)$ $(\bar{n}m0)$ $(\bar{m}n0)$ $(nm0)$	\mathbf{c} $n\mathbf{a} - m\mathbf{b}$ $p\mathbf{a} + q\mathbf{b}$ \mathbf{c} $m\mathbf{a} + n\mathbf{b}$ $-q\mathbf{a} + p\mathbf{b}$ \mathbf{c} $n\mathbf{a} + m\mathbf{b}$ $-p\mathbf{a} + q\mathbf{b}$ \mathbf{c} $m\mathbf{a} - n\mathbf{b}$ $q\mathbf{a} + p\mathbf{b}$	$P2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2/m11$ $pm11$	L14 L11
$(0mn)$ $(0\bar{m}n)$	\mathbf{a} $n\mathbf{b} - m\mathbf{c}$ $p\mathbf{b} + q\mathbf{c}$ \mathbf{a} $n\mathbf{b} + m\mathbf{c}$ $-p\mathbf{b} + q\mathbf{c}$ n odd p even q odd n even m odd p odd n odd p odd	$P2/c11$ $P2/b11$ $P2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$ $0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$ $[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p211$ $p1$ $p2/b11$ $pb11$ $p\bar{1}$ $p211 (\mathbf{b}'/4)$ $p1$	L02 L08 L01 L16 L12 L02 L08 L01
$(m0n)$ $(m0\bar{n})$	\mathbf{b} $m\mathbf{c} - n\mathbf{a}$ $q\mathbf{c} + p\mathbf{a}$ \mathbf{b} $m\mathbf{c} + n\mathbf{a}$ $-q\mathbf{c} + p\mathbf{a}$ n odd m even q odd m odd q odd m odd p odd q even	$P2/b11$ $P2/n11$ $P2/c11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$ $[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$ $[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ $pb11$ $p\bar{1}$ $p211 (\mathbf{b}'/4)$ $p1$ $p\bar{1}$ $p211$ $p1$	L16 L12 L02 L08 L01 L02 L08 L01
(hhl) $(\bar{h}hl)$ $(h\bar{h}l)$ $(\bar{h}\bar{h}l)$	$\mathbf{a} - \mathbf{b}$ $n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$ $p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$ $\mathbf{a} - \mathbf{b}$ $n(\mathbf{a} + \mathbf{b}) + m\mathbf{c}$ $-p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$ $\mathbf{a} + \mathbf{b}$ $n(\mathbf{b} - \mathbf{a}) - m\mathbf{c}$ $p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$ $\mathbf{a} + \mathbf{b}$ $n(\mathbf{b} - \mathbf{a}) + m\mathbf{c}$ $-p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$ n odd m even q odd m odd q odd m odd p odd q even	$C2/m11$ $I2/m11$ $B2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$ $[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$ $[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$c2/m11$ $cm11$ $p2/m11$ $p2_1/m11 [(\mathbf{a}' + \mathbf{b}')/4]$ $pm11$ $p2/m11$ $p2_1/m11 (\mathbf{a}'/4)$ $pm11$	L18 L13 L14 L15 L11 L14 L15 L11
l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$					

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}				
$(mn0)$ $(\bar{n}m0)$ $(\bar{m}n0)$ $(nm0)$ $(\mathbf{a} + \mathbf{b} + \mathbf{c})/4$	\mathbf{c} \mathbf{c} \mathbf{c} \mathbf{c}	$n\mathbf{a} - m\mathbf{b}$ $m\mathbf{a} + n\mathbf{b}$ $n\mathbf{a} + m\mathbf{b}$ $m\mathbf{a} - n\mathbf{b}$	$p\mathbf{a} + q\mathbf{b}$ $-q\mathbf{a} + p\mathbf{b}$ $-p\mathbf{a} + q\mathbf{b}$ $q\mathbf{a} + p\mathbf{b}$	$P2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p211 (\mathbf{b}'/4)$ $p1$	L02 L08 L01
			n odd m even p even q odd or n even m odd p odd q even p odd q odd	$P2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p211$ $p1$	L02 L08 L01
			n odd m odd	$P2/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2/b11$ $pb11$	L16 L12
$(0mn)$ $(0\bar{m}n)$ $(\mathbf{a} + \mathbf{b} + \mathbf{c})/4$	\mathbf{a} \mathbf{a}	$n\mathbf{b} - m\mathbf{c}$ $n\mathbf{b} + m\mathbf{c}$	$p\mathbf{b} + q\mathbf{c}$ $-p\mathbf{b} + q\mathbf{c}$	$P2/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2/b11$ $pb11$	L16 L12
			n odd m even q odd m odd q odd	$P2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p211 (\mathbf{b}'/4)$ $p1$	L02 L08 L01
			p odd m odd q even	$P2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p211$ $p1$	L02 L08 L01
$(m0n)$ $(m0\bar{n})$ $(\mathbf{a} + \mathbf{b} + \mathbf{c})/4$	\mathbf{b} \mathbf{b}	$m\mathbf{c} - n\mathbf{a}$ $m\mathbf{c} + n\mathbf{a}$	$q\mathbf{c} + p\mathbf{a}$ $-q\mathbf{c} + p\mathbf{a}$	$P2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p211$ $p1$	L02 L08 L01
			n odd p even q odd	$P2/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2/b11$ $pb11$	L16 L12
			n even m odd p odd n odd p odd	$P2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p211 (\mathbf{b}'/4)$ $p1$	L02 L08 L01

Continued

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$		
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}					
(hhl) $(\bar{h}hl)$ $(\mathbf{a} - \mathbf{b} + \mathbf{c})/4$	$\mathbf{a} - \mathbf{b}$	$n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$	$p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$	$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}\bar{1}$ $c211$ $\widehat{p}1$	L02	
	$\mathbf{a} - \mathbf{b}$	$n(\mathbf{a} + \mathbf{b}) + m\mathbf{c}$	$-p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$				L10	
		n odd	m even				L01	
		p even	q odd					
		n even	m odd		$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ $p2_1/b11 (\mathbf{a}'/4)$ $pb11$	L16
		p odd	q even					L17
		n even	m odd				L12	
		p odd	q even		$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ $p2_1/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ $pb11$	L16
		p odd	q odd					L17
		n even	m odd				L12	
		p odd	q odd		$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ $p2/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ $pb11 (\mathbf{a}'/4)$	L17
		p even	q odd					L16
		n odd	m odd				L12	
		p even	q odd		$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ $p2/b11 (\mathbf{a}'/4)$ $pb11 (\mathbf{a}'/4)$	L17
	p odd	q even		L16				
	n odd	m odd				L12		
	p odd	q even		$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}\bar{1}$ $c211 (\mathbf{b}'/4)$ $\widehat{p}1$	L02	
	p odd	q odd					L10	
	n odd	m even				L01		
	p odd	q odd						
(hhl) $(\bar{h}hl)$ $(\mathbf{a} + \mathbf{b} + \mathbf{c})/4$	$\mathbf{a} + \mathbf{b}$	$n(\mathbf{b} - \mathbf{a}) - m\mathbf{c}$	$p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$	$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}\bar{1}$ $c211$ $\widehat{p}1$	L02	
	$\mathbf{a} + \mathbf{b}$	$n(\mathbf{b} - \mathbf{a}) + m\mathbf{c}$	$-p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$				L10	
		n odd	m even				L01	
		p even	q odd					
		n even	m odd		$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ $p2_1/b11 (\mathbf{a}'/4)$ $pb11$	L16
		p odd	q even					L17
		n even	m odd				L12	
		p odd	q even		$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2/b11$ $p2_1/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ $pb11$	L16
		p odd	q odd					L17
		n even	m odd				L12	
		p odd	q odd		$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ $p2/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ $pb11 (\mathbf{a}'/4)$	L17
		p even	q odd					L16
		n odd	m odd				L12	
		p even	q odd		$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ $p2/b11 (\mathbf{a}'/4)$ $pb11 (\mathbf{a}'/4)$	L17
	p odd	q even		L16				
	n odd	m odd				L12		
	p odd	q even		$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}\bar{1}$ $c211 (\mathbf{b}'/4)$ $\widehat{p}1$	L02	
	p odd	q odd					L10	
	n odd	m even				L01		
	p odd	q odd						

 l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$

Continued

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}				
(<i>mn0</i>)	\mathbf{c}	$n\mathbf{a} - m\mathbf{b}$	$p\mathbf{a} + q\mathbf{b}$	$P2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p211 (\mathbf{b}'/4)$ $p1$	L02
($\bar{n}m0$)	\mathbf{c}	$m\mathbf{a} + n\mathbf{b}$	$-q\mathbf{a} + p\mathbf{b}$				L08
($\bar{m}n0$)	\mathbf{c}	$n\mathbf{a} + m\mathbf{b}$	$-p\mathbf{a} + q\mathbf{b}$				L01
(<i>nm0</i>)	\mathbf{c}	$m\mathbf{a} - n\mathbf{b}$	$q\mathbf{a} + p\mathbf{b}$				
		n odd	m even				
		p even	q odd				
		or					
		n even	m odd				
		p odd	q even				
		p odd	q odd	$P2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p211$ $p1$	L02 L08 L01
		n odd	m odd	$P2/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2/b11$ $pb11$	L16 L12
(<i>0mn</i>)	\mathbf{a}	$n\mathbf{b} - m\mathbf{c}$	$p\mathbf{b} + q\mathbf{c}$	$P2/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2/b11$ $pb11$	L16
($0\bar{m}n$)	\mathbf{a}	$n\mathbf{b} + m\mathbf{c}$	$-p\mathbf{b} + q\mathbf{c}$				L12
		n odd	m even				
			q odd	$P2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p211 (\mathbf{b}'/4)$ $p1$	L02 L08 L01
			m odd	$P2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p211$ $p1$	L02 L08 L01
		p odd	q even				
(<i>m0n</i>)	\mathbf{b}	$m\mathbf{c} - n\mathbf{a}$	$q\mathbf{c} + p\mathbf{a}$	$P2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p211$ $p1$	L02
($m0\bar{n}$)	\mathbf{b}	$m\mathbf{c} + n\mathbf{a}$	$-q\mathbf{c} + p\mathbf{a}$				L08
		n odd	q odd				L01
		p even					
		n even	m odd	$P2/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2/b11$ $pb11$	L16 L12
		p odd		$P2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p211 (\mathbf{b}'/4)$ $p1$	L02 L08 L01
		n odd					
		p odd					

Continued

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$				
(hhl) $(\bar{h}hl)$ ($\mathbf{a}/2$ or $\mathbf{b}/2$)	$\mathbf{a} - \mathbf{b}$ $n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$ $p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$	$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}\bar{1}$ $c211$ $\widehat{p}1$	L02			
	$\mathbf{a} - \mathbf{b}$ $n(\mathbf{a} + \mathbf{b}) + m\mathbf{c}$ $-p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$				L10			
	n odd m even				L01			
	p even q odd							
	n even m odd				$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ $p2_1/b11 (\mathbf{a}'/4)$ $pb11$	L16 L17 L12
	p odd q even							
	n even m odd				$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ $p2_1/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ $pb11$	L16 L17 L12
	p odd q odd							
	n odd m odd				$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ $p2/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ $pb11 (\mathbf{a}'/4)$	L17 L16 L12
	p even q odd							
	n odd m odd				$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ $p2/b11 (\mathbf{a}'/4)$ $pb11 (\mathbf{a}'/4)$	L17 L16 L12
	p odd q even							
	n odd m even				$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}\bar{1}$ $c211 (\mathbf{b}'/4)$ $\widehat{p}1$	L02 L10 L01
					p odd q odd			
(hhl) $(\bar{h}hl)$	$\mathbf{a} + \mathbf{b}$ $n(\mathbf{b} - \mathbf{a}) - m\mathbf{c}$ $p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$	$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}\bar{1}$ $c211$ $\widehat{p}1$	L02			
	$\mathbf{a} + \mathbf{b}$ $n(\mathbf{b} - \mathbf{a}) + m\mathbf{c}$ $-p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$				L10			
	n odd m even				L01			
	p even q odd							
	n even m odd				$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ $p2_1/b11 (\mathbf{a}'/4)$ $pb11$	L16 L17 L12
	p odd q even							
	n even m odd				$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2/b11$ $p2_1/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ $pb11$	L16 L17 L12
	p odd q odd							
	n odd m odd				$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ $p2/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ $pb11 (\mathbf{a}'/4)$	L17 L16 L12
	p even q odd							
	n odd m odd				$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ $p2/b11 (\mathbf{a}'/4)$ $pb11 (\mathbf{a}'/4)$	L17 L16 L12
	p odd q even							
	n odd m even				$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}\bar{1}$ $c211 (\mathbf{b}'/4)$ $\widehat{p}1$	L02 L10 L01
					p odd q odd			
l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$								

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}				
$(mn0)$	\mathbf{c}	$n\mathbf{a} - m\mathbf{b}$	$p\mathbf{a} + q\mathbf{b}$	$P2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p211 (\mathbf{b}'/4)$ $p1$	L02
$(\bar{n}m0)$	\mathbf{c}	$m\mathbf{a} + n\mathbf{b}$	$-q\mathbf{a} + p\mathbf{b}$				L08
$(\bar{m}n0)$	\mathbf{c}	$n\mathbf{a} + m\mathbf{b}$	$-p\mathbf{a} + q\mathbf{b}$				L01
$(nm0)$	\mathbf{c}	$m\mathbf{a} - n\mathbf{b}$	$q\mathbf{a} + p\mathbf{b}$				
$(\mathbf{a} + \mathbf{b} + \mathbf{c})/4$			n odd m even				
			p even q odd				
			or				
			n even m odd				
			p odd q even				
		p odd q odd		$P2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p211$ $p1$	L02 L08 L01
		n odd m odd		$P2/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2/b11$ $pb11$	L16 L12
$(0mn)$	\mathbf{a}	$n\mathbf{b} - m\mathbf{c}$	$p\mathbf{b} + q\mathbf{c}$	$P2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p211 (\mathbf{b}'/4)$ $p1$	L02
$(0\bar{m}n)$	\mathbf{a}	$n\mathbf{b} + m\mathbf{c}$	$-p\mathbf{b} + q\mathbf{c}$				L08
$(m0n)$	\mathbf{b}	$m\mathbf{c} - n\mathbf{a}$	$q\mathbf{c} + p\mathbf{a}$				L01
$(m0\bar{n})$	\mathbf{b}	$m\mathbf{c} + n\mathbf{a}$	$-q\mathbf{c} + p\mathbf{a}$				
$(\mathbf{a} + \mathbf{b} + \mathbf{c})/4$			n odd m even				
			p even q odd				
			or				
			n even m odd				
			p odd q even				
		p odd q odd		$P2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p211$ $p1$	L02 L08 L01
		n odd m odd		$P2/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2/b11$ $pb11$	L16 L12

Continued

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$
(hhl) $(\bar{h}hl)$ $(\mathbf{a} - \mathbf{b} + \mathbf{c})/4$	$\mathbf{a} - \mathbf{b}$ $n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$ $p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$	$C2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c2/m11$ L18 $cm11$ L13
	$\mathbf{a} - \mathbf{b}$ $n(\mathbf{a} + \mathbf{b}) + m\mathbf{c}$ $-p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$			
	n odd m even			
	q odd			
	m odd			
	q odd			
$(\bar{h}\bar{h}l)$ $(\bar{h}hl)$ $(\mathbf{a} + \mathbf{b} + \mathbf{c})/4$	$\mathbf{a} + \mathbf{b}$ $n(\mathbf{b} - \mathbf{a}) - m\mathbf{c}$ $p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$	$C2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c2/m11$ L18 $cm11$ L13
	$\mathbf{a} + \mathbf{b}$ $n(\mathbf{b} - \mathbf{a}) + m\mathbf{c}$ $-p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$			
	n odd m even			
	q odd			
	m odd			
	q odd			
$(\bar{h}\bar{h}l)$ $(\bar{h}hl)$ $(\mathbf{a} + \mathbf{b} + \mathbf{c})/4$	$\mathbf{a} + \mathbf{b}$ $n(\mathbf{b} - \mathbf{a}) - m\mathbf{c}$ $p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$	$I2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ L14 $p2_1/m11 [(\mathbf{a}' + \mathbf{b}')/4]$ L15 $pm11$ L11
	$\mathbf{a} + \mathbf{b}$ $n(\mathbf{b} - \mathbf{a}) + m\mathbf{c}$ $-p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$			
	n odd m even			
	q odd			
	m odd			
	q odd			
$(\bar{h}\bar{h}l)$ $(\bar{h}hl)$ $(\mathbf{a} + \mathbf{b} + \mathbf{c})/4$	$\mathbf{a} + \mathbf{b}$ $n(\mathbf{b} - \mathbf{a}) - m\mathbf{c}$ $p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$	$B2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ L14 $p2_1/m11 (\mathbf{a}'/4)$ L15 $pm11$ L11
	$\mathbf{a} + \mathbf{b}$ $n(\mathbf{b} - \mathbf{a}) + m\mathbf{c}$ $-p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$			
	n odd m even			
	q odd			
	m odd			
	q odd			
l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$				

Continued

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}				
$(mn0)$	\mathbf{c}	$n\mathbf{a} - m\mathbf{b}$	$p\mathbf{a} + q\mathbf{b}$	$P2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p211 (\mathbf{b}'/4)$ $p1$	L02
$(\bar{n}m0)$	\mathbf{c}	$m\mathbf{a} + n\mathbf{b}$	$-q\mathbf{a} + p\mathbf{b}$				L08
$(\bar{m}n0)$	\mathbf{c}	$n\mathbf{a} + m\mathbf{b}$	$-p\mathbf{a} + q\mathbf{b}$				L01
$(nm0)$	\mathbf{c}	$m\mathbf{a} - n\mathbf{b}$	$q\mathbf{a} + p\mathbf{b}$				
		n odd	m even				
		p even	q odd				
		or					
		n even	m odd				
		p odd	q even				
		p odd	q odd	$P2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p211$ $p1$	L02 L08 L01
		n odd	m odd	$P2/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2/b11$ $pb11$	L16 L12
$(0mn)$	\mathbf{a}	$n\mathbf{b} - m\mathbf{c}$	$p\mathbf{b} + q\mathbf{c}$	$P2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p211 (\mathbf{b}'/4)$ $p1$	L02
$(0\bar{m}n)$	\mathbf{a}	$n\mathbf{b} + m\mathbf{c}$	$-p\mathbf{b} + q\mathbf{c}$				L08
$(m0n)$	\mathbf{b}	$m\mathbf{c} - n\mathbf{a}$	$q\mathbf{c} + p\mathbf{a}$				L01
$(m0\bar{n})$	\mathbf{b}	$m\mathbf{c} + n\mathbf{a}$	$-q\mathbf{c} + p\mathbf{a}$				
		n odd	m even				
		p even	q odd				
		or					
		n even	m odd				
		p odd	q even				
		p odd	q odd	$P2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p211$ $p1$	L02 L08 L01
		n odd	m odd	$P2/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2/b11$ $pb11$	L16 L12

Continued

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$
(hhl) $(\bar{h}hl)$ $(\mathbf{a}/2 \text{ or } \mathbf{b}/2)$	$\mathbf{a} - \mathbf{b}$ $n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$ $p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$ $\mathbf{a} - \mathbf{b}$ $n(\mathbf{a} + \mathbf{b}) + m\mathbf{c}$ $-p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$	$C2/m11$ $I2/m11$ $B2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$ $[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$ $[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$c2/m11$ L18 $cm11$ L13 $p2/m11$ L14 $p2_1/m11 [(\mathbf{a}' + \mathbf{b}')/4]$ L15 $pm11$ L11 $p2/m11$ L14 $p2_1/m11 (\mathbf{a}'/4)$ L15 $pm11$ L11
	n odd m even q odd m odd q odd			
	m odd q odd			
	p odd q even			
	n odd m even q odd m odd q odd			
	p odd q even			
$(h\bar{h}l)$ $(\bar{h}hl)$	$\mathbf{a} + \mathbf{b}$ $n(\mathbf{b} - \mathbf{a}) - m\mathbf{c}$ $p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$ $\mathbf{a} + \mathbf{b}$ $n(\mathbf{b} - \mathbf{a}) + m\mathbf{c}$ $-p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$	$C2/m11$ $I2/m11$ $B2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$ $[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$ $[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$c2/m11$ L18 $cm11$ L13 $p2/m11$ L14 $p2_1/m11 [(\mathbf{a}' + \mathbf{b}')/4]$ L15 $pm11$ L11 $p2/m11$ L14 $p2_1/m11 (\mathbf{a}'/4)$ L15 $pm11$ L11
	n odd m even q odd m odd q odd			
	m odd q odd			
	p odd q even			
	n odd m even q odd m odd q odd			
	p odd q even			
l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$				

$$\mathcal{G} = P \frac{4_2}{m} \frac{2_1}{b} \frac{2}{c}$$

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$			
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}						
(<i>mn0</i>)	\mathbf{c}	$n\mathbf{a} - m\mathbf{b}$	$p\mathbf{a} + q\mathbf{b}$	$P2_1/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [$s\mathbf{d}, -s\mathbf{d}$]	$p2_1/m11$	L14		
($\bar{m}n0$)	\mathbf{c}	$m\mathbf{a} + n\mathbf{b}$	$-q\mathbf{a} + p\mathbf{b}$				L11		
($\bar{m}\bar{n}0$)	\mathbf{c}	$n\mathbf{a} + m\mathbf{b}$	$-p\mathbf{a} + q\mathbf{b}$						
(<i>nm0</i>)	\mathbf{c}	$m\mathbf{a} - n\mathbf{b}$	$q\mathbf{a} + p\mathbf{b}$						
(<i>0mn</i>)	\mathbf{a}	$n\mathbf{b} - m\mathbf{c}$	$p\mathbf{b} + q\mathbf{c}$	$P2_1/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [$s\mathbf{d}, -s\mathbf{d}$]	$p2_1/b11$	L17		
(<i>0m\bar{n}</i>)		$n\mathbf{b} + m\mathbf{c}$	$-p\mathbf{b} + q\mathbf{c}$				n odd m even	$p2_1/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]
			q odd			$p2_111$ ($\mathbf{b}'/4$)	L09		
			m odd			$p1$	L01		
			q odd						
			m odd	$P2_1/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	$p\bar{1}$	L02		
		p odd	q even				$p2_111$	L09	
						$p1$	L01		
(<i>m0n</i>)	\mathbf{b}	$m\mathbf{c} - n\mathbf{a}$	$q\mathbf{c} + p\mathbf{a}$	$P2_1/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	$p\bar{1}$	L02		
(<i>m0\bar{n}</i>)		$m\mathbf{c} + n\mathbf{a}$	$-q\mathbf{c} + p\mathbf{a}$				n odd	$p2_111$	L09
			q odd			$p1$	L01		
			p even						
			q odd	$P2_1/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [$s\mathbf{d}, -s\mathbf{d}$]	$p2_1/b11$	L17		
		n even	m odd				$p2_1/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	$p\bar{1}$
		p odd				$p2_111$ ($\mathbf{a}'/4$)	L17		
		n odd				$p\bar{1}$	L02		
		p odd				$p2_111$ ($\mathbf{b}'/4$)	L09		
						$p1$	L01		
(<i>hhl</i>)	$\mathbf{a} - \mathbf{b}$	$n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$	$p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$	$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	$\widehat{p}\bar{1}$	L02		
($\bar{h}hl$)	$\mathbf{a} - \mathbf{b}$	$n(\mathbf{a} + \mathbf{b}) + m\mathbf{c}$	$-p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$				n odd m even	$c211$	L10
($h\bar{h}l$)	$\mathbf{a} + \mathbf{b}$	$n(\mathbf{b} - \mathbf{a}) - m\mathbf{c}$	$p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$				p even q odd	$\widehat{p}1$	L01
($\bar{h}\bar{h}l$)	$\mathbf{a} + \mathbf{b}$	$n(\mathbf{b} - \mathbf{a}) + m\mathbf{c}$	$-p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$				n even m odd	$p2/b11$	L16
($\mathbf{a}/2$ or $\mathbf{b}/2$)							p odd q even	$p2_1/b11$ ($\mathbf{a}'/4$)	L17
								$pb11$	L12
							n even m odd	$p2/b11$	L16
							p odd q even	$p2_1/b11$ [($\mathbf{a}' + \mathbf{b}'$)/4]	L17
								$pb11$	L12
							n even m odd	$p2/b11$	L16
							p odd q odd	$p2_1/b11$ [($\mathbf{a}' + \mathbf{b}'$)/4]	L17
								$pb11$	L12
							n odd m odd	$p2_1/b11$	L17
							p even q odd	$p2/b11$ [($\mathbf{a}' + \mathbf{b}'$)/4]	L16
								$pb11$ ($\mathbf{a}'/4$)	L12
							n odd m odd	$p2_1/b11$	L17
				p odd q even	$p2/b11$ ($\mathbf{a}'/4$)	L16			
					$pb11$ ($\mathbf{a}'/4$)	L12			
				n odd m even	$\widehat{p}\bar{1}$	L02			
				p odd q odd	$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	$c211$ ($\mathbf{b}'/4$)	L10		
						$\widehat{p}1$	L01		

l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$

$$\mathcal{G} = P \begin{matrix} 4_2 & 2_1 & 2 \\ m & n & m \end{matrix}$$

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$				
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}							
(<i>mn0</i>)	\mathbf{c}	$n\mathbf{a} - m\mathbf{b}$	$p\mathbf{a} + q\mathbf{b}$	$P2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [$s\mathbf{d}, -s\mathbf{d}$]	$p2/m11$	L14			
($\bar{n}m0$)	\mathbf{c}	$m\mathbf{a} + n\mathbf{b}$	$-q\mathbf{a} + p\mathbf{b}$				L11			
($\bar{m}n0$)	\mathbf{c}	$n\mathbf{a} + m\mathbf{b}$	$-p\mathbf{a} + q\mathbf{b}$							
(<i>nm0</i>)	\mathbf{c}	$m\mathbf{a} - n\mathbf{b}$	$q\mathbf{a} + p\mathbf{b}$							
(<i>0mn</i>)	\mathbf{a}	$n\mathbf{b} - m\mathbf{c}$	$p\mathbf{b} + q\mathbf{c}$	$P2_1/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ [$\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	$p\bar{1}$	L02			
($0\bar{m}n$)	\mathbf{a}	$n\mathbf{b} + m\mathbf{c}$	$-p\mathbf{b} + q\mathbf{c}$				L09			
(<i>m0n</i>)	\mathbf{b}	$m\mathbf{c} - n\mathbf{a}$	$q\mathbf{c} + p\mathbf{a}$				L01			
($m0\bar{n}$)	\mathbf{b}	$m\mathbf{c} + n\mathbf{a}$	$-q\mathbf{c} + p\mathbf{a}$							
		n odd	m even							
		p even	q odd							
		or								
		n even	m odd							
		p odd	q even							
		p odd	q odd							
		n odd	m odd							
							$P2_1/c11$		$p\bar{1}$	L02
						$p2_111$	L09			
						$p1$	L01			
				$P2_1/b11$		$p2_1/b11$	L17			
						$pb11 (\mathbf{a}'/4)$	L12			
(<i>hhl</i>)	$\mathbf{a} - \mathbf{b}$	$n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$	$p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$	$C2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [$s\mathbf{d}, -s\mathbf{d}$]	$c2/m11$	L18			
($\bar{h}hl$)	$\mathbf{a} - \mathbf{b}$	$n(\mathbf{a} + \mathbf{b}) + m\mathbf{c}$	$-p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$				L13			
(<i>hhl</i>)	$\mathbf{a} + \mathbf{b}$	$n(\mathbf{b} - \mathbf{a}) - m\mathbf{c}$	$p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$				$I2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ [$\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	$p2/m11$	L14
($\bar{h}hl$)	$\mathbf{a} + \mathbf{b}$	$n(\mathbf{b} - \mathbf{a}) + m\mathbf{c}$	$-p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$							L15
		n odd	m even							L11
		q odd	m odd							
		m odd	q odd							
		m odd	q even							
		p odd	q even							
							$B2/m11$		$p2/m11$	L14
									$p2_1/m11 (\mathbf{a}'/4)$	L15
									$pm11$	L11

l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}			
$(mn0)$	\mathbf{c}	$n\mathbf{a} - m\mathbf{b}$	$p\mathbf{a} + q\mathbf{b}$	$P2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p211 (\mathbf{b}'/4)$ $p1$
$(\bar{n}m0)$	\mathbf{c}	$m\mathbf{a} + n\mathbf{b}$	$-q\mathbf{a} + p\mathbf{b}$			
$(\bar{m}n0)$	\mathbf{c}	$n\mathbf{a} + m\mathbf{b}$	$-p\mathbf{a} + q\mathbf{b}$			
$(nm0)$	\mathbf{c}	$m\mathbf{a} - n\mathbf{b}$	$q\mathbf{a} + p\mathbf{b}$			
		n odd	m even			L02
		p even	q odd			L08
		or				L01
		n even	m odd			
		p odd	q even			
		p odd	q odd	$P2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p211$ $p1$
		n odd	m odd	$P2/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2/b11$ $pb11$
$(0mn)$	\mathbf{a}	$n\mathbf{b} - m\mathbf{c}$	$p\mathbf{b} + q\mathbf{c}$	$P2_1/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2_1/m11$ $pm11 (\mathbf{a}'/4)$
$(0\bar{m}n)$	\mathbf{a}	$n\mathbf{b} + m\mathbf{c}$	$-p\mathbf{b} + q\mathbf{c}$			
$(m0n)$	\mathbf{b}	$m\mathbf{c} - n\mathbf{a}$	$q\mathbf{c} + p\mathbf{a}$			
$(m0\bar{n})$	\mathbf{b}	$m\mathbf{c} + n\mathbf{a}$	$-q\mathbf{c} + p\mathbf{a}$			
$(\mathbf{a} + \mathbf{b} + \mathbf{c})/4$						

Continued

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group a' b' d	Scanning group \mathcal{H}	Linear orbit sd	Sectional layer group $\mathcal{L}(sd)$				
(hhl) $(\bar{h}hl)$ $(\mathbf{a} - \mathbf{b} + \mathbf{c})/4$	a - b $n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$ $p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$	$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}\bar{1}$ $c211$ $\widehat{p}1$	L02			
	a - b $n(\mathbf{a} + \mathbf{b}) + m\mathbf{c}$ $-p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$				L10			
	n odd m even				L01			
	p even q odd							
	n even m odd				$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ $p2_1/b11 (\mathbf{a}'/4)$ $pb11$	L16 L17 L12
	p odd q even							
	n even m odd				$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ $p2_1/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ $pb11$	L16 L17 L12
	p odd q odd							
	n odd m odd				$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ $p2/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ $pb11 (\mathbf{a}'/4)$	L17 L16 L12
	p even q odd							
	n odd m odd				$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ $p2/b11 (\mathbf{a}'/4)$ $pb11 (\mathbf{a}'/4)$	L17 L16 L12
	p odd q even							
n odd m even	$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}\bar{1}$ $c211 (\mathbf{b}'/4)$ $\widehat{p}1$	L02 L10 L01				
p odd q odd								
(hhl) $(\bar{h}hl)$ $(\mathbf{a} + \mathbf{b} + \mathbf{c})/4$	a + b $n(\mathbf{b} - \mathbf{a}) - m\mathbf{c}$ $p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$	$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}\bar{1}$ $c211$ $\widehat{p}1$	L02			
	a + b $n(\mathbf{b} - \mathbf{a}) + m\mathbf{c}$ $-p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$				L10			
	n odd m even				L01			
	p even q odd							
	n even m odd				$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ $p2_1/b11 (\mathbf{a}'/4)$ $pb11$	L16 L17 L12
	p odd q even							
	n even m odd				$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2/b11$ $p2_1/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ $pb11$	L16 L17 L12
	p odd q odd							
	n odd m odd				$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ $p2/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ $pb11 (\mathbf{a}'/4)$	L17 L16 L12
	p even q odd							
	n odd m odd				$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ $p2/b11 (\mathbf{a}'/4)$ $pb11 (\mathbf{a}'/4)$	L17 L16 L12
	p odd q even							
n odd m even	$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}\bar{1}$ $c211 (\mathbf{b}'/4)$ $\widehat{p}1$	L02 L10 L01				
p odd q odd								

l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$

Continued

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}				
$(mn0)$	\mathbf{c}	$n\mathbf{a} - m\mathbf{b}$	$p\mathbf{a} + q\mathbf{b}$	$P2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p211 (\mathbf{b}'/4)$ $p1$	L02
$(\bar{n}m0)$	\mathbf{c}	$m\mathbf{a} + n\mathbf{b}$	$-q\mathbf{a} + p\mathbf{b}$				L08
$(\bar{m}n0)$	\mathbf{c}	$n\mathbf{a} + m\mathbf{b}$	$-p\mathbf{a} + q\mathbf{b}$				L01
$(nm0)$	\mathbf{c}	$m\mathbf{a} - n\mathbf{b}$	$q\mathbf{a} + p\mathbf{b}$				
		n odd	m even				
		p even	q odd				
		or					
		n even	m odd				
		p odd	q even	$P2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p211$ $p1$	L02 L08 L01
		p odd	q odd				
		n odd	m odd	$P2/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2/b11$ $pb11$	L16 L12
$(0mn)$	\mathbf{a}	$n\mathbf{b} - m\mathbf{c}$	$p\mathbf{b} + q\mathbf{c}$	$P2_1/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2_1/m11$ $pm11 (\mathbf{a}'/4)$	L15
$(0\bar{m}n)$	\mathbf{a}	$n\mathbf{b} + m\mathbf{c}$	$-p\mathbf{b} + q\mathbf{c}$				L11
$(m0n)$	\mathbf{b}	$m\mathbf{c} - n\mathbf{a}$	$q\mathbf{c} + p\mathbf{a}$				
$(m0\bar{n})$	\mathbf{b}	$m\mathbf{c} + n\mathbf{a}$	$-q\mathbf{c} + p\mathbf{a}$				

Continued

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$				
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}							
(hhl) $(\bar{h}hl)$	$\mathbf{a} - \mathbf{b}$	$n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$	$p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$	$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}\bar{1}$ $c211$ $\widehat{p}1$	L02			
	$\mathbf{a} - \mathbf{b}$	$n(\mathbf{a} + \mathbf{b}) + m\mathbf{c}$	$-p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$				L10			
		n odd	m even				L01			
		p even	q odd							
		n even	m odd				$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ $p2_1/b11 (\mathbf{a}'/4)$ $pb11$	L16 L17 L12
		p odd	q even							
		n even	m odd				$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ $p2_1/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ $pb11$	L16 L17 L12
		p odd	q odd							
		n odd	m odd				$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ $p2/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ $pb11 (\mathbf{a}'/4)$	L17 L16 L12
		p even	q odd							
		n odd	m odd				$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ $p2/b11 (\mathbf{a}'/4)$ $pb11 (\mathbf{a}'/4)$	L17 L16 L12
		p odd	q even							
		n odd	m even				$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}\bar{1}$ $c211 (\mathbf{b}'/4)$ $\widehat{p}1$	L02 L10 L01
		p odd	q odd							
(hhl) $(\bar{h}hl)$ $(\mathbf{a}/2 \text{ or } \mathbf{b}/2)$	$\mathbf{a} + \mathbf{b}$	$n(\mathbf{b} - \mathbf{a}) - m\mathbf{c}$	$p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$	$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}\bar{1}$ $c211$ $\widehat{p}1$	L02			
	$\mathbf{a} + \mathbf{b}$	$n(\mathbf{b} - \mathbf{a}) + m\mathbf{c}$	$-p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$				L10			
		n odd	m even				L01			
		p even	q odd							
		n even	m odd				$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ $p2_1/b11 (\mathbf{a}'/4)$ $pb11$	L16 L17 L12
		p odd	q even							
		n even	m odd				$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2/b11$ $p2_1/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ $pb11$	L16 L17 L12
		p odd	q odd							
		n odd	m odd				$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ $p2/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ $pb11 (\mathbf{a}'/4)$	L17 L16 L12
		p even	q odd							
		n odd	m odd				$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ $p2/b11 (\mathbf{a}'/4)$ $pb11 (\mathbf{a}'/4)$	L17 L16 L12
		p odd	q even							
		n odd	m even				$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}\bar{1}$ $c211 (\mathbf{b}'/4)$ $\widehat{p}1$	L02 L10 L01
		p odd	q odd							
l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$										

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}				
$(mn0)$ $(\bar{n}m0)$ $(\bar{m}n0)$ $(nm0)$ $(\mathbf{a} + \mathbf{b} + \mathbf{c})/4$	\mathbf{c}	$n\mathbf{a} - m\mathbf{b}$	$p\mathbf{a} + q\mathbf{b}$	$P2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p211 (\mathbf{b}'/4)$ $p1$	L02
	\mathbf{c}	$m\mathbf{a} + n\mathbf{b}$	$-q\mathbf{a} + p\mathbf{b}$				L08
	\mathbf{c}	$n\mathbf{a} + m\mathbf{b}$	$-p\mathbf{a} + q\mathbf{b}$				L01
	\mathbf{c}	$m\mathbf{a} - n\mathbf{b}$	$q\mathbf{a} + p\mathbf{b}$				
			n odd m even p even q odd or n even m odd p odd q even p odd q odd				
			n odd m odd				
			$P2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p211$ $p1$	L02 L08 L01	
			$P2/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2/b11$ $pb11$	L16 L12	
$(0mn)$ $(0\bar{m}n)$ $(\mathbf{a} + \mathbf{b} + \mathbf{c})/4$	\mathbf{a}	$n\mathbf{b} - m\mathbf{c}$	$p\mathbf{b} + q\mathbf{c}$	$P2_1/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p2_111$ $p1$	L02
	\mathbf{a}	$n\mathbf{b} + m\mathbf{c}$	$-p\mathbf{b} + q\mathbf{c}$				L09
			n odd m even p even q odd				L01
			n even m odd p odd				
			n odd m odd p odd				
							$P2_1/b11$
			$P2_1/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p2_111 (\mathbf{b}'/4)$ $p1$	L02 L09 L01	
$(m0n)$ $(m0\bar{n})$ $(\mathbf{a} + \mathbf{b} + \mathbf{c})/4$	\mathbf{b}	$m\mathbf{c} - n\mathbf{a}$	$q\mathbf{c} + p\mathbf{a}$	$P2_1/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2_1/b11$ $pb11 (\mathbf{a}'/4)$	L17
	\mathbf{b}	$m\mathbf{c} + n\mathbf{a}$	$-q\mathbf{c} + p\mathbf{a}$				L12
			n odd m even q odd m odd q odd				
			m odd q odd				
			m odd q even				
							$P2_1/n11$
			$P2_1/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p2_111$ $p1$	L02 L09 L01	

Continued

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$
(hhl) $(\bar{h}hl)$ $(\mathbf{a} - \mathbf{b} + \mathbf{c})/4$	$\mathbf{a} - \mathbf{b}$ $n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$ $p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$	$C2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c2/m11$ L18 $cm11$ L13
	$\mathbf{a} - \mathbf{b}$ $n(\mathbf{a} + \mathbf{b}) + m\mathbf{c}$ $-p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$			
	n odd m even			
	q odd			
	m odd			
	q odd			
$(h\bar{h}l)$ $(\bar{h}hl)$ $(\mathbf{a} + \mathbf{b} + \mathbf{c})/4$	$\mathbf{a} + \mathbf{b}$ $n(\mathbf{b} - \mathbf{a}) - m\mathbf{c}$ $p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$	$I2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ L14 $p2_1/m11 [(\mathbf{a}' + \mathbf{b}')/4]$ L15 $pm11$ L11
	$\mathbf{a} + \mathbf{b}$ $n(\mathbf{b} - \mathbf{a}) + m\mathbf{c}$ $-p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$			
	n odd m even			
	q odd			
	m odd			
	q odd			
$(h\bar{h}l)$ $(\bar{h}hl)$ $(\mathbf{a} + \mathbf{b} + \mathbf{c})/4$	$\mathbf{a} + \mathbf{b}$ $n(\mathbf{b} - \mathbf{a}) - m\mathbf{c}$ $p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$	$B2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ L14 $p2_1/m11 (\mathbf{a}'/4)$ L15 $pm11$ L11
	$\mathbf{a} + \mathbf{b}$ $n(\mathbf{b} - \mathbf{a}) + m\mathbf{c}$ $-p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$			
	n odd m even			
	q odd			
	m odd			
	q even			
l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$				

Continued

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$				
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}							
(<i>mn0</i>)	\mathbf{c}	$n\mathbf{a} - m\mathbf{b}$	$p\mathbf{a} + q\mathbf{b}$	$P2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p211 (\mathbf{b}'/4)$ $p1$	L02			
($\bar{1}m0$)	\mathbf{c}	$m\mathbf{a} + n\mathbf{b}$	$-q\mathbf{a} + p\mathbf{b}$				L08			
($\bar{m}n0$)	\mathbf{c}	$n\mathbf{a} + m\mathbf{b}$	$-p\mathbf{a} + q\mathbf{b}$				L01			
(<i>nm0</i>)	\mathbf{c}	$m\mathbf{a} - n\mathbf{b}$	$q\mathbf{a} + p\mathbf{b}$							
		n odd m even	p even q odd							
		p odd q even	p odd q odd							
		or								
		n even m odd	p odd q even	$P2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p211$ $p1$	L02 L08 L01			
		p odd q odd		$P2/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2/b11$ $pb11$	L16 L12			
		n odd m odd								
(<i>0mn</i>)	\mathbf{a}	$n\mathbf{b} - m\mathbf{c}$	$p\mathbf{b} + q\mathbf{c}$	$P2_1/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p2_111$ $p1$	L02			
($0\bar{m}n$)	\mathbf{a}	$n\mathbf{b} + m\mathbf{c}$	$-p\mathbf{b} + q\mathbf{c}$				L09			
		n odd	p even q odd				L01			
		n even m odd					$P2_1/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2_1/b11$ $pb11 (\mathbf{a}'/4)$	L17 L12
		p odd					$P2_1/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p2_111 (\mathbf{b}'/4)$ $p1$	L02 L09 L01
		n odd	p odd							
(<i>m0n</i>)	\mathbf{b}	$m\mathbf{c} - n\mathbf{a}$	$q\mathbf{c} + p\mathbf{a}$	$P2_1/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2_1/b11$ $pb11 (\mathbf{a}'/4)$	L17			
($m0\bar{n}$)	\mathbf{b}	$m\mathbf{c} + n\mathbf{a}$	$-q\mathbf{c} + p\mathbf{a}$				L12			
		n odd	m even				$P2_1/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p2_111 (\mathbf{b}'/4)$ $p1$	L02 L09 L01
		q odd	m odd				$P2_1/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p2_111$ $p1$	L02 L09 L01
		m odd	q odd							
		p odd	q even							

Continued

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$
(hhl) $(\bar{h}hl)$	$\mathbf{a} - \mathbf{b}$ $n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$ $p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$ $\mathbf{a} - \mathbf{b}$ $n(\mathbf{a} + \mathbf{b}) + m\mathbf{c}$ $-p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$	$C2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c2/m11$ L18
				$cm11$ L13
				$p2/m11$ L14
		$I2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/m11$ $[(\mathbf{a}' + \mathbf{b}')/4]$ L15
				$pm11$ L11
				$p2/m11$ L14
$B2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/m11$ $(\mathbf{a}'/4)$ L15		
		$pm11$ L11		
		$p2/m11$ L14		
$(\bar{h}\bar{h}l)$ $(\bar{h}hl)$ ($\mathbf{a}/2$ or $\mathbf{b}/2$)	$\mathbf{a} + \mathbf{b}$ $n(\mathbf{b} - \mathbf{a}) - m\mathbf{c}$ $p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$ $\mathbf{a} + \mathbf{b}$ $n(\mathbf{b} - \mathbf{a}) + m\mathbf{c}$ $-p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$	$C2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c2/m11$ L18
				$cm11$ L13
				$p2/m11$ L14
		$I2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/m11$ $[(\mathbf{a}' + \mathbf{b}')/4]$ L15
				$pm11$ L11
				$p2/m11$ L14
$B2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/m11$ $(\mathbf{a}'/4)$ L15		
		$pm11$ L11		
		$p2/m11$ L14		
l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$				

$$\mathcal{G} = I_{m m m}^4 \frac{2}{2} \frac{2}{2}$$

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}				
(<i>mn</i> 0)	\mathbf{c}	$n\mathbf{a} - m\mathbf{b}$	$p\mathbf{a} + q\mathbf{b}$				
($\bar{n}m$ 0)	\mathbf{c}	$m\mathbf{a} + n\mathbf{b}$	$-q\mathbf{a} + p\mathbf{b}$				
($m\bar{n}$ 0)	\mathbf{c}	$n\mathbf{a} + m\mathbf{b}$	$-p\mathbf{a} + q\mathbf{b}$				
(<i>nm</i> 0)	\mathbf{c}	$m\mathbf{a} - n\mathbf{b}$	$q\mathbf{a} + p\mathbf{b}$				
			<i>n</i> odd <i>m</i> even	$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2/b11$	L16
			<i>p</i> even <i>q</i> odd		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2_1/b11 (\mathbf{a}'/4)$	L17
					$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11$	L12
			<i>n</i> even <i>m</i> odd	$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$\widehat{p}\bar{1}$	L02
			<i>p</i> odd <i>q</i> even		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$c211$	L12
					$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}1$	L01
			<i>n</i> even <i>m</i> odd	$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$\widehat{p}\bar{1}$	L02
			<i>p</i> odd <i>q</i> odd		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$c211 (\mathbf{b}'/4)$	L10
					$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}1$	L01
			<i>n</i> odd <i>m</i> odd	$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2_1/b11$	L17
			<i>p</i> even <i>q</i> odd		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2/b11 (\mathbf{a}'/4)$	L16
					$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$	L12
			<i>n</i> odd <i>m</i> odd	$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2_1/b11$	L17
			<i>p</i> odd <i>q</i> even		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2/b11 [(\mathbf{a}' + \mathbf{b}')/4]$	L16
					$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$	L12
			<i>n</i> odd <i>m</i> even	$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2/b11$	L16
			<i>p</i> odd <i>q</i> odd		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2_1/b11 [(\mathbf{a}' + \mathbf{b}')/4]$	L17
					$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11$	L12
(<i>0mn</i>)	\mathbf{a}	$n\mathbf{b} - m\mathbf{c}$	$p\mathbf{b} + q\mathbf{c}$				
($0\bar{m}n$)	\mathbf{a}	$n\mathbf{b} + m\mathbf{c}$	$-p\mathbf{b} + q\mathbf{c}$				
(<i>m</i> 0 <i>n</i>)	\mathbf{b}	$m\mathbf{c} - n\mathbf{a}$	$q\mathbf{c} + p\mathbf{a}$				
($m0\bar{n}$)	\mathbf{b}	$m\mathbf{c} + n\mathbf{a}$	$-q\mathbf{c} + p\mathbf{a}$				
			<i>n</i> odd <i>m</i> even	$I2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2/m11$	L14
			<i>p</i> even <i>q</i> odd		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2_1/m11 [(\mathbf{a}' + \mathbf{b}')/4]$	L15
					$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pm11$	L11
			<i>n</i> even <i>m</i> odd				
			<i>p</i> odd <i>q</i> even				
			<i>p</i> odd <i>q</i> odd	$B2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2/m11$	L14
					$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2_1/m11 (\mathbf{a}'/4)$	L15
					$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pm11$	L11
			<i>n</i> odd <i>m</i> odd	$C2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$	$c2/m11$	L18
					$[s\mathbf{d}, -s\mathbf{d}]$	$cm11$	L13

Continued

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$
(hhl) $(\bar{h}hl)$	$\mathbf{a} - \mathbf{b}$ $n\hat{\mathbf{a}} - mc$ $p\hat{\mathbf{a}} + qc$	$B2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ L14
	$\mathbf{a} - \mathbf{b}$ $n\hat{\mathbf{a}} + mc$ $-p\hat{\mathbf{a}} + qc$			$p2_1/m11$ ($\mathbf{a}'/4$) L15
	n odd q odd			$pm11$ L11
	n even m odd			$c2/m11$ L18
	p odd	$cm11$ L13		
	n odd	$I2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2/m11$ L14
	p odd		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2_1/m11$ [$(\mathbf{a}' + \mathbf{b}')/4$] L15
			$\pm s\mathbf{d}, \pm s \frac{1}{2} \mathbf{d}$	$pm11$ L11
	$\hat{\mathbf{a}} = (\mathbf{a} + \mathbf{b} + \mathbf{c})/2$			
$(h\bar{h}l)$ $(\bar{h}hl)$	$\mathbf{a} + \mathbf{b}$ $n\hat{\mathbf{a}} - mc$ $p\hat{\mathbf{a}} + qc$	$B2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ L14
	$\mathbf{a} + \mathbf{b}$ $n\hat{\mathbf{a}} + mc$ $-p\hat{\mathbf{a}} + qc$			$p2_1/m11$ ($\mathbf{a}'/4$) L15
	n odd q odd			$pm11$ L11
	n even m odd			$c2/m11$ L18
	p odd	$cm11$ L13		
	n odd	$I2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2/m11$ L14
	p odd		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2_1/m11$ [$(\mathbf{a}' + \mathbf{b}')/4$] L15
			$\pm s\mathbf{d}, \pm s \frac{1}{2} \mathbf{d}$	$pm11$ L11
	$\hat{\mathbf{a}} = (\mathbf{b} - \mathbf{a} + \mathbf{c})/2$			
l odd $\Rightarrow n = 2l, m = 2h + l; l$ even $\Rightarrow n = l, m = h + l/2$				

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}				
$(mn0)$	\mathbf{c}	$n\mathbf{a} - m\mathbf{b}$	$p\mathbf{a} + q\mathbf{b}$				
$(\bar{m}n0)$	\mathbf{c}	$m\mathbf{a} + n\mathbf{b}$	$-q\mathbf{a} + p\mathbf{b}$				
$(\bar{m}\bar{n}0)$	\mathbf{c}	$n\mathbf{a} + m\mathbf{b}$	$-p\mathbf{a} + q\mathbf{b}$				
$(nm0)$	\mathbf{c}	$m\mathbf{a} - n\mathbf{b}$	$q\mathbf{a} + p\mathbf{b}$				
		n odd	m even	$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2/b11$	L16
		p even	q odd		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2_1/b11 (\mathbf{a}'/4)$	L17
					$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11$	L12
		n even	m odd	$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$\widehat{p}\bar{1}$	L02
		p odd	q even		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$c211$	L12
					$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}1$	L01
		n even	m odd	$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$\widehat{p}\bar{1}$	L02
		p odd	q odd		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$c211 (\mathbf{b}'/4)$	L10
					$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}1$	L01
		n odd	m odd	$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2_1/b11$	L17
		p even	q odd		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2/b11 (\mathbf{a}'/4)$	L16
					$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$	L12
		n odd	m odd	$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2_1/b11$	L17
		p odd	q even		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2/b11 [(\mathbf{a}' + \mathbf{b}')/4]$	L16
					$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$	L12
		n odd	m even	$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2/b11$	L16
		p odd	q odd		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2_1/b11 [(\mathbf{a}' + \mathbf{b}')/4]$	L17
					$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11$	L12
$(0mn)$	\mathbf{a}	$n\mathbf{b} - m\mathbf{c}$	$p\mathbf{b} + q\mathbf{c}$				
$(0\bar{m}n)$	\mathbf{a}	$n\mathbf{b} + m\mathbf{c}$	$-p\mathbf{b} + q\mathbf{c}$				
		n odd	m even	$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2_1/b11$	L17
		p even	q odd		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2/b11 [(\mathbf{a}' + \mathbf{b}')/4]$	L16
					$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$	L12
		n even	m odd	$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2/b11$	L16
		p odd	q even		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2_1/b11 [(\mathbf{a}' + \mathbf{b}')/4]$	L17
					$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11$	L12
		n even	m odd	$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2/b11$	L16
		p odd	q odd		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2_1/b11 (\mathbf{a}'/4)$	L17
					$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11$	L12
		n odd	m odd	$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$\widehat{p}\bar{1}$	L02
		p even	q odd		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$c211$	L10
					$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}1$	L01
		n odd	m odd	$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$\widehat{p}\bar{1}$	L02
		p odd	q even		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$c211 (\mathbf{b}'/4)$	L10
					$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}1$	L01
		n odd	m even	$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2_1/b11$	L17
		p odd	q odd		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2/b11 (\mathbf{a}'/4)$	L16
					$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$	L12

Continued

Orientation orbit (hkl)	Conventional basis of the scanning group $\mathbf{a}' \quad \mathbf{b}' \quad \mathbf{d}$	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$					
$(m0n)$ $(m0\bar{n})$	$\mathbf{b} \quad mc - na \quad qc + pa$ $\mathbf{b} \quad mc + na \quad -qc + pa$ n odd m even p even q odd n even m odd p odd q even n even m odd p odd q odd n odd m odd p even q odd n odd m odd p odd q even n odd m even p odd q odd	$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ L16 $p2_1/b11 [(a' + b')/4]$ L17 $pb11$ L12					
					$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ L17 $p2/b11 [(a' + b')/4]$ L16 $pb11 (a'/4)$ L12		
								$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$
		$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}\bar{1}$ L02 $c211 (b'/4)$ L10 $\widehat{p}1$ L01					
					$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}\bar{1}$ L02 $c211$ L10 $\widehat{p}1$ L01		
		$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ L16 $p2_1/b11 (a'/4)$ L17 $pb11$ L12					
					(hhl) $(\bar{h}\bar{h}l)$	$\mathbf{a} - \mathbf{b} \quad n\hat{\mathbf{a}} - mc \quad p\hat{\mathbf{a}} + qc$ $\mathbf{a} - \mathbf{b} \quad n\hat{\mathbf{a}} + mc \quad -p\hat{\mathbf{a}} + qc$ n odd q odd p even n even m odd p odd n odd m odd p odd n odd m even p odd	$B2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ L14 $p2_1/m11 (a'/4)$ L15 $pm11$ L11
		$C2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c2/m11$ L18 $cm11$ L13					
		$\widehat{\mathbf{a}} = (\mathbf{a} + \mathbf{b} + \mathbf{c})/2$							
							$(h\bar{h}l)$ $(\bar{h}hl)$	$\mathbf{a} + \mathbf{b} \quad n\hat{\mathbf{a}} - mc \quad p\hat{\mathbf{a}} + qc$ $\mathbf{a} + \mathbf{b} \quad n\hat{\mathbf{a}} + mc \quad -p\hat{\mathbf{a}} + qc$ n odd q odd p even n even m odd p odd n odd m odd p odd	$B2/m11$
		$C2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c2/m11$ L18 $cm11$ L13					
$I2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$								
		$\widehat{\mathbf{a}} = (\mathbf{b} - \mathbf{a} + \mathbf{c})/2$							

$$l \text{ odd} \Rightarrow n = 2l, m = 2h + l; l \text{ even} \Rightarrow n = l, m = h + l/2$$

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$		
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}					
(<i>mn0</i>)	\mathbf{c}	$n\mathbf{a} - m\mathbf{b}$	$p\mathbf{a} + q\mathbf{b}$					
($\bar{n}m0$)	\mathbf{c}	$m\mathbf{a} + n\mathbf{b}$	$-q\mathbf{a} + p\mathbf{b}$					
($\bar{m}n0$)	\mathbf{c}	$n\mathbf{a} + m\mathbf{b}$	$-p\mathbf{a} + q\mathbf{b}$					
(<i>nm0</i>)	\mathbf{c}	$m\mathbf{a} - n\mathbf{b}$	$q\mathbf{a} + p\mathbf{b}$					
$(\mathbf{b} + \mathbf{c})/8$			n odd	m even	$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2_1/b11$ L17	
			p even	q odd		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2/b11 [(a' + b')/4]$ L16	
						$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11 (a'/4)$ L12	
			n even	m odd	$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2/b11$ L16	
			p odd	q even		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2_1/b11 [(a' + b')/4]$ L17	
						$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11$ L12	
			n even	m odd	$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2/b11$ L16	
			p odd	q odd		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2_1/b11 (a'/4)$ L17	
						$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11$ L12	
			n odd	m odd	$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$\widehat{p}\bar{1}$ L02	
			p even	q odd		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$c211$ L10	
						$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}1$ L01	
		n odd	m odd	$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$\widehat{p}\bar{1}$ L02		
		p odd	q even		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$c211 (\mathbf{b}'/4)$ L10		
					$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}1$ L01		
		n odd	m even	$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2_1/b11$ L17		
		p odd	q odd		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2/b11 (a'/4)$ L16		
					$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11 (a'/4)$ L12		
$(\mathbf{b}/4 + \mathbf{c}/8)$	(<i>0mn</i>)	\mathbf{a}	$n\mathbf{b} - m\mathbf{c}$	$p\mathbf{b} + q\mathbf{c}$				
	($0\bar{m}n$)	\mathbf{a}	$n\mathbf{b} + m\mathbf{c}$	$-p\mathbf{b} + q\mathbf{c}$				
				n odd	m even	$I2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2/m11$ L14
				p even	q odd		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2_1/m11 [(a' + b')/4]$ L15
							$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pm11$ L11
				n even	m odd			
				p odd	q even	$B2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2/m11$ L14
				p odd	q odd		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2_1/m11 (a'/4)$ L15
							$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pm11$ L11
			n odd	m odd	$C2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$	$c2/m11$ L18	
						$s\mathbf{d}, -s\mathbf{d}$	$cm11$ L13	
	$(\mathbf{a}/4 + 3\mathbf{c}/8)$	(<i>m0n</i>)	\mathbf{b}	$m\mathbf{c} - n\mathbf{a}$	$q\mathbf{c} + p\mathbf{a}$			
($m0\bar{n}$)		\mathbf{b}	$m\mathbf{c} + n\mathbf{a}$	$-q\mathbf{c} + p\mathbf{a}$				
				n odd	m even	$I2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2/m11$ L14
				p even	q odd		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2_1/m11 [(a' + b')/4]$ L15
							$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pm11$ L11
				n even	m odd			
				p odd	q even	$B2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2/m11$ L14
				p odd	q odd		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2_1/m11 (a'/4)$ L15
							$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pm11$ L11
			n odd	m odd	$C2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$	$c2/m11$ L18	
						$s\mathbf{d}, -s\mathbf{d}$	$cm11$ L13	

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group a' b' d	Scanning group \mathcal{H}	Linear orbit sd	Sectional layer group $\mathcal{L}(sd)$	
(hhl) $(\bar{h}hl)$ $3(\mathbf{a}/4 + \mathbf{c}/8)$	$\mathbf{a} - \mathbf{b}$ $n\hat{\mathbf{a}} - mc$ $p\hat{\mathbf{a}} + qc$	$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ L16	
	$\mathbf{a} - \mathbf{b}$ $n\hat{\mathbf{a}} + mc$ $-p\hat{\mathbf{a}} + qc$			$p2_1/b11 (\mathbf{a}'/4)$ L17	
	n odd m even			$pb11$ L12	
	p even q odd				
	n even m odd			$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $\hat{p}\bar{1}$ L02
	p odd q even			$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $c211$ L12	
				$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$ $\hat{p}1$ L01	
	n even m odd			$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $\hat{p}\bar{1}$ L02
	p odd q odd			$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $c211 (\mathbf{b}'/4)$ L10	
				$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$ $\hat{p}1$ L01	
	n odd m odd			$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $p2_1/b11$ L17
	p even q odd			$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $p2/b11 (\mathbf{a}'/4)$ L16	
				$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$ $pb11 (\mathbf{a}'/4)$ L12	
	n odd m odd			$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $p2_1/b11$ L17
p odd q even	$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $p2/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ L16				
	$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$ $pb11 (\mathbf{a}'/4)$ L12				
n odd m even	$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $p2/b11$ L16			
p odd q odd	$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $p2_1/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ L17				
	$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$ $pb11$ L12				
$\hat{\mathbf{a}} = (\mathbf{a} + \mathbf{b} + \mathbf{c})/2$					
$(\bar{h}hl)$ (hhl) $(\mathbf{a}/4 + \mathbf{c}/8)$	$\mathbf{a} + \mathbf{b}$ $n\hat{\mathbf{a}} - mc$ $p\hat{\mathbf{a}} + qc$	$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ L16	
	$\mathbf{a} + \mathbf{b}$ $n\hat{\mathbf{a}} + mc$ $-p\hat{\mathbf{a}} + qc$			$p2_1/b11 (\mathbf{a}'/4)$ L17	
	n odd m even			$pb11$ L12	
	p even q odd				
	n even m odd			$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $\hat{p}\bar{1}$ L02
	p odd q even			$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $c211$ L12	
				$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$ $p1$ L01	
	n even m odd			$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $\hat{p}\bar{1}$ L02
	p odd q odd			$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $c211 (\mathbf{b}'/4)$ L10	
				$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$ $\hat{p}1$ L01	
	n odd m odd			$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $p2_1/b11$ L17
	p even q odd			$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $p2/b11 (\mathbf{a}'/4)$ L16	
				$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$ $pb11 (\mathbf{a}'/4)$ L12	
	n odd m odd			$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $p2_1/b11$ L17
p odd q even	$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $p2/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ L16				
	$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$ $pb11 (\mathbf{a}'/4)$ L12				
n odd m even	$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $p2/b11$ L16			
p odd q odd	$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $p2_1/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ L17				
	$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$ $pb11$ L12				
$\hat{\mathbf{a}} = (\mathbf{b} - \mathbf{a} + \mathbf{c})/2$					

l odd $\Rightarrow n = 2l, m = 2h + l; l$ even $\Rightarrow n = l, m = h + l/2$

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$
$(mn0)$ $(\bar{m}n0)$ $(\bar{m}n0)$ $(nm0)$	\mathbf{c} $n\mathbf{a} - m\mathbf{b}$ $p\mathbf{a} + q\mathbf{b}$ \mathbf{c} $m\mathbf{a} + n\mathbf{b}$ $-q\mathbf{a} + p\mathbf{b}$ \mathbf{c} $n\mathbf{a} + m\mathbf{b}$ $-p\mathbf{a} + q\mathbf{b}$ \mathbf{c} $m\mathbf{a} - n\mathbf{b}$ $q\mathbf{a} + p\mathbf{b}$			
	n odd m even p even q odd	$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ L17 $p2/b11 [(a' + b')/4]$ L16 $pb11 (a'/4)$ L12
	n even m odd p odd q even	$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ L16 $p2_1/b11 [(a' + b')/4]$ L17 $pb11$ L12
	n even m odd p odd q odd	$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ L16 $p2_1/b11 (a'/4)$ L17 $pb11$ L12
	n odd m odd p even q odd	$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}\bar{1}$ L02 $c211$ L10 $\widehat{p}1$ L01
	n odd m odd p odd q even	$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}\bar{1}$ L02 $c211 (b'/4)$ L10 $\widehat{p}1$ L01
	n odd m even p odd q odd	$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ L17 $p2/b11 (a'/4)$ L16 $pb11 (a'/4)$ L12
$(0mn)$ $(0\bar{m}n)$	\mathbf{a} $n\mathbf{b} - m\mathbf{c}$ $p\mathbf{b} + q\mathbf{c}$ \mathbf{a} $n\mathbf{b} + m\mathbf{c}$ $-p\mathbf{b} + q\mathbf{c}$			
	n odd m even p even q odd or n even m odd p odd q even p odd q odd	$I2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ L14 $p2_1/m11 [(a' + b')/4]$ L15 $pm11$ L11
	n odd m odd	$B2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ L14 $p2_1/m11 (a'/4)$ L15 $pm11$ L11
		$C2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $s\mathbf{d}, -s\mathbf{d}$	$c2/m11$ L18 $cm11$ L13
$(m0n)$ $(m0\bar{n})$ $(\mathbf{a} + \mathbf{b} + \mathbf{c})/4$	\mathbf{b} $m\mathbf{c} - n\mathbf{a}$ $q\mathbf{c} + p\mathbf{a}$ \mathbf{b} $m\mathbf{c} + n\mathbf{a}$ $-q\mathbf{c} + p\mathbf{a}$			
	n odd m even p even q odd or n even m odd p odd q even p odd q odd	$I2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ L14 $p2_1/m11 [(a' + b')/4]$ L15 $pm11$ L11
	n odd m odd	$B2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ L14 $p2_1/m11 (a'/4)$ L15 $pm11$ L11
		$C2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $s\mathbf{d}, -s\mathbf{d}$	$c2/m11$ L18 $cm11$ L13

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group a' b' d	Scanning group \mathcal{H}	Linear orbit sd	Sectional layer group $\mathcal{L}(sd)$		
(hhl) (\overline{hhl}) $(\mathbf{a} - \mathbf{b} + \mathbf{c})/4$	$\mathbf{a} - \mathbf{b}$ $n\hat{\mathbf{a}} - mc$ $p\hat{\mathbf{a}} + qc$	$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ $p2_1/b11 (\mathbf{a}'/4)$ $pb11$	L16	
	$\mathbf{a} - \mathbf{b}$ $n\hat{\mathbf{a}} + mc$ $-p\hat{\mathbf{a}} + qc$				n odd m even	L17
					p even q odd	L12
					n even m odd	$\widehat{p}\overline{1}$ L02
					p odd q even	$c211$ L12
						$\widehat{p}1$ L01
					n even m odd	$C2/n11$ $\widehat{p}\overline{1}$ L02
					p odd q odd	$c211 (\mathbf{b}'/4)$ L10
						$\widehat{p}1$ L01
					n odd m odd	$B2/n11$ $p2_1/b11$ L17
					p even q odd	$p2/b11 (\mathbf{a}'/4)$ L16
						$pb11 (\mathbf{a}'/4)$ L12
					n odd m odd	$I2/c11$ $p2_1/b11$ L17
					p odd q even	$p2/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ L16
		$pb11 (\mathbf{a}'/4)$ L12				
	n odd m even	$I2/b11$ $p2/b11$ L16				
	p odd q odd	$p2_1/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ L17				
		$pb11$ L12				
	$\hat{\mathbf{a}} = (\mathbf{a} + \mathbf{b} + \mathbf{c})/2$					
(\overline{hhl}) (hhl) $(\mathbf{a}/2 \text{ or } \mathbf{b}/2)$	$\mathbf{a} + \mathbf{b}$ $n\hat{\mathbf{a}} - mc$ $p\hat{\mathbf{a}} + qc$	$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ $p2_1/b11 (\mathbf{a}'/4)$ $pb11$	L16	
	$\mathbf{a} + \mathbf{b}$ $n\hat{\mathbf{a}} + mc$ $-p\hat{\mathbf{a}} + qc$				n odd m even	L17
					p even q odd	L12
					n even m odd	$\widehat{p}\overline{1}$ L02
					p odd q even	$c211$ L12
						$p1$ L01
					n even m odd	$C2/n11$ $\widehat{p}\overline{1}$ L02
					p odd q odd	$c211 (\mathbf{b}'/4)$ L10
						$\widehat{p}1$ L01
					n odd m odd	$B2/n11$ $p2_1/b11$ L17
					p even q odd	$p2/b11 (\mathbf{a}'/4)$ L16
						$pb11 (\mathbf{a}'/4)$ L12
					n odd m odd	$I2/c11$ $p2_1/b11$ L17
					p odd q even	$p2/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ L16
		$pb11 (\mathbf{a}'/4)$ L12				
	n odd m even	$I2/b11$ $p2/b11$ L16				
	p odd q odd	$p2_1/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ L17				
		$pb11$ L12				
	$\hat{\mathbf{a}} = (\mathbf{b} - \mathbf{a} + \mathbf{c})/2$					
l odd $\Rightarrow n = 2l, m = 2h + l; l$ even $\Rightarrow n = l, m = h + l/2$						

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}				
(<i>mn0</i>)	\mathbf{c}	$n\mathbf{a} - m\mathbf{b}$	$p\mathbf{a} + q\mathbf{b}$				
($\bar{n}m0$)	\mathbf{c}	$m\mathbf{a} + n\mathbf{b}$	$-q\mathbf{a} + p\mathbf{b}$				
($\bar{m}n0$)	\mathbf{c}	$n\mathbf{a} + m\mathbf{b}$	$-p\mathbf{a} + q\mathbf{b}$				
(<i>nm0</i>)	\mathbf{c}	$m\mathbf{a} - n\mathbf{b}$	$q\mathbf{a} + p\mathbf{b}$				
$(\mathbf{b} + \mathbf{c})/8$			n odd	m even	$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ L17 $p2/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ L16 $pb11 (\mathbf{a}'/4)$ L12
			p even	q odd			
			n even	m odd	$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ L16 $p2_1/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ L17 $pb11$ L12
			p odd	q even			
			n even	m odd	$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ L16 $p2_1/b11 (\mathbf{a}'/4)$ L17 $pb11$ L12
			p odd	q odd			
			n odd	m odd	$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}\bar{1}$ L02 $c211$ L10 $\widehat{p}1$ L01
			p even	q odd			
			n odd	m odd	$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}\bar{1}$ L02 $c211 (\mathbf{b}'/4)$ L10 $\widehat{p}1$ L01
			p odd	q even			
			n odd	m even	$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ L17 $p2/b11 (\mathbf{a}'/4)$ L16 $pb11 (\mathbf{a}'/4)$ L12
			p odd	q odd			
$(\mathbf{b}/4 + \mathbf{c}/8)$	(<i>0mn</i>)	\mathbf{a}	$n\mathbf{b} - m\mathbf{c}$	$p\mathbf{b} + q\mathbf{c}$			
	($0\bar{m}n$)	\mathbf{a}	$n\mathbf{b} + m\mathbf{c}$	$-p\mathbf{b} + q\mathbf{c}$			
			n odd	m even	$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ L17 $p2/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ L16 $pb11 (\mathbf{a}'/4)$ L12
			p even	q odd			
			n even	m odd	$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ L16 $p2_1/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ L17 $pb11$ L12
			p odd	q even			
			n even	m odd	$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ L16 $p2_1/b11 (\mathbf{a}'/4)$ L17 $pb11$ L12
			p odd	q odd			
			n odd	m odd	$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}\bar{1}$ L02 $c211$ L10 $\widehat{p}1$ L01
			p even	q odd			
			n odd	m odd	$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}\bar{1}$ L02 $c211 (\mathbf{b}'/4)$ L10 $\widehat{p}1$ L01
			p odd	q even			
		n odd	m even	$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ L17 $p2/b11 (\mathbf{a}'/4)$ L16 $pb11 (\mathbf{a}'/4)$ L12	
		p odd	q odd				

Continued

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$		
$(m0n)$ $(m0\bar{n})$ $(\mathbf{a}/4 + 3\mathbf{c}/8)$	\mathbf{b} $mc - na$ $qc + pa$	$I2/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ L16		
	\mathbf{b} $mc + na$ $-qc + pa$			$p2_1/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ L17		
	n odd m even			$pb11$ L12		
	p even q odd					
	n even m odd			$I2/c11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ L17
	p odd q even				$p2/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ L16	
	n even m odd			$B2/n11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ L17
	p odd q odd				$p2/b11 (\mathbf{a}'/4)$ L16	
	n odd m odd			$C2/n11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}\bar{1}$ L02
	p even q odd				$c211 (\mathbf{b}'/4)$ L10	
	n odd m odd			$C2/c11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}\bar{1}$ L02
	p odd q even				$c211$ L10	
n odd m even	$B2/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}1$ L01			
p odd q odd			$p2/b11$ L16			
			$p2_1/b11 (\mathbf{a}'/4)$ L17			
			$pb11$ L12			
(hhl) $(\bar{h}\bar{h}l)$ $(\mathbf{a}/4 + 3\mathbf{c}/8)$	$\mathbf{a} - \mathbf{b}$ $\widehat{n}\mathbf{a} - mc$ $p\widehat{\mathbf{a}} + qc$	$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ L16		
	$\mathbf{a} - \mathbf{b}$ $\widehat{n}\mathbf{a} + mc$ $-p\widehat{\mathbf{a}} + qc$			$p2_1/b11 (\mathbf{a}'/4)$ L17		
	n odd m even			$pb11$ L12		
	p even q odd					
	n even m odd			$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}\bar{1}$ L02
	p odd q even				$c211$ L12	
	n even m odd			$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}1$ L01
	p odd q odd				$c211 (\mathbf{b}'/4)$ L10	
	n odd m odd			$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}\bar{1}$ L02
	p even q odd				$p2_1/b11$ L17	
	n odd m odd			$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11 (\mathbf{a}'/4)$ L16
	p odd q even				$pb11 (\mathbf{a}'/4)$ L12	
n odd m even	$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ L16			
p odd q odd			$p2_1/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ L17			
			$pb11$ L12			
	$\widehat{\mathbf{a}} = (\mathbf{a} + \mathbf{b} + \mathbf{c})/2$					

Continued

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$
$(\overline{h}hl)$ $(\overline{h}hl)$ $3(\mathbf{a}/4 + \mathbf{c}/8)$	$\mathbf{a} + \mathbf{b}$ $n\hat{\mathbf{a}} - m\mathbf{c}$ $p\hat{\mathbf{a}} + q\mathbf{c}$	$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ L16
	$\mathbf{a} + \mathbf{b}$ $n\hat{\mathbf{a}} + m\mathbf{c}$ $-p\hat{\mathbf{a}} + q\mathbf{c}$			$p2_1/b11 (\mathbf{a}'/4)$ L17
	n odd m even	$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11$ L12
	p even q odd			$\widehat{p}\overline{1}$ L02
	n even m odd	$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$c211$ L12
	p odd q even			$\widehat{p}1$ L01
	n even m odd	$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}\overline{1}$ L02
	p odd q odd			$c211 (\mathbf{b}'/4)$ L10
	n odd m odd	$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}1$ L01
	p even q odd			$p2_1/b11$ L17
	n odd m odd	$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11 (\mathbf{a}'/4)$ L16
	p odd q even			$pb11 (\mathbf{a}'/4)$ L12
	n odd m odd	$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ L17
	p odd q even			$p2/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ L16
n odd m even	$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$ L12	
p odd q odd			$p2/b11$ L16	
	$\widehat{\mathbf{a}} = (\mathbf{b} - \mathbf{a} + \mathbf{c})/2$			$p2_1/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ L17
				$pb11$ L12

l odd $\Rightarrow n = 2l, m = 2h + l; l$ even $\Rightarrow n = l, m = h + l/2$

Continued

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}			
$(mn0)$	\mathbf{c}	$n\mathbf{a} - m\mathbf{b}$	$p\mathbf{a} + q\mathbf{b}$			
$(\bar{n}m0)$	\mathbf{c}	$m\mathbf{a} + n\mathbf{b}$	$-q\mathbf{a} + p\mathbf{b}$			
$(\bar{m}n0)$	\mathbf{c}	$n\mathbf{a} + m\mathbf{b}$	$-p\mathbf{a} + q\mathbf{b}$			
$(nm0)$	\mathbf{c}	$m\mathbf{a} - n\mathbf{b}$	$q\mathbf{a} + p\mathbf{b}$			
		n odd	m even	$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ L17 $p2/b11 [(a' + b')/4]$ L16 $pb11 (a'/4)$ L12
		p even	q odd			
		n even	m odd	$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ L16 $p2_1/b11 [(a' + b')/4]$ L17 $pb11$ L12
		p odd	q even			
		n even	m odd	$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ L16 $p2_1/b11 (a'/4)$ L17 $pb11$ L12
		p odd	q odd			
		n odd	m odd	$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}\bar{1}$ L02 $c211$ L10 $\widehat{p}1$ L01
		p even	q odd			
		n odd	m odd	$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}\bar{1}$ L02 $c211 (b'/4)$ L10 $\widehat{p}1$ L01
		p odd	q even			
		n odd	m even	$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ L17 $p2/b11 (a'/4)$ L16 $pb11 (a'/4)$ L12
		p odd	q odd			
$(0mn)$	\mathbf{a}	$n\mathbf{b} - m\mathbf{c}$	$p\mathbf{b} + q\mathbf{c}$			
$(0\bar{m}n)$	\mathbf{a}	$n\mathbf{b} + m\mathbf{c}$	$-p\mathbf{b} + q\mathbf{c}$			
		n odd	m even	$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ L17 $p2/b11 [(a' + b')/4]$ L16 $pb11 (a'/4)$ L12
		p even	q odd			
		n even	m odd	$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ L16 $p2_1/b11 [(a' + b')/4]$ L17 $pb11$ L12
		p odd	q even			
		n even	m odd	$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ L16 $p2_1/b11 (a'/4)$ L17 $pb11$ L12
		p odd	q odd			
		n odd	m odd	$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}\bar{1}$ L02 $c211$ L10 $\widehat{p}1$ L01
		p even	q odd			
		n odd	m odd	$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}\bar{1}$ L02 $c211 (b'/4)$ L10 $\widehat{p}1$ L01
		p odd	q even			
		n odd	m even	$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ L17 $p2/b11 (a'/4)$ L16 $pb11 (a'/4)$ L12
		p odd	q odd			

Continued

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$		
$(m0n)$ $(m0\bar{n})$ $(\mathbf{a} + \mathbf{b} + \mathbf{c})/4$	\mathbf{b} $mc - na$ $qc + pa$	$I2/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$	$p2/b11$ L16		
	\mathbf{b} $mc + na$ $-qc + pa$			$p2_1/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ L17		
	n odd m even			$pb11$ L12		
	p even q odd					
	n even m odd			$I2/c11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$	$p2_1/b11$ L17
	p odd q even				$p2/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ L16	
	n even m odd			$B2/n11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$	$p2_1/b11$ L17
	p odd q odd				$p2/b11 (\mathbf{a}'/4)$ L16	
	n odd m odd			$C2/n11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$	$\widehat{p}\bar{1}$ L02
	p even q odd				$c211 (\mathbf{b}'/4)$ L10	
	n odd m odd			$C2/c11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$	$\widehat{p}\bar{1}$ L02
	p odd q even				$c211$ L10	
n odd m even	$B2/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}1$ L01			
p odd q odd			$p2/b11$ L16			
			$p2_1/b11 (\mathbf{a}'/4)$ L17			
			$pb11$ L12			
(hhl) $(\bar{h}hl)$	$\mathbf{a} - \mathbf{b}$ $\widehat{n}\mathbf{a} - mc$ $p\widehat{\mathbf{a}} + qc$	$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ L16		
	$\mathbf{a} - \mathbf{b}$ $\widehat{n}\mathbf{a} + mc$ $-p\widehat{\mathbf{a}} + qc$			$p2_1/b11 (\mathbf{a}'/4)$ L17		
	n odd m even			$pb11$ L12		
	p even q odd					
	n even m odd			$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}\bar{1}$ L02
	p odd q even				$c211$ L12	
	n even m odd			$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}1$ L01
	p odd q odd				$c211 (\mathbf{b}'/4)$ L10	
	n odd m odd			$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}\bar{1}$ L02
	p even q odd				$p2_1/b11$ L17	
	n odd m odd			$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11 (\mathbf{a}'/4)$ L16
	p odd q even				$pb11 (\mathbf{a}'/4)$ L12	
n odd m even	$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ L16			
p odd q odd			$p2_1/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ L17			
			$pb11$ L12			
	$\widehat{\mathbf{a}} = (\mathbf{a} + \mathbf{b} + \mathbf{c})/2$					

Continued

Orientation orbit (hkl)	Conventional basis of the scanning group $\mathbf{a}' \quad \mathbf{b}' \quad \mathbf{d}$	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$
$(\overline{h}hl)$ $(\overline{h}hl)$	$\mathbf{a} + \mathbf{b} \quad n\hat{\mathbf{a}} - mc \quad p\hat{\mathbf{a}} + qc$	$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2/b11$ L16
	$\mathbf{a} + \mathbf{b} \quad n\hat{\mathbf{a}} + mc \quad -p\hat{\mathbf{a}} + qc$		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2_1/b11 (\mathbf{a}'/4)$ L17
	$n \text{ odd} \quad m \text{ even}$ $p \text{ even} \quad q \text{ odd}$		$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11$ L12
	$n \text{ even} \quad m \text{ odd}$ $p \text{ odd} \quad q \text{ even}$	$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$\widehat{p1}$ L02
			$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$c211$ L12
			$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p1}$ L01
	$n \text{ even} \quad m \text{ odd}$ $p \text{ odd} \quad q \text{ odd}$	$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$\widehat{p1}$ L02
			$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$c211 (\mathbf{b}'/4)$ L10
			$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p1}$ L01
	$n \text{ odd} \quad m \text{ odd}$ $p \text{ even} \quad q \text{ odd}$	$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2_1/b11$ L17
			$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2/b11 (\mathbf{a}'/4)$ L16
			$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$ L12
	$n \text{ odd} \quad m \text{ odd}$ $p \text{ odd} \quad q \text{ even}$	$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2_1/b11$ L17
			$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ L16
		$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$ L12	
$n \text{ odd} \quad m \text{ even}$ $p \text{ odd} \quad q \text{ odd}$	$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2/b11$ L16	
		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2_1/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ L17	
		$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11$ L12	
	$\hat{\mathbf{a}} = (\mathbf{b} - \mathbf{a} + \mathbf{c})/2$			
$l \text{ odd} \Rightarrow n = 2l, m = 2h + l; l \text{ even} \Rightarrow n = l, m = h + l/2$				

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$
$(\bar{h}2h\bar{l})$	$2\mathbf{a} + \mathbf{b}$ $n\mathbf{b} - m\mathbf{c}$ $p\mathbf{b} + q\mathbf{c}$	$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$ L10
$(\bar{h}h2hl)$	$\mathbf{b} - \mathbf{a}$ $-n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$ $-p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$			$\hat{p}1$ L01
$(2h\bar{h}hl)$	$-(\mathbf{a} + 2\mathbf{b})$ $n\mathbf{a} - m\mathbf{c}$ $p\mathbf{a} + q\mathbf{c}$	$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08
	n odd m even q odd m odd q odd			$p2_111$ ($\mathbf{b}'/4$) L09
	p odd q even	$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p1$ L01
				$p211$ L08 $p2_111$ L09 $p1$ L01
	l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$			

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}				
$(0h\bar{h}l)$	\mathbf{a}	$n(\mathbf{a} + 2\mathbf{b}) - m\mathbf{c}$	$p(\mathbf{a} + 2\mathbf{b}) + q\mathbf{c}$				
$(\bar{h}0hl)$	\mathbf{b}	$-n(2\mathbf{a} + \mathbf{b}) - m\mathbf{c}$	$-p(2\mathbf{a} + \mathbf{b}) + q\mathbf{c}$				
$(h\bar{h}0l)$	$-(\mathbf{a} + \mathbf{b})$	$n(\mathbf{a} - \mathbf{b}) - m\mathbf{c}$	$p(\mathbf{a} - \mathbf{b}) + q\mathbf{c}$				
		n odd	m even	$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$	L10
			q odd			$\hat{p}1$	L01
			m odd	$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p211$	L08
			q odd		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2_111 (\mathbf{b}'/4)$	L09
					$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p1$	L01
			m odd	$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p211$	L08
		p odd	q even		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2_111$	L09
					$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p1$	L01
	l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$						

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$				
$(\bar{h}2h\bar{l})$	$2\mathbf{a} + \mathbf{b}$ $n\mathbf{b} - m\mathbf{c}$ $p\mathbf{b} + q\mathbf{c}$ n odd m even q odd m odd q odd p odd q even	$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$ L10 $\widehat{p}1$ L01				
		$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111$ ($\mathbf{b}'/4$) L09 $p1$ L01				
		$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111$ L09 $p1$ L01				
		$(\bar{h}h2hl)$ ($c/3$)	$\mathbf{b} - \mathbf{a}$ $-n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$ $-p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$ n odd m even q odd m odd q odd p odd q even	$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$ L10 $\widehat{p}1$ L01		
				$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111$ ($\mathbf{b}'/4$) L09 $p1$ L01		
				$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111$ L09 $p1$ L01		
				$(2h\bar{h}\bar{l})$ ($c/6$)	$-(\mathbf{a} + 2\mathbf{b})$ $n\mathbf{a} - m\mathbf{c}$ $p\mathbf{a} + q\mathbf{c}$ n odd m even q odd m odd q odd p odd q even	$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$ L10 $\widehat{p}1$ L01
						$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111$ ($\mathbf{b}'/4$) L09 $p1$ L01
						$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111$ L09 $p1$ L01
l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$								

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$				
$(0h\bar{h}l)$ ($c/3$)	\mathbf{a} $n(\mathbf{a} + 2\mathbf{b}) - m\mathbf{c}$ $p(\mathbf{a} + 2\mathbf{b}) + q\mathbf{c}$ n odd m even q odd m odd q odd m odd q even p odd	$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$ L10 $\widehat{p}1$ L01				
		$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111$ ($\mathbf{b}'/4$) L09 $p1$ L01				
		$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111$ L09 $p1$ L01				
		$(\bar{h}0hl)$ ($c/6$)	\mathbf{b} $-n(2\mathbf{a} + \mathbf{b}) - m\mathbf{c}$ $-p(2\mathbf{a} + \mathbf{b}) + q\mathbf{c}$ n odd m even q odd m odd q odd m odd q even p odd	$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$ L10 $\widehat{p}1$ L01		
				$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111$ ($\mathbf{b}'/4$) L09 $p1$ L01		
				$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111$ L09 $p1$ L01		
				$(h\bar{h}0l)$	$-(\mathbf{a} + \mathbf{b})$ $n(\mathbf{a} - \mathbf{b}) - m\mathbf{c}$ $p(\mathbf{a} - \mathbf{b}) + q\mathbf{c}$ n odd m even q odd m odd q odd m odd q even p odd	$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$ L10 $\widehat{p}1$ L01
						$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111$ ($\mathbf{b}'/4$) L09 $p1$ L01
						$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111$ L09 $p1$ L01
l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$								

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$		
$(\bar{h}2h\bar{l})$	$2\mathbf{a} + \mathbf{b}$ $n\mathbf{b} - m\mathbf{c}$ $p\mathbf{b} + q\mathbf{c}$ n odd m even q odd m odd	$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$ $\widehat{p}1$	L10 L01	
		$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111$ ($\mathbf{b}'/4$) $p1$	L08 L09 L01	
		$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111$ $p1$	L08 L09 L01	
	$(\bar{h}\bar{h}2hl)$ ($c/6$)	$\mathbf{b} - \mathbf{a}$ $-n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$ $-p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$ n odd m even q odd m odd	$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$ $\widehat{p}1$	L10 L01
			$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111$ ($\mathbf{b}'/4$) $p1$	L08 L09 L01
			$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111$ $p1$	L08 L09 L01
	$(2h\bar{h}\bar{l})$ ($c/3$)	$-(\mathbf{a} + 2\mathbf{b})$ $n\mathbf{a} - m\mathbf{c}$ $p\mathbf{a} + q\mathbf{c}$ n odd m even q odd m odd	$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$ $\widehat{p}1$	L10 L01
			$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111$ ($\mathbf{b}'/4$) $p1$	L08 L09 L01
			$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111$ $p1$	L08 L09 L01
	l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$					

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
$(0\bar{h}hl)$ ($c/6$)	\mathbf{a} $n(\mathbf{a} + 2\mathbf{b}) - m\mathbf{c}$ $p(\mathbf{a} + 2\mathbf{b}) + q\mathbf{c}$ n odd m even q odd m odd q odd	$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$ L10 $\widehat{p}1$ L01	
		$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111$ ($\mathbf{b}'/4$) L09 $p1$ L01	
		$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111$ L09 $p1$ L01	
	$(\bar{h}0hl)$ ($c/3$)	\mathbf{b} $-n(2\mathbf{a} + \mathbf{b}) - m\mathbf{c}$ $-p(2\mathbf{a} + \mathbf{b}) + q\mathbf{c}$ n odd m even q odd m odd q odd	$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$ L10 $\widehat{p}1$ L01
			$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111$ ($\mathbf{b}'/4$) L09 $p1$ L01
			$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111$ L09 $p1$ L01
	$(h\bar{h}0l)$	$-(\mathbf{a} + \mathbf{b})$ $n(\mathbf{a} - \mathbf{b}) - m\mathbf{c}$ $p(\mathbf{a} - \mathbf{b}) + q\mathbf{c}$ n odd m even q odd m odd q odd	$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$ L10 $\widehat{p}1$ L01
			$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111$ ($\mathbf{b}'/4$) L09 $p1$ L01
			$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111$ L09 $p1$ L01
	l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$				

Orientation orbit

Hexagonal axes ($hkil$)	Rhombohedral axes (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$			
$(0h\bar{h}l)$ $(\bar{h}0hl)$ $(h\bar{h}0l)$	(hhl) (lhh) (hlh)	\mathbf{a} $n\mathbf{c} - m\mathbf{c}_r$ $p\mathbf{c} + q\mathbf{c}_r$ \mathbf{b} $n\mathbf{c} - m\mathbf{a}_r$ $p\mathbf{c} + q\mathbf{a}_r$ $-(\mathbf{a} + \mathbf{b})$ $n\mathbf{c} - m\mathbf{b}_r$ $p\mathbf{c} + q\mathbf{b}_r$	$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111 (\mathbf{b}'/4)$ L09 $p1$ L01			
		n odd m even p even q odd or n even m odd p odd q even p odd q odd				$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111$ L09 $p1$ L01
		n odd m odd						
Transformation of indices from hexagonal to auxiliary monoclinic basis l odd $\Rightarrow n = l - 2h, m = 6h; l$ even $\Rightarrow n = l/2 - h, m = 3h$ Transformation of indices from rhombohedral to auxiliary monoclinic basis l odd $\Rightarrow n = l, m = 2h + l; l$ even $\Rightarrow n = l/2, m = h + l/2$								

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$
$(0h\bar{h}l)$ $(\bar{h}0hl)$ $(h\bar{h}0l)$	\mathbf{a} $n(\mathbf{a} + 2\mathbf{b}) - m\mathbf{c}$ $p(\mathbf{a} + 2\mathbf{b}) + q\mathbf{c}$ \mathbf{b} $-n(2\mathbf{a} + \mathbf{b}) - m\mathbf{c}$ $-p(2\mathbf{a} + \mathbf{b}) + q\mathbf{c}$ $-(\mathbf{a} + \mathbf{b})$ $n(\mathbf{a} - \mathbf{b}) - m\mathbf{c}$ $p(\mathbf{a} - \mathbf{b}) + q\mathbf{c}$			
	n odd m even q odd m odd q odd m odd q even p odd	$Cm11$	$s\mathbf{d}$	$cm11$ L13
		$Im11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pm11$ L11
		$Bm11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pm11$ L11
	l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$			

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$
$(\bar{h}2h\bar{l})$ $(\bar{h}h2hl)$ $(2h\bar{h}l)$	$2\mathbf{a} + \mathbf{b}$ $n\mathbf{b} - m\mathbf{c}$ $p\mathbf{b} + q\mathbf{c}$ $\mathbf{b} - \mathbf{a}$ $-n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$ $-p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$ $-(\mathbf{a} + 2\mathbf{b})$ $na - mc$ $pa + qc$ <div style="text-align: right; margin-right: 100px;"> n odd m even q odd m odd q odd m odd p odd q even </div>	$Cm11$	$s\mathbf{d}$	$cm11$ L13
		$Im11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pm11$ L11
		$Bm11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pm11$ L11
	l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$			

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}			
$(0h\bar{h}l)$	\mathbf{a}	$n(\mathbf{a} + 2\mathbf{b}) - m\mathbf{c}$	$p(\mathbf{a} + 2\mathbf{b}) + q\mathbf{c}$			
$(\bar{h}0hl)$	\mathbf{b}	$-n(2\mathbf{a} + \mathbf{b}) - m\mathbf{c}$	$-p(2\mathbf{a} + \mathbf{b}) + q\mathbf{c}$			
$(h\bar{h}0l)$	$-(\mathbf{a} + \mathbf{b})$	$n(\mathbf{a} - \mathbf{b}) - m\mathbf{c}$	$p(\mathbf{a} - \mathbf{b}) + q\mathbf{c}$			
		n odd	m even	$Cc11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}1$ L01
		p even	q odd	$Bb11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11$ L12
		n even	m odd	$Ib11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11$ L12
		p odd	q even	$Ic11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$ L12
		n even	m odd	$Bn11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$ L12
		p odd	q odd	$Cn11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}1$ L01
		n odd	m even			
		p odd	q odd			
	l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$					

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$
$(\bar{h}2h\bar{h}l)$	$2\mathbf{a} + \mathbf{b}$	$n\mathbf{b} - m\mathbf{c}$	$p\mathbf{b} + q\mathbf{c}$	
$(\bar{h}h2hl)$	$\mathbf{b} - \mathbf{a}$	$-n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$	$-p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$	
$(2hh\bar{h}l)$	$-(\mathbf{a} + 2\mathbf{b})$	$n\mathbf{a} - m\mathbf{c}$	$p\mathbf{a} + q\mathbf{c}$	
		n odd m even		
		p even q odd	$Cc11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$
		n even m odd	$Bb11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$
		p odd q even	$Ib11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$
		n even m odd	$Ic11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$
		p odd q odd	$Bn11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$
		n odd m odd	$Cn11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$
		p even q odd		$\widehat{p}1$
		n odd m even		$pb11$
		p odd q even		$pb11$
		n odd m even		$pb11 (\mathbf{a}'/4)$
		p odd q odd		$pb11 (\mathbf{a}'/4)$
		n odd m even		$\widehat{p}1$
		p odd q odd		L01
	l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$			

Orientation orbit

Hexagonal axes ($hkil$)	Rhombohedral axes (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$
$(0h\bar{h}l)$ $(\bar{h}0hl)$ $(h\bar{h}0l)$	(hhl) (lhh) (hlh)	\mathbf{a} $n\mathbf{c} - m\mathbf{c}_r$ $p\mathbf{c} + q\mathbf{c}_r$ \mathbf{b} $n\mathbf{c} - m\mathbf{a}_r$ $p\mathbf{c} + q\mathbf{a}_r$ $-(\mathbf{a} + \mathbf{b})$ $n\mathbf{c} - m\mathbf{b}_r$ $p\mathbf{c} + q\mathbf{b}_r$	$Im11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pm11$ L11
		n odd m even p even q odd or n even m odd p odd q even p odd q odd n odd m odd			
		$Bm11$ $[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$ $pm11$ L11 $Cm11$ $s\mathbf{d}$ $cm11$ L13			
Transformation of indices from hexagonal to auxiliary monoclinic basis l odd $\Rightarrow n = l - 2h, m = 6h; l$ even $\Rightarrow n = l/2 - h, m = 3h$ Transformation of indices from rhombohedral to auxiliary monoclinic basis l odd $\Rightarrow n = l, m = 2h + l; l$ even $\Rightarrow n = l/2, m = h + l/2$					

Orientation orbit

Hexagonal axes ($hkil$)	Rhombohedral axes (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$
$(0h\bar{h}l)$ $(\bar{h}0hl)$ $(h\bar{h}0l)$	(hhl) (lhh) (hlh)	\mathbf{a} $n\mathbf{c} - m\mathbf{c}_r$ $p\mathbf{c} + q\mathbf{c}_r$ \mathbf{b} $n\mathbf{c} - m\mathbf{a}_r$ $p\mathbf{c} + q\mathbf{a}_r$ $-(\mathbf{a} + \mathbf{b})$ $n\mathbf{c} - m\mathbf{b}_r$ $p\mathbf{c} + q\mathbf{b}_r$			
		n odd m even	$Ib11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11$ L12
		p even q odd	$Ic11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$ L12
		n even m odd	$Bn11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$ L12
		p odd q even	$Cn11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$ L01
		n even m odd	$Cc11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$ L01
		p odd q odd	$Bb11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11$ L12
<p>Transformation of indices from hexagonal to auxiliary monoclinic basis l odd $\Rightarrow n = l - 2h, m = 6h; l$ even $\Rightarrow n = l/2 - h, m = 3h$</p> <p>Transformation of indices from rhombohedral to auxiliary monoclinic basis l odd $\Rightarrow n = l, m = 2h + l; l$ even $\Rightarrow n = l/2, m = h + l/2$</p>					

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$
$(\bar{h}2h\bar{l})$	$2\mathbf{a} + \mathbf{b}$ $n\mathbf{b} - m\mathbf{c}$ $p\mathbf{b} + q\mathbf{c}$			
$(\bar{h}h2hl)$	$\mathbf{b} - \mathbf{a}$ $-n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$ $-p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$			
$(2h\bar{h}\bar{l})$	$-(\mathbf{a} + 2\mathbf{b})$ $n\mathbf{a} - m\mathbf{c}$ $p\mathbf{a} + q\mathbf{c}$			
	n odd m even	$C2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c2/m11$ L18 $cm11$ L13
	q odd	$I2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ L14 $p2_1/m11 [(a' + b')/4]$ L15 $pm11$ L11
	m odd	$B2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ L14 $p2_1/m11 (a'/4)$ L15 $pm11$ L11
	q odd			
	p odd q even			
	l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$			

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}				
$(\bar{h}2h\bar{h}l)$	$2\mathbf{a} + \mathbf{b}$	$n\mathbf{b} - m\mathbf{c}$	$p\mathbf{b} + q\mathbf{c}$			$\widehat{p}1$	L02
$(\bar{h}h2hl)$	$\mathbf{b} - \mathbf{a}$	$-n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$	$-p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$				
$(2h\bar{h}hl)$	$-(\mathbf{a} + 2\mathbf{b})$	$n\mathbf{a} - m\mathbf{c}$	$p\mathbf{a} + q\mathbf{c}$				
		n odd	m even	$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$c211$	L10
		p even	q odd		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$\widehat{p}1$	L01
					$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$		
		n even	m odd	$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2/b11$	L16
		p odd	q even		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2_1/b11 (\mathbf{a}'/4)$	L17
					$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11$	L12
		n even	m odd	$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2/b11$	L16
		p odd	q odd		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2_1/b11 [(\mathbf{a}' + \mathbf{b}')/4]$	L17
					$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11$	L12
		n odd	m odd	$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2_1/b11$	L17
		p even	q odd		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2/b11 [(\mathbf{a}' + \mathbf{b}')/4]$	L16
					$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$	L12
		n odd	m odd	$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2_1/b11$	L17
		p odd	q even		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2/b11 (\mathbf{a}'/4)$	L16
					$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$	L12
		n odd	m even	$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$\widehat{p}1$	L02
		p odd	q odd		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$c211 (\mathbf{b}'/4)$	L10
					$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}1$	L01
	l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$						

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$				
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}							
$(0h\bar{h}l)$	\mathbf{a}	$n(\mathbf{a} + 2\mathbf{b}) - m\mathbf{c}$	$p(\mathbf{a} + 2\mathbf{b}) + q\mathbf{c}$	$C2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c2/m11$	L18			
$(\bar{h}0hl)$	\mathbf{b}	$-n(2\mathbf{a} + \mathbf{b}) - m\mathbf{c}$	$-p(2\mathbf{a} + \mathbf{b}) + q\mathbf{c}$				$I2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$cm11$	L13
$(h\bar{h}0l)$	$-(\mathbf{a} + \mathbf{b})$	$n(\mathbf{a} - \mathbf{b}) - m\mathbf{c}$	$p(\mathbf{a} - \mathbf{b}) + q\mathbf{c}$						$B2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$
			q odd	$p2_1/m11$	$p2_1/m11 [(a' + b')/4]$	L15				
			m odd	$pm11$		L11				
			q odd							
			m odd							
			p odd							
			q even							
	l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$									

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
	\mathbf{a}	\mathbf{b}	\mathbf{d}				
$(0\bar{h}\bar{l})$	\mathbf{a}	$n(\mathbf{a} + 2\mathbf{b}) - m\mathbf{c}$	$p(\mathbf{a} + 2\mathbf{b}) + q\mathbf{c}$				
$(\bar{h}0hl)$	\mathbf{b}	$-n(2\mathbf{a} + \mathbf{b}) - m\mathbf{c}$	$-p(2\mathbf{a} + \mathbf{b}) + q\mathbf{c}$				
$(h\bar{h}0l)$	$-(\mathbf{a} + \mathbf{b})$	$n(\mathbf{a} - \mathbf{b}) - m\mathbf{c}$	$p(\mathbf{a} - \mathbf{b}) + q\mathbf{c}$				
		n odd	m even	$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$\widehat{p}\bar{1}$	L02
		p even	q odd		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$c211$	L10
					$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}1$	L01
		n even	m odd	$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2/b11$	L16
		p odd	q even		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2_1/b11 (\mathbf{a}'/4)$	L17
					$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11$	L12
		n even	m odd	$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2/b11$	L16
		p odd	q odd		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2_1/b11 [(\mathbf{a}' + \mathbf{b}')/4]$	L17
					$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11$	L12
		n odd	m odd	$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2_1/b11$	L17
		p even	q odd		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2/b11 [(\mathbf{a}' + \mathbf{b}')/4]$	L16
					$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$	L12
		n odd	m odd	$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2_1/b11$	L17
		p odd	q even		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2/b11 (\mathbf{a}'/4)$	L16
					$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$	L12
		n odd	m even	$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$\widehat{p}\bar{1}$	L02
		p odd	q odd		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$c211 (\mathbf{b}'/4)$	L10
					$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}1$	L01
	l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$						

Orientation orbit

Hexagonal axes ($hkil$)	Rhombohedral axes (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$			
$(0h\bar{h}l)$ $(\bar{h}0hl)$ $(h\bar{h}0l)$	(hhl) (lhh) (hlh)	\mathbf{a} $n\mathbf{c} - m\mathbf{c}_r$ $p\mathbf{c} + q\mathbf{c}_r$ \mathbf{b} $n\mathbf{c} - m\mathbf{a}_r$ $p\mathbf{c} + q\mathbf{a}_r$ $-(\mathbf{a} + \mathbf{b})$ $n\mathbf{c} - m\mathbf{b}_r$ $p\mathbf{c} + q\mathbf{b}_r$	$I2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ L14 $p2_1/m11 [(a' + b')/4]$ L15 $pm11$ L11			
		n odd m even p even q odd or n even m odd p odd q even p odd q odd				$B2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ L14 $p2_1/m11 (a'/4)$ L15 $pm11$ L11
		n odd m odd						
Transformation of indices from hexagonal to auxiliary monoclinic basis l odd $\Rightarrow n = l - 2h, m = 6h; l$ even $\Rightarrow n = l/2 - h, m = 3h$ Transformation of indices from rhombohedral to auxiliary monoclinic basis l odd $\Rightarrow n = l, m = 2h + l; l$ even $\Rightarrow n = l/2, m = h + l/2$								

Orientation orbit

Hexagonal axes ($hkil$)	Rhombohedral axes (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$
		\mathbf{a}'	\mathbf{b}'	\mathbf{d}			
$(0h\bar{h}l)$	(hhl)	\mathbf{a}	$n\mathbf{c} - m\mathbf{c}_r$	$p\mathbf{c} + q\mathbf{c}_r$			
$(\bar{h}0hl)$	(lhh)	\mathbf{b}	$n\mathbf{c} - m\mathbf{a}_r$	$p\mathbf{c} + q\mathbf{a}_r$			
$(h\bar{h}0l)$	(hlh)	$-(\mathbf{a} + \mathbf{b})$	$n\mathbf{c} - m\mathbf{b}_r$	$p\mathbf{c} + q\mathbf{b}_r$			
			n odd	m even	$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2/b11$ L16
			p even	q odd		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2_1/b11 [(a' + b')/4]$ L17
			n even	m odd		$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11$ L12
			p odd	q even	$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2_1/b11$ L17
			n even	m odd		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2/b11 [(a' + b')/4]$ L16
			p odd	q odd		$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11 (a'/4)$ L12
			n even	m odd	$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2_1/b11$ L17
			p odd	q odd		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2/b11 (a'/4)$ L16
			n odd	m odd		$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11 (a'/4)$ L12
			p even	q odd	$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$\widehat{p}\bar{1}$ L02
			n odd	m odd		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$c211 (b'/4)$ L10
			p odd	q even		$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}1$ L01
			n odd	m odd	$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$\widehat{p}\bar{1}$ L02
			p odd	q even		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$c211$ L10
			n odd	m even		$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}1$ L01
			p odd	q odd	$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2/b11$ L16
			n even	m even		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2_1/b11 (a'/4)$ L17
			p odd	q odd		$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11$ L12
<p>Transformation of indices from hexagonal to auxiliary monoclinic basis l odd $\Rightarrow n = l - 2h, m = 6h$; l even $\Rightarrow n = l/2 - h, m = 3h$</p> <p>Transformation of indices from rhombohedral to auxiliary monoclinic basis l odd $\Rightarrow n = l, m = 2h + l$; l even $\Rightarrow n = l/2, m = h + l/2$</p>							

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$
$(\overline{mnm} + n0)$	\mathbf{c} $n\mathbf{a} - m\mathbf{b}$ $p\mathbf{a} + q\mathbf{b}$	$P211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p211$ L08
$(\overline{m + nmn}0)$	\mathbf{c} $m\mathbf{a} + (m + n)\mathbf{b}$ $-q\mathbf{a} + (p - q)\mathbf{b}$			$p1$ L01
$(\overline{nm + nm}0)$	\mathbf{c} $-(m + n)\mathbf{a} - n\mathbf{b}$ $(q - p)\mathbf{a} - p\mathbf{b}$			

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
$(\overline{mnm} + n0)$	\mathbf{c} $n\mathbf{a} - m\mathbf{b}$ $p\mathbf{a} + q\mathbf{b}$	$P2_111$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [$s\mathbf{d}, -s\mathbf{d}$]	$p2_111$	L09
$(\overline{m} + nmn0)$	\mathbf{c} $m\mathbf{a} + (m+n)\mathbf{b}$ $-q\mathbf{a} + (p-q)\mathbf{b}$			$p1$	L01
$(\overline{nm} + nm0)$	\mathbf{c} $-(m+n)\mathbf{a} - n\mathbf{b}$ $(q-p)\mathbf{a} - p\mathbf{b}$				

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
$(\overline{mnm} + n0)$	\mathbf{c} $n\mathbf{a} - m\mathbf{b}$ $p\mathbf{a} + q\mathbf{b}$	$P2_111$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [$s\mathbf{d}, -s\mathbf{d}$]	$p2_111$	L09
$(\overline{m + nmn}0)$	\mathbf{c} $m\mathbf{a} + (m + n)\mathbf{b}$ $-q\mathbf{a} + (p - q)\mathbf{b}$			$p1$	L01
$(\overline{nm + nm}0)$	\mathbf{c} $-(m + n)\mathbf{a} - n\mathbf{b}$ $(q - p)\mathbf{a} - p\mathbf{b}$				

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$
$(\overline{mnm} + n0)$	\mathbf{c} $n\mathbf{a} - m\mathbf{b}$ $p\mathbf{a} + q\mathbf{b}$	$P211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [$s\mathbf{d}, -s\mathbf{d}$]	$p211$ L08
$(\overline{m} + nmn0)$	\mathbf{c} $m\mathbf{a} + (m+n)\mathbf{b}$ $-q\mathbf{a} + (p-q)\mathbf{b}$			$p1$ L01
$(\overline{nm} + nm0)$	\mathbf{c} $-(m+n)\mathbf{a} - n\mathbf{b}$ $(q-p)\mathbf{a} - p\mathbf{b}$			

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$		
$(\overline{mnm} + n0)$	\mathbf{c} $n\mathbf{a} - m\mathbf{b}$ $p\mathbf{a} + q\mathbf{b}$	$P211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p211$	L08	
$(\overline{m} + nm0)$	\mathbf{c} $m\mathbf{a} + (m+n)\mathbf{b}$ $-q\mathbf{a} + (p-q)\mathbf{b}$				$p1$	L01
$(\overline{nm} + nm0)$	\mathbf{c} $-(m+n)\mathbf{a} - n\mathbf{b}$ $(q-p)\mathbf{a} - p\mathbf{b}$					

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$		
$(\overline{mnm} + n0)$	\mathbf{c} $n\mathbf{a} - m\mathbf{b}$ $p\mathbf{a} + q\mathbf{b}$	$P2_111$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [$s\mathbf{d}, -s\mathbf{d}$]	$p2_111$	L09	
$(\overline{m + nmn}0)$	\mathbf{c} $m\mathbf{a} + (m + n)\mathbf{b}$ $-q\mathbf{a} + (p - q)\mathbf{b}$				$p1$	L01
$(\overline{nm + nm}0)$	\mathbf{c} $-(m + n)\mathbf{a} - n\mathbf{b}$ $(q - p)\mathbf{a} - p\mathbf{b}$					

No. 174 $P\bar{6}$

$$\mathcal{G} = P\bar{6}$$

C_{3h}^1

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$
$(\overline{mnm} + n0)$	\mathbf{c} $n\mathbf{a} - m\mathbf{b}$ $p\mathbf{a} + q\mathbf{b}$	$Pm11$	$s\mathbf{d}$	$pm11$ L11
$(\overline{m + nmn}0)$	\mathbf{c} $m\mathbf{a} + (m + n)\mathbf{b}$ $-q\mathbf{a} + (p - q)\mathbf{b}$			
$(\overline{nm + nm}0)$	\mathbf{c} $-(m + n)\mathbf{a} - n\mathbf{b}$ $(q - p)\mathbf{a} - p\mathbf{b}$			

No. 175 $P6/m$

$$\mathcal{G} = P6/m$$

C_{6h}^1

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$
$(\overline{mnm} + n0)$	\mathbf{c} $n\mathbf{a} - m\mathbf{b}$ $p\mathbf{a} + q\mathbf{b}$	$P2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [$s\mathbf{d}, -s\mathbf{d}$]	$p2/m11$ L14
$(\overline{m + nmn}0)$	\mathbf{c} $m\mathbf{a} + (m + n)\mathbf{b}$ $-q\mathbf{a} + (p - q)\mathbf{b}$			$pm11$ L11
$(\overline{nm + nm}0)$	\mathbf{c} $-(m + n)\mathbf{a} - n\mathbf{b}$ $(q - p)\mathbf{a} - p\mathbf{b}$			

No. 176 $P6_3/m$

$$\mathcal{G} = P6_3/m$$

C_{6h}^2

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$
$(\overline{mnm} + n0)$	\mathbf{c} $n\mathbf{a} - m\mathbf{b}$ $p\mathbf{a} + q\mathbf{b}$	$P2_1/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [$s\mathbf{d}, -s\mathbf{d}$]	$p2_1/m11$ L15
$(\overline{m} + nm0)$	\mathbf{c} $m\mathbf{a} + (m+n)\mathbf{b}$ $-q\mathbf{a} + (p-q)\mathbf{b}$			$pm11$ ($\mathbf{a}'/4$) L11
$(\overline{nm} + nm0)$	\mathbf{c} $-(m+n)\mathbf{a} - n\mathbf{b}$ $(q-p)\mathbf{a} - p\mathbf{b}$			

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$		
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}					
$(\overline{mm} + n0)$	\mathbf{c}	$n\mathbf{a} - m\mathbf{b}$	$p\mathbf{a} + q\mathbf{b}$	P211	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [$s\mathbf{d}, -s\mathbf{d}$]	$p211$	L08	
$(\overline{m} + nm0)$	\mathbf{c}	$m\mathbf{a} + (m+n)\mathbf{b}$	$-q\mathbf{a} + (p-q)\mathbf{b}$					
$(nm + nm0)$	\mathbf{c}	$-(m+n)\mathbf{a} - n\mathbf{b}$	$(q-p)\mathbf{a} - p\mathbf{b}$					
$(\overline{nm} + n0)$	$-\mathbf{c}$	$m\mathbf{a} - n\mathbf{b}$	$-q\mathbf{a} - p\mathbf{b}$					
$(\overline{m} + nm0)$	\mathbf{c}	$n\mathbf{a} + (m+n)\mathbf{b}$	$p\mathbf{a} + (p-q)\mathbf{b}$					
$(mm + nt0)$	$-\mathbf{c}$	$-(m+n)\mathbf{a} - m\mathbf{b}$	$(q-p)\mathbf{a} + q\mathbf{b}$			$p1$	L01	
$(0h\overline{hl})$	\mathbf{a}	$n(\mathbf{a} + 2\mathbf{b}) - m\mathbf{c}$	$p(\mathbf{a} + 2\mathbf{b}) + q\mathbf{c}$	C211	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [$s\mathbf{d}, -s\mathbf{d}$]	$c211$	L10	
$(0h\overline{h}\overline{l})$	$-\mathbf{a}$	$n(\mathbf{a} + 2\mathbf{b}) + m\mathbf{c}$	$p(\mathbf{a} + 2\mathbf{b}) - q\mathbf{c}$					
$(\overline{h}0hl)$	\mathbf{b}	$-n(2\mathbf{a} + \mathbf{b}) - m\mathbf{c}$	$-p(2\mathbf{a} + \mathbf{b}) + q\mathbf{c}$					
$(\overline{h}0h\overline{l})$	$-\mathbf{b}$	$-n(2\mathbf{a} + \mathbf{b}) + m\mathbf{c}$	$-p(2\mathbf{a} + \mathbf{b}) - q\mathbf{c}$					
$(h\overline{h}0l)$	$-(\mathbf{a} + \mathbf{b})$	$n(\mathbf{a} - \mathbf{b}) - m\mathbf{c}$	$p(\mathbf{a} - \mathbf{b}) + q\mathbf{c}$					
$(h\overline{h}0\overline{l})$	$(\mathbf{a} + \mathbf{b})$	$n(\mathbf{a} - \mathbf{b}) + m\mathbf{c}$	$p(\mathbf{a} - \mathbf{b}) - q\mathbf{c}$					
		n odd	m even	I211	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$	L08	
			q odd	B211	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_111$ ($\mathbf{b}'/4$)	L09	
			m odd				$p1$	L01
		p odd	q even				$p211$	L08
$(\overline{h}2h\overline{hl})$	$2\mathbf{a} + \mathbf{b}$	$n\mathbf{b} - m\mathbf{c}$	$p\mathbf{b} + q\mathbf{c}$	C211	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [$s\mathbf{d}, -s\mathbf{d}$]	$c211$	L10	
$(\overline{h}2h\overline{h}\overline{l})$	$-(2\mathbf{a} + \mathbf{b})$	$n\mathbf{b} + m\mathbf{c}$	$p\mathbf{b} - q\mathbf{c}$					
$(\overline{h}\overline{h}2hl)$	$\mathbf{b} - \mathbf{a}$	$-n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$	$-p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$					
$(\overline{h}\overline{h}2h\overline{l})$	$\mathbf{a} - \mathbf{b}$	$-n(\mathbf{a} + \mathbf{b}) + m\mathbf{c}$	$-p(\mathbf{a} + \mathbf{b}) - q\mathbf{c}$					
$(2h\overline{h}\overline{hl})$	$-(\mathbf{a} + 2\mathbf{b})$	$n\mathbf{a} - m\mathbf{c}$	$p\mathbf{a} + q\mathbf{c}$					
$(2h\overline{h}\overline{h}\overline{l})$	$\mathbf{a} + 2\mathbf{b}$	$n\mathbf{a} + m\mathbf{c}$	$p\mathbf{a} - q\mathbf{c}$					
		n odd	m even	I211	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$	L08	
			q odd	B211	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_111$ ($\mathbf{b}'/4$)	L09	
			m odd				$p1$	L01
		p odd	q even				$p211$	L08
				$p2_111$	L09			
				$p1$	L01			

l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
$(\overline{mm} + \overline{n0})$ $(\overline{m} + \overline{nm}n0)$ $(\overline{nm} + \overline{nm}0)$ $(\overline{nm} + \overline{n0})$ $(\overline{m} + \overline{nm}0)$ $(\overline{mm} + \overline{nn}0)$	\mathbf{c} $n\mathbf{a} - m\mathbf{b}$ $p\mathbf{a} + q\mathbf{b}$ \mathbf{c} $m\mathbf{a} + (m+n)\mathbf{b}$ $-q\mathbf{a} + (p-q)\mathbf{b}$ \mathbf{c} $-(m+n)\mathbf{a} - n\mathbf{b}$ $(q-p)\mathbf{a} - p\mathbf{b}$ $-\mathbf{c}$ $m\mathbf{a} - n\mathbf{b}$ $-q\mathbf{a} - p\mathbf{b}$ \mathbf{c} $n\mathbf{a} + (m+n)\mathbf{b}$ $p\mathbf{a} + (p-q)\mathbf{b}$ $-\mathbf{c}$ $-(m+n)\mathbf{a} - m\mathbf{b}$ $(q-p)\mathbf{a} + q\mathbf{b}$	$P2_111$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2_111$ $p1$	L09 L01
$(0h\overline{hl})$ $(0hhl)$	\mathbf{a} $n(\mathbf{a} + 2\mathbf{b}) - m\mathbf{c}$ $p(\mathbf{a} + 2\mathbf{b}) + q\mathbf{c}$ $-\mathbf{a}$ $n(\mathbf{a} + 2\mathbf{b}) + m\mathbf{c}$ $p(\mathbf{a} + 2\mathbf{b}) - q\mathbf{c}$ n odd m even q odd m odd q odd m odd p odd q even	$C211$ $I211$ $B211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$ $[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$ $[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$c211$ $\widehat{p}1$ $p211$ $p2_111 (\mathbf{b}'/4)$ $p1$ $p211$ $p2_111$ $p1$	L10 L01 L08 L09 L01 L08 L09 L01
$(\overline{h}0hl)$ $(\overline{h}0h\overline{l})$ $\mathbf{c}/3$	\mathbf{b} $-n(2\mathbf{a} + \mathbf{b}) - m\mathbf{c}$ $-p(2\mathbf{a} + \mathbf{b}) + q\mathbf{c}$ $-\mathbf{b}$ $-n(2\mathbf{a} + \mathbf{b}) + m\mathbf{c}$ $-p(2\mathbf{a} + \mathbf{b}) - q\mathbf{c}$ n odd m even q odd m odd q odd m odd p odd q even	$C211$ $I211$ $B211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$ $[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$ $[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$c211$ $\widehat{p}1$ $p211$ $p2_111 (\mathbf{b}'/4)$ $p1$ $p211$ $p2_111$ $p1$	L10 L01 L08 L09 L01 L08 L09 L01
$(h\overline{h}0l)$ $(h\overline{h}0\overline{l})$ $\mathbf{c}/6$	$-(\mathbf{a} + \mathbf{b})$ $n(\mathbf{a} - \mathbf{b}) - m\mathbf{c}$ $p(\mathbf{a} - \mathbf{b}) + q\mathbf{c}$ $(\mathbf{a} + \mathbf{b})$ $n(\mathbf{a} - \mathbf{b}) + m\mathbf{c}$ $p(\mathbf{a} - \mathbf{b}) - q\mathbf{c}$ n odd m even q odd m odd q odd m odd p odd q even	$C211$ $I211$ $B211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$ $[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$ $[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$c211$ $\widehat{p}1$ $p211$ $p2_111 (\mathbf{b}'/4)$ $p1$ $p211$ $p2_111$ $p1$	L10 L01 L08 L09 L01 L08 L09 L01
l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$					

Continued

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
$(\overline{mm} + \overline{n0})$ $(\overline{m} + \overline{nm}n0)$ $(\overline{nm} + \overline{nm}0)$ $(\overline{nm} + \overline{n0})$ $(\overline{m} + \overline{nm}0)$ $(\overline{mm} + \overline{nn}0)$	\mathbf{c} $n\mathbf{a} - m\mathbf{b}$ $p\mathbf{a} + q\mathbf{b}$ \mathbf{c} $m\mathbf{a} + (m+n)\mathbf{b}$ $-q\mathbf{a} + (p-q)\mathbf{b}$ \mathbf{c} $-(m+n)\mathbf{a} - n\mathbf{b}$ $(q-p)\mathbf{a} - p\mathbf{b}$ $-\mathbf{c}$ $m\mathbf{a} - n\mathbf{b}$ $-q\mathbf{a} - p\mathbf{b}$ \mathbf{c} $n\mathbf{a} + (m+n)\mathbf{b}$ $p\mathbf{a} + (p-q)\mathbf{b}$ $-\mathbf{c}$ $-(m+n)\mathbf{a} - m\mathbf{b}$ $(q-p)\mathbf{a} + q\mathbf{b}$	$P2_111$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2_111$ $p1$	L09 L01
$(0h\overline{hl})$ $(0hhl)$	\mathbf{a} $n(\mathbf{a} + 2\mathbf{b}) - m\mathbf{c}$ $p(\mathbf{a} + 2\mathbf{b}) + q\mathbf{c}$ $-\mathbf{a}$ $n(\mathbf{a} + 2\mathbf{b}) + m\mathbf{c}$ $p(\mathbf{a} + 2\mathbf{b}) - q\mathbf{c}$ n odd m even q odd m odd q odd m odd p odd q even	$C211$ $I211$ $B211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$ $[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$ $[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$c211$ $\widehat{p}1$ $p211$ $p2_111 (\mathbf{b}'/4)$ $p1$ $p211$ $p2_111$ $p1$	L10 L01 L08 L09 L01 L08 L09 L01
$(\overline{h}0hl)$ $(\overline{h}0h\overline{l})$ $\mathbf{c}/6$	\mathbf{b} $-n(2\mathbf{a} + \mathbf{b}) - m\mathbf{c}$ $-p(2\mathbf{a} + \mathbf{b}) + q\mathbf{c}$ $-\mathbf{b}$ $-n(2\mathbf{a} + \mathbf{b}) + m\mathbf{c}$ $-p(2\mathbf{a} + \mathbf{b}) - q\mathbf{c}$ n odd m even q odd m odd q odd m odd p odd q even	$C211$ $I211$ $B211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$ $[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$ $[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$c211$ $\widehat{p}1$ $p211$ $p2_111 (\mathbf{b}'/4)$ $p1$ $p211$ $p2_111$ $p1$	L10 L01 L08 L09 L01 L08 L09 L01
$(h\overline{h}0l)$ $(h\overline{h}0\overline{l})$ $\mathbf{c}/3$	$-(\mathbf{a} + \mathbf{b})$ $n(\mathbf{a} - \mathbf{b}) - m\mathbf{c}$ $p(\mathbf{a} - \mathbf{b}) + q\mathbf{c}$ $(\mathbf{a} + \mathbf{b})$ $n(\mathbf{a} - \mathbf{b}) + m\mathbf{c}$ $p(\mathbf{a} - \mathbf{b}) - q\mathbf{c}$ n odd m even q odd m odd q odd m odd p odd q even	$C211$ $I211$ $B211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$ $[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$ $[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$c211$ $\widehat{p}1$ $p211$ $p2_111 (\mathbf{b}'/4)$ $p1$ $p211$ $p2_111$ $p1$	L10 L01 L08 L09 L01 L08 L09 L01
l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$					

Continued

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$					
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}								
$(\bar{h}2h\bar{h}l)$ $(\bar{h}2h\bar{h}l)$ $5c/12$	$2\mathbf{a} + \mathbf{b}$	$n\mathbf{b} - m\mathbf{c}$	$p\mathbf{b} + q\mathbf{c}$	C211	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [$s\mathbf{d}, -s\mathbf{d}$]	$c211$ $\hat{p}1$	L10 L01				
	$-(2\mathbf{a} + \mathbf{b})$	$n\mathbf{b} + m\mathbf{c}$	$p\mathbf{b} - q\mathbf{c}$					I211	[$0\mathbf{d}, \frac{1}{2}\mathbf{d}$] [$\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	$p211$ $p2_111 (\mathbf{b}'/4)$ $p1$	L08 L09 L01
			n odd m even q odd m odd q odd								
			p odd q even								
			m odd q even								
	$(\bar{h}h2hl)$ $(\bar{h}h2hl)$ $c/12$	$\mathbf{b} - \mathbf{a}$	$-n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$	$-p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$	C211	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [$s\mathbf{d}, -s\mathbf{d}$]	$c211$ $\hat{p}1$	L10 L01			
$\mathbf{a} - \mathbf{b}$		$-n(\mathbf{a} + \mathbf{b}) + m\mathbf{c}$	$-p(\mathbf{a} + \mathbf{b}) - q\mathbf{c}$	I211					[$0\mathbf{d}, \frac{1}{2}\mathbf{d}$] [$\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	$p211$ $p2_111 (\mathbf{b}'/4)$ $p1$	L08 L09 L01
			n odd m even q odd m odd q odd								
			p odd q even								
			m odd q even								
$(2h\bar{h}hl)$ $(2h\bar{h}hl)$ $c/4$		$-(\mathbf{a} + 2\mathbf{b})$	$n\mathbf{a} - m\mathbf{c}$	$p\mathbf{a} + q\mathbf{c}$	C211	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [$s\mathbf{d}, -s\mathbf{d}$]	$c211$ $\hat{p}1$	L10 L01			
	$\mathbf{a} + 2\mathbf{b}$	$n\mathbf{a} + m\mathbf{c}$	$p\mathbf{a} - q\mathbf{c}$	I211					[$0\mathbf{d}, \frac{1}{2}\mathbf{d}$] [$\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	$p211$ $p2_111 (\mathbf{b}'/4)$ $p1$	L08 L09 L01
			n odd m even q odd m odd q odd								
			p odd q even								
			m odd q even								
	l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$										

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
$(\overline{mm} + \overline{n0})$ $(\overline{m} + \overline{nm}n0)$ $(\overline{nm} + \overline{nm}0)$ $(\overline{nm} + \overline{n0})$ $(\overline{m} + \overline{nm}0)$ $(\overline{mm} + \overline{nn}0)$	\mathbf{c} $n\mathbf{a} - m\mathbf{b}$ $p\mathbf{a} + q\mathbf{b}$ \mathbf{c} $m\mathbf{a} + (m+n)\mathbf{b}$ $-q\mathbf{a} + (p-q)\mathbf{b}$ \mathbf{c} $-(m+n)\mathbf{a} - n\mathbf{b}$ $(q-p)\mathbf{a} - p\mathbf{b}$ $-\mathbf{c}$ $m\mathbf{a} - n\mathbf{b}$ $-q\mathbf{a} - p\mathbf{b}$ \mathbf{c} $n\mathbf{a} + (m+n)\mathbf{b}$ $p\mathbf{a} + (p-q)\mathbf{b}$ $-\mathbf{c}$ $-(m+n)\mathbf{a} - m\mathbf{b}$ $(q-p)\mathbf{a} + q\mathbf{b}$	$P211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p211$ $p1$	L08 L01
$(0h\overline{hl})$ $(0hhl)$	\mathbf{a} $n(\mathbf{a} + 2\mathbf{b}) - m\mathbf{c}$ $p(\mathbf{a} + 2\mathbf{b}) + q\mathbf{c}$ $-\mathbf{a}$ $n(\mathbf{a} + 2\mathbf{b}) + m\mathbf{c}$ $p(\mathbf{a} + 2\mathbf{b}) - q\mathbf{c}$ n odd m even q odd m odd q odd m odd p odd q even	$C211$ $I211$ $B211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$ $[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$ $[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$c211$ $\widehat{p}1$ $p211$ $p2_111 (\mathbf{b}'/4)$ $p1$ $p211$ $p2_111$ $p1$	L10 L01 L08 L09 L01 L08 L09 L01
$(\overline{h}0hl)$ $(\overline{h}0h\overline{l})$ $\mathbf{c}/6$	\mathbf{b} $-n(2\mathbf{a} + \mathbf{b}) - m\mathbf{c}$ $-p(2\mathbf{a} + \mathbf{b}) + q\mathbf{c}$ $-\mathbf{b}$ $-n(2\mathbf{a} + \mathbf{b}) + m\mathbf{c}$ $-p(2\mathbf{a} + \mathbf{b}) - q\mathbf{c}$ n odd m even q odd m odd q odd m odd p odd q even	$C211$ $I211$ $B211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$ $[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$ $[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$c211$ $\widehat{p}1$ $p211$ $p2_111 (\mathbf{b}'/4)$ $p1$ $p211$ $p2_111$ $p1$	L10 L01 L08 L09 L01 L08 L09 L01
$(h\overline{h}0l)$ $(h\overline{h}0\overline{l})$ $\mathbf{c}/3$	$-(\mathbf{a} + \mathbf{b})$ $n(\mathbf{a} - \mathbf{b}) - m\mathbf{c}$ $p(\mathbf{a} - \mathbf{b}) + q\mathbf{c}$ $(\mathbf{a} + \mathbf{b})$ $n(\mathbf{a} - \mathbf{b}) + m\mathbf{c}$ $p(\mathbf{a} - \mathbf{b}) - q\mathbf{c}$ n odd m even q odd m odd q odd m odd p odd q even	$C211$ $I211$ $B211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$ $[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$ $[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$c211$ $\widehat{p}1$ $p211$ $p2_111 (\mathbf{b}'/4)$ $p1$ $p211$ $p2_111$ $p1$	L10 L01 L08 L09 L01 L08 L09 L01
l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$					

Continued

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$
$(\bar{h}2h\bar{h}l)$ $(\bar{h}2h\bar{h}l)$ $c/6$	$2\mathbf{a} + \mathbf{b}$ $n\mathbf{b} - m\mathbf{c}$ $p\mathbf{b} + q\mathbf{c}$ $-(2\mathbf{a} + \mathbf{b})$ $n\mathbf{b} + m\mathbf{c}$ $p\mathbf{b} - q\mathbf{c}$ n odd m even q odd m odd q odd m odd p odd q even	$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$ L10 $\hat{p}1$ L01
		$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111$ ($\mathbf{b}'/4$) L09 $p1$ L01
		$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111$ L09 $p1$ L01
$(\bar{h}h2hl)$ $(\bar{h}h2hl)$ $c/3$	$\mathbf{b} - \mathbf{a}$ $-n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$ $-p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$ $\mathbf{a} - \mathbf{b}$ $-n(\mathbf{a} + \mathbf{b}) + m\mathbf{c}$ $-p(\mathbf{a} + \mathbf{b}) - q\mathbf{c}$ n odd m even q odd m odd q odd m odd p odd q even	$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$ L10 $\hat{p}1$ L01
		$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111$ ($\mathbf{b}'/4$) L09 $p1$ L01
		$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111$ L09 $p1$ L01
$(2h\bar{h}hl)$ $(2h\bar{h}hl)$	$-(\mathbf{a} + 2\mathbf{b})$ $n\mathbf{a} - m\mathbf{c}$ $p\mathbf{a} + q\mathbf{c}$ $\mathbf{a} + 2\mathbf{b}$ $n\mathbf{a} + m\mathbf{c}$ $p\mathbf{a} - q\mathbf{c}$ n odd m even q odd m odd q odd m odd p odd q even	$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$ L10 $\hat{p}1$ L01
		$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111$ ($\mathbf{b}'/4$) L09 $p1$ L01
		$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111$ L09 $p1$ L01
l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$				

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
$(\overline{mm} + \overline{n0})$ $(\overline{m} + \overline{nm}n0)$ $(\overline{nm} + \overline{nm}0)$ $(\overline{nm} + \overline{n0})$ $(\overline{m} + \overline{nm}n0)$ $(\overline{mm} + \overline{nn}0)$	\mathbf{c} $n\mathbf{a} - m\mathbf{b}$ $p\mathbf{a} + q\mathbf{b}$ \mathbf{c} $m\mathbf{a} + (m+n)\mathbf{b}$ $-q\mathbf{a} + (p-q)\mathbf{b}$ \mathbf{c} $-(m+n)\mathbf{a} - n\mathbf{b}$ $(q-p)\mathbf{a} - p\mathbf{b}$ $-\mathbf{c}$ $m\mathbf{a} - n\mathbf{b}$ $-q\mathbf{a} - p\mathbf{b}$ \mathbf{c} $n\mathbf{a} + (m+n)\mathbf{b}$ $p\mathbf{a} + (p-q)\mathbf{b}$ $-\mathbf{c}$ $-(m+n)\mathbf{a} - m\mathbf{b}$ $(q-p)\mathbf{a} + q\mathbf{b}$	$P211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p211$ $p1$	L08 L01
$(0h\overline{hl})$ $(0hhl)$	\mathbf{a} $n(\mathbf{a} + 2\mathbf{b}) - m\mathbf{c}$ $p(\mathbf{a} + 2\mathbf{b}) + q\mathbf{c}$ $-\mathbf{a}$ $n(\mathbf{a} + 2\mathbf{b}) + m\mathbf{c}$ $p(\mathbf{a} + 2\mathbf{b}) - q\mathbf{c}$ n odd m even q odd m odd q odd p odd q even	$C211$ $I211$ $B211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$ $[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$ $[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$c211$ $\widehat{p}1$ $p211$ $p2_111 (\mathbf{b}'/4)$ $p1$ $p211$ $p2_111$ $p1$	L10 L01 L08 L09 L01 L08 L09 L01
$(\overline{h}0hl)$ $(\overline{h}0h\overline{l})$ $\mathbf{c}/3$	\mathbf{b} $-n(2\mathbf{a} + \mathbf{b}) - m\mathbf{c}$ $-p(2\mathbf{a} + \mathbf{b}) + q\mathbf{c}$ $-\mathbf{b}$ $-n(2\mathbf{a} + \mathbf{b}) + m\mathbf{c}$ $-p(2\mathbf{a} + \mathbf{b}) - q\mathbf{c}$ n odd m even q odd m odd q odd p odd q even	$C211$ $I211$ $B211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$ $[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$ $[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$c211$ $\widehat{p}1$ $p211$ $p2_111 (\mathbf{b}'/4)$ $p1$ $p211$ $p2_111$ $p1$	L10 L01 L08 L09 L01 L08 L09 L01
$(h\overline{h}0l)$ $(h\overline{h}0\overline{l})$ $\mathbf{c}/6$	$-(\mathbf{a} + \mathbf{b})$ $n(\mathbf{a} - \mathbf{b}) - m\mathbf{c}$ $p(\mathbf{a} - \mathbf{b}) + q\mathbf{c}$ $(\mathbf{a} + \mathbf{b})$ $n(\mathbf{a} - \mathbf{b}) + m\mathbf{c}$ $p(\mathbf{a} - \mathbf{b}) - q\mathbf{c}$ n odd m even q odd m odd q odd p odd q even	$C211$ $I211$ $B211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$ $[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$ $[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$c211$ $\widehat{p}1$ $p211$ $p2_111 (\mathbf{b}'/4)$ $p1$ $p211$ $p2_111$ $p1$	L10 L01 L08 L09 L01 L08 L09 L01
l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$					

Continued

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}				
$(\overline{mnm} + \overline{n0})$	\mathbf{c}	$n\mathbf{a} - m\mathbf{b}$	$p\mathbf{a} + q\mathbf{b}$	$P2_111$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [$s\mathbf{d}, -s\mathbf{d}$]	$p2_111$ $p1$	L09 L01
$(\overline{m} + \overline{nmn0})$	\mathbf{c}	$m\mathbf{a} + (m+n)\mathbf{b}$	$-q\mathbf{a} + (p-q)\mathbf{b}$				
$(\overline{nm} + \overline{nm0})$	\mathbf{c}	$-(m+n)\mathbf{a} - n\mathbf{b}$	$(q-p)\mathbf{a} - p\mathbf{b}$				
$(\overline{mnm} + \overline{n0})$	$-\mathbf{c}$	$m\mathbf{a} - n\mathbf{b}$	$-q\mathbf{a} - p\mathbf{b}$				
$(\overline{m} + \overline{nmn0})$	\mathbf{c}	$n\mathbf{a} + (m+n)\mathbf{b}$	$p\mathbf{a} + (p-q)\mathbf{b}$				
$(\overline{mm} + \overline{nn0})$	$-\mathbf{c}$	$-(m+n)\mathbf{a} - m\mathbf{b}$	$(q-p)\mathbf{a} + q\mathbf{b}$				
$(0\overline{h}\overline{hl})$	\mathbf{a}	$n(\mathbf{a} + 2\mathbf{b}) - m\mathbf{c}$	$p(\mathbf{a} + 2\mathbf{b}) + q\mathbf{c}$	$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [$s\mathbf{d}, -s\mathbf{d}$]	$c211$ $\widehat{p}1$	L10 L01
$(0\overline{h}\overline{hl})$	$-\mathbf{a}$	$n(\mathbf{a} + 2\mathbf{b}) + m\mathbf{c}$	$p(\mathbf{a} + 2\mathbf{b}) - q\mathbf{c}$				
$(\overline{h}0\overline{hl})$	\mathbf{b}	$-n(2\mathbf{a} + \mathbf{b}) - m\mathbf{c}$	$-p(2\mathbf{a} + \mathbf{b}) + q\mathbf{c}$				
$(\overline{h}0\overline{hl})$	$-\mathbf{b}$	$-n(2\mathbf{a} + \mathbf{b}) + m\mathbf{c}$	$-p(2\mathbf{a} + \mathbf{b}) - q\mathbf{c}$				
$(\overline{h}\overline{h}0\overline{l})$	$-(\mathbf{a} + \mathbf{b})$	$n(\mathbf{a} - \mathbf{b}) - m\mathbf{c}$	$p(\mathbf{a} - \mathbf{b}) + q\mathbf{c}$				
$(\overline{h}\overline{h}0\overline{l})$	$(\mathbf{a} + \mathbf{b})$	$n(\mathbf{a} - \mathbf{b}) + m\mathbf{c}$	$p(\mathbf{a} - \mathbf{b}) - q\mathbf{c}$				
			n odd m even				
			q odd				
			m odd				
			q odd				
			m odd				
			p odd q even				
				$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111 (\mathbf{b}'/4)$ $p1$	L08 L09 L01
				$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111$ $p1$	L08 L09 L01
$(\overline{h}2\overline{h}\overline{hl})$	$2\mathbf{a} + \mathbf{b}$	$n\mathbf{b} - m\mathbf{c}$	$p\mathbf{b} + q\mathbf{c}$	$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [$s\mathbf{d}, -s\mathbf{d}$]	$c211$ $\widehat{p}1$	L10 L01
$(\overline{h}2\overline{h}\overline{hl})$	$-(2\mathbf{a} + \mathbf{b})$	$n\mathbf{b} + m\mathbf{c}$	$p\mathbf{b} - q\mathbf{c}$				
$(\overline{h}\overline{h}2\overline{hl})$	$\mathbf{b} - \mathbf{a}$	$-n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$	$-p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$				
$(\overline{h}\overline{h}2\overline{hl})$	$\mathbf{a} - \mathbf{b}$	$-n(\mathbf{a} + \mathbf{b}) + m\mathbf{c}$	$-p(\mathbf{a} + \mathbf{b}) - q\mathbf{c}$				
$(2\overline{h}\overline{h}\overline{hl})$	$-(\mathbf{a} + 2\mathbf{b})$	$n\mathbf{a} - m\mathbf{c}$	$p\mathbf{a} + q\mathbf{c}$				
$(2\overline{h}\overline{h}\overline{hl})$	$\mathbf{a} + 2\mathbf{b}$	$n\mathbf{a} + m\mathbf{c}$	$p\mathbf{a} - q\mathbf{c}$				
			n odd m even				
			q odd				
			m odd				
			q odd				
			m odd				
			p odd q even				
$c/4$				$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111 (\mathbf{b}'/4)$ $p1$	L08 L09 L01
				$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111$ $p1$	L08 L09 L01

 l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}				
$(m\bar{n}m + \bar{n}0)$	\mathbf{c}	$n\mathbf{a} - m\mathbf{b}$	$p\mathbf{a} + q\mathbf{b}$	$P211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p211$	L08
$(\bar{m} + nm\bar{n}0)$	\mathbf{c}	$m\mathbf{a} + (m+n)\mathbf{b}$	$-q\mathbf{a} + (p-q)\mathbf{b}$				
$(nm + \bar{n}m0)$	\mathbf{c}	$-(m+n)\mathbf{a} - n\mathbf{b}$	$(q-p)\mathbf{a} - p\mathbf{b}$				
$(nm\bar{m} + \bar{n}0)$	$-\mathbf{c}$	$m\mathbf{a} - n\mathbf{b}$	$-q\mathbf{a} - p\mathbf{b}$				
$(\bar{m} + nm\bar{n}0)$	\mathbf{c}	$n\mathbf{a} + (m+n)\mathbf{b}$	$p\mathbf{a} + (p-q)\mathbf{b}$				
$(m\bar{m} + \bar{n}m0)$	$-\mathbf{c}$	$-(m+n)\mathbf{a} - m\mathbf{b}$	$(q-p)\mathbf{a} + q\mathbf{b}$				
$(0h\bar{h}l)$	\mathbf{a}	$n(\mathbf{a} + 2\mathbf{b}) - m\mathbf{c}$	$p(\mathbf{a} + 2\mathbf{b}) + q\mathbf{c}$	$Cm11$	$s\mathbf{d}$	$cm11$	L13
$(0hhl)$	$-\mathbf{a}$	$n(\mathbf{a} + 2\mathbf{b}) + m\mathbf{c}$	$p(\mathbf{a} + 2\mathbf{b}) - q\mathbf{c}$				
$(\bar{h}0hl)$	\mathbf{b}	$-n(2\mathbf{a} + \mathbf{b}) - m\mathbf{c}$	$-p(2\mathbf{a} + \mathbf{b}) + q\mathbf{c}$				
$(\bar{h}0h\bar{l})$	$-\mathbf{b}$	$-n(2\mathbf{a} + \mathbf{b}) + m\mathbf{c}$	$-p(2\mathbf{a} + \mathbf{b}) - q\mathbf{c}$				
$(h\bar{h}0l)$	$-(\mathbf{a} + \mathbf{b})$	$n(\mathbf{a} - \mathbf{b}) - m\mathbf{c}$	$p(\mathbf{a} - \mathbf{b}) + q\mathbf{c}$				
$(h\bar{h}0\bar{l})$	$(\mathbf{a} + \mathbf{b})$	$n(\mathbf{a} - \mathbf{b}) + m\mathbf{c}$	$p(\mathbf{a} - \mathbf{b}) - q\mathbf{c}$				
		n odd	m even	$Im11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pm11$	L11
			q odd				
			m odd	$Bm11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pm11$	L11
			q odd				
			m odd				
		p odd	q even				
$(\bar{h}2h\bar{h}l)$	$2\mathbf{a} + \mathbf{b}$	$n\mathbf{b} - m\mathbf{c}$	$p\mathbf{b} + q\mathbf{c}$	$Cm11$	$s\mathbf{d}$	$cm11$	L13
$(\bar{h}2hhl)$	$-(2\mathbf{a} + \mathbf{b})$	$n\mathbf{b} + m\mathbf{c}$	$p\mathbf{b} - q\mathbf{c}$				
$(h\bar{h}2hl)$	$\mathbf{b} - \mathbf{a}$	$-n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$	$-p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$				
$(h\bar{h}2h\bar{l})$	$\mathbf{a} - \mathbf{b}$	$-n(\mathbf{a} + \mathbf{b}) + m\mathbf{c}$	$-p(\mathbf{a} + \mathbf{b}) - q\mathbf{c}$				
$(2h\bar{h}hl)$	$-(\mathbf{a} + 2\mathbf{b})$	$na - m\mathbf{c}$	$pa + q\mathbf{c}$				
$(2h\bar{h}h\bar{l})$	$\mathbf{a} + 2\mathbf{b}$	$na + m\mathbf{c}$	$pa - q\mathbf{c}$				
		n odd	m even	$Im11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pm11$	L11
			q odd				
			m odd	$Bm11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pm11$	L11
			q odd				
			m odd				
		p odd	q even				
l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$							

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}				
$(\overline{mnm} + \overline{n0})$	\mathbf{c}	$n\mathbf{a} - m\mathbf{b}$	$p\mathbf{a} + q\mathbf{b}$	$P211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [$s\mathbf{d}, -s\mathbf{d}$]	$p211$	L08
$(\overline{m} + \overline{nmn0})$	\mathbf{c}	$m\mathbf{a} + (m+n)\mathbf{b}$	$-q\mathbf{a} + (p-q)\mathbf{b}$				
$(\overline{nm} + \overline{nm0})$	\mathbf{c}	$-(m+n)\mathbf{a} - n\mathbf{b}$	$(q-p)\mathbf{a} - p\mathbf{b}$				
$(\overline{mnm} + \overline{n0})$	$-\mathbf{c}$	$m\mathbf{a} - n\mathbf{b}$	$-q\mathbf{a} - p\mathbf{b}$				
$(\overline{m} + \overline{nmn0})$	\mathbf{c}	$n\mathbf{a} + (m+n)\mathbf{b}$	$p\mathbf{a} + (p-q)\mathbf{b}$				
$(\overline{mm} + \overline{nn0})$	$-\mathbf{c}$	$-(m+n)\mathbf{a} - m\mathbf{b}$	$(q-p)\mathbf{a} + q\mathbf{b}$				
$(0\overline{h}\overline{h}l)$	\mathbf{a}	$n(\mathbf{a} + 2\mathbf{b}) - m\mathbf{c}$	$p(\mathbf{a} + 2\mathbf{b}) + q\mathbf{c}$	$Cc11$	[$s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}$]	$\widehat{p}1$	L01
$(0\overline{h}\overline{h}\overline{l})$	$-\mathbf{a}$	$n(\mathbf{a} + 2\mathbf{b}) + m\mathbf{c}$	$p(\mathbf{a} + 2\mathbf{b}) - q\mathbf{c}$				
$(\overline{h}0\overline{h}l)$	\mathbf{b}	$-n(2\mathbf{a} + \mathbf{b}) - m\mathbf{c}$	$-p(2\mathbf{a} + \mathbf{b}) + q\mathbf{c}$				
$(\overline{h}0\overline{h}\overline{l})$	$-\mathbf{b}$	$-n(2\mathbf{a} + \mathbf{b}) + m\mathbf{c}$	$-p(2\mathbf{a} + \mathbf{b}) - q\mathbf{c}$				
$(\overline{h}\overline{h}0l)$	$-(\mathbf{a} + \mathbf{b})$	$n(\mathbf{a} - \mathbf{b}) - m\mathbf{c}$	$p(\mathbf{a} - \mathbf{b}) + q\mathbf{c}$				
$(\overline{h}\overline{h}0\overline{l})$	$(\mathbf{a} + \mathbf{b})$	$n(\mathbf{a} - \mathbf{b}) + m\mathbf{c}$	$p(\mathbf{a} - \mathbf{b}) - q\mathbf{c}$				
		n odd	m even				
		p even	q odd				
		n even	m odd				
		p odd	q even				
		n even	m odd				
		p odd	q odd				
		n odd	m odd				
		p even	q odd				
		n odd	m odd				
		p odd	q even				
		n odd	m even				
		p odd	q odd				
$(\overline{h}2\overline{h}\overline{h}l)$	$2\mathbf{a} + \mathbf{b}$	$n\mathbf{b} - m\mathbf{c}$	$p\mathbf{b} + q\mathbf{c}$	$Cc11$	[$s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}$]	$\widehat{p}1$	L01
$(\overline{h}2\overline{h}\overline{h}\overline{l})$	$-(2\mathbf{a} + \mathbf{b})$	$n\mathbf{b} + m\mathbf{c}$	$p\mathbf{b} - q\mathbf{c}$				
$(\overline{h}\overline{h}2\overline{h}l)$	$\mathbf{b} - \mathbf{a}$	$-n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$	$-p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$				
$(\overline{h}\overline{h}2\overline{h}\overline{l})$	$\mathbf{a} - \mathbf{b}$	$-n(\mathbf{a} + \mathbf{b}) + m\mathbf{c}$	$-p(\mathbf{a} + \mathbf{b}) - q\mathbf{c}$				
$(2\overline{h}\overline{h}\overline{h}l)$	$-(\mathbf{a} + 2\mathbf{b})$	$n\mathbf{a} - m\mathbf{c}$	$p\mathbf{a} + q\mathbf{c}$				
$(2\overline{h}\overline{h}\overline{h}\overline{l})$	$\mathbf{a} + 2\mathbf{b}$	$n\mathbf{a} + m\mathbf{c}$	$p\mathbf{a} - q\mathbf{c}$				
		n odd	m even				
		p even	q odd				
		n even	m odd				
		p odd	q even				
		n even	m odd				
		p odd	q odd				
		n odd	m odd				
		p even	q odd				
		n odd	m odd				
		p odd	q even				
		n odd	m even				
		p odd	q odd				
l odd $\Rightarrow n = l, m = 2h$; l even $\Rightarrow n = l/2, m = h$							

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
$(\overline{mnm} + \overline{n}0)$ $(\overline{m} + \overline{nmn}0)$ $(\overline{nm} + \overline{nm}0)$ $(\overline{nm\overline{m}} + \overline{n}0)$ $(\overline{m} + \overline{nmn}0)$ $(\overline{mm} + \overline{nn}0)$	\mathbf{c} $n\mathbf{a} - m\mathbf{b}$ $p\mathbf{a} + q\mathbf{b}$ \mathbf{c} $m\mathbf{a} + (m+n)\mathbf{b}$ $-q\mathbf{a} + (p-q)\mathbf{b}$ \mathbf{c} $-(m+n)\mathbf{a} - n\mathbf{b}$ $(q-p)\mathbf{a} - p\mathbf{b}$ $-\mathbf{c}$ $m\mathbf{a} - n\mathbf{b}$ $-q\mathbf{a} - p\mathbf{b}$ \mathbf{c} $n\mathbf{a} + (m+n)\mathbf{b}$ $p\mathbf{a} + (p-q)\mathbf{b}$ $-\mathbf{c}$ $-(m+n)\mathbf{a} - m\mathbf{b}$ $(q-p)\mathbf{a} + q\mathbf{b}$	$P2_111$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2_111$ $p1$	L09 L01
$(0h\overline{h}l)$ $(0h\overline{h}\overline{l})$ $(\overline{h}0hl)$ $(\overline{h}0h\overline{l})$ $(\overline{h\overline{h}}0l)$ $(\overline{h\overline{h}}0\overline{l})$	\mathbf{a} $n(\mathbf{a} + 2\mathbf{b}) - m\mathbf{c}$ $p(\mathbf{a} + 2\mathbf{b}) + q\mathbf{c}$ $-\mathbf{a}$ $n(\mathbf{a} + 2\mathbf{b}) + m\mathbf{c}$ $p(\mathbf{a} + 2\mathbf{b}) - q\mathbf{c}$ \mathbf{b} $-n(2\mathbf{a} + \mathbf{b}) - m\mathbf{c}$ $-p(2\mathbf{a} + \mathbf{b}) + q\mathbf{c}$ $-\mathbf{b}$ $-n(2\mathbf{a} + \mathbf{b}) + m\mathbf{c}$ $-p(2\mathbf{a} + \mathbf{b}) - q\mathbf{c}$ $-(\mathbf{a} + \mathbf{b})$ $n(\mathbf{a} - \mathbf{b}) - m\mathbf{c}$ $p(\mathbf{a} - \mathbf{b}) + q\mathbf{c}$ $(\mathbf{a} + \mathbf{b})$ $n(\mathbf{a} - \mathbf{b}) + m\mathbf{c}$ $p(\mathbf{a} - \mathbf{b}) - q\mathbf{c}$	$Cc11$ $Bb11$ $Ib11$ $Ic11$ $Bn11$ $Cn11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$ $[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$ $[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$ $[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$ $[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$ $[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}1$ $pb11$ $pb11$ $pb11 (\mathbf{a}'/4)$ $pb11 (\mathbf{a}'/4)$ $\widehat{p}1$	L01 L12 L12 L12 L12 L01
$(\overline{h}2h\overline{h}l)$ $(\overline{h}2h\overline{h}\overline{l})$ $(\overline{h\overline{h}}2hl)$ $(\overline{h\overline{h}}2h\overline{l})$ $(2h\overline{h}hl)$ $(2h\overline{h}h\overline{l})$	$2\mathbf{a} + \mathbf{b}$ $n\mathbf{b} - m\mathbf{c}$ $p\mathbf{b} + q\mathbf{c}$ $-(2\mathbf{a} + \mathbf{b})$ $n\mathbf{b} + m\mathbf{c}$ $p\mathbf{b} - q\mathbf{c}$ $\mathbf{b} - \mathbf{a}$ $-n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$ $-p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$ $\mathbf{a} - \mathbf{b}$ $-n(\mathbf{a} + \mathbf{b}) + m\mathbf{c}$ $-p(\mathbf{a} + \mathbf{b}) - q\mathbf{c}$ $-(\mathbf{a} + 2\mathbf{b})$ $n\mathbf{a} - m\mathbf{c}$ $p\mathbf{a} + q\mathbf{c}$ $\mathbf{a} + 2\mathbf{b}$ $n\mathbf{a} + m\mathbf{c}$ $p\mathbf{a} - q\mathbf{c}$	$Cm11$ $Im11$ $Bm11$	$s\mathbf{d}$ $[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$ $[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$cm11$ $pm11$ $pm11$	L13 L11 L11
$l \text{ odd} \Rightarrow n = l, m = 2h; l \text{ even} \Rightarrow n = l/2, m = h$					

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
$(\overline{mnm} + \overline{n}0)$ $(\overline{m} + \overline{nmn}0)$ $(\overline{nm} + \overline{nm}0)$ $(\overline{nm} + \overline{n}0)$ $(\overline{m} + \overline{nm}0)$ $(\overline{mm} + \overline{nm}0)$	\mathbf{c} $na - mb$ $pa + qb$ \mathbf{c} $ma + (m+n)\mathbf{b}$ $-qa + (p-q)\mathbf{b}$ \mathbf{c} $-(m+n)\mathbf{a} - n\mathbf{b}$ $(q-p)\mathbf{a} - p\mathbf{b}$ $-\mathbf{c}$ $ma - n\mathbf{b}$ $-qa - p\mathbf{b}$ \mathbf{c} $na + (m+n)\mathbf{b}$ $pa + (p-q)\mathbf{b}$ $-\mathbf{c}$ $-(m+n)\mathbf{a} - m\mathbf{b}$ $(q-p)\mathbf{a} + qb$	$P2_111$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2_111$ $p1$	L09 L01
$(0h\overline{h}l)$ $(0\overline{h}hl)$ $(\overline{h}0hl)$ $(\overline{h}0\overline{h}l)$ $(h\overline{h}0l)$ $(h\overline{h}0\overline{l})$	\mathbf{a} $n(\mathbf{a} + 2\mathbf{b}) - m\mathbf{c}$ $p(\mathbf{a} + 2\mathbf{b}) + q\mathbf{c}$ $-\mathbf{a}$ $n(\mathbf{a} + 2\mathbf{b}) + m\mathbf{c}$ $p(\mathbf{a} + 2\mathbf{b}) - q\mathbf{c}$ \mathbf{b} $-n(2\mathbf{a} + \mathbf{b}) - m\mathbf{c}$ $-p(2\mathbf{a} + \mathbf{b}) + q\mathbf{c}$ $-\mathbf{b}$ $-n(2\mathbf{a} + \mathbf{b}) + m\mathbf{c}$ $-p(2\mathbf{a} + \mathbf{b}) - q\mathbf{c}$ $-(\mathbf{a} + \mathbf{b})$ $n(\mathbf{a} - \mathbf{b}) - m\mathbf{c}$ $p(\mathbf{a} - \mathbf{b}) + q\mathbf{c}$ $(\mathbf{a} + \mathbf{b})$ $n(\mathbf{a} - \mathbf{b}) + m\mathbf{c}$ $p(\mathbf{a} - \mathbf{b}) - q\mathbf{c}$	$Cm11$ $Im11$ $Bm11$	$s\mathbf{d}$ $[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$ $[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$cm11$ $pm11$ $pm11$	L13 L11 L11
$(\overline{h}2h\overline{h}l)$ $(\overline{h}2hhl)$ $(\overline{h}h2hl)$ $(\overline{h}h2h\overline{l})$ $(2h\overline{h}hl)$ $(2h\overline{h}h\overline{l})$	$2\mathbf{a} + \mathbf{b}$ $n\mathbf{b} - m\mathbf{c}$ $p\mathbf{b} + q\mathbf{c}$ $-(2\mathbf{a} + \mathbf{b})$ $n\mathbf{b} + m\mathbf{c}$ $p\mathbf{b} - q\mathbf{c}$ $\mathbf{b} - \mathbf{a}$ $-n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$ $-p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$ $\mathbf{a} - \mathbf{b}$ $-n(\mathbf{a} + \mathbf{b}) + m\mathbf{c}$ $-p(\mathbf{a} + \mathbf{b}) - q\mathbf{c}$ $-(\mathbf{a} + 2\mathbf{b})$ $na - m\mathbf{c}$ $pa + q\mathbf{c}$ $\mathbf{a} + 2\mathbf{b}$ $na + m\mathbf{c}$ $pa - q\mathbf{c}$	$Cc11$ $Bb11$ $Ib11$ $Ic11$ $Bn11$ $Cn11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$ $[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$ $[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$ $[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$ $[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$ $[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}1$ $pb11$ $pb11$ $pb11 (\mathbf{a}'/4)$ $pb11 (\mathbf{a}'/4)$ $\widehat{p}1$	L01 L12 L12 L12 L12 L01
$l \text{ odd} \Rightarrow n = l, m = 2h; l \text{ even} \Rightarrow n = l/2, m = h$					

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}				
$(m\bar{n}m + \bar{n}0)$ $(\bar{m} + nm\bar{n}0)$ $(nm + nm0)$ $(nm\bar{m} + \bar{n}0)$ $(\bar{m} + nm\bar{n}0)$ $(m\bar{m} + nm0)$	\mathbf{c} \mathbf{c} \mathbf{c} $-\mathbf{c}$ \mathbf{c} $-\mathbf{c}$	$na - m\mathbf{b}$ $ma + (m+n)\mathbf{b}$ $-(m+n)\mathbf{a} - n\mathbf{b}$ $ma - n\mathbf{b}$ $na + (m+n)\mathbf{b}$ $-(m+n)\mathbf{a} - m\mathbf{b}$	$pa + q\mathbf{b}$ $-qa + (p-q)\mathbf{b}$ $(q-p)\mathbf{a} - p\mathbf{b}$ $-qa - p\mathbf{b}$ $pa + (p-q)\mathbf{b}$ $(q-p)\mathbf{a} + q\mathbf{b}$	$Pm11$	$s\mathbf{d}$	$pm11$	L11
$(0h\bar{h}l)$ $(0hhl)$ $(\bar{h}0hl)$ $(\bar{h}0h\bar{l})$ $(h\bar{h}0l)$ $(h\bar{h}0\bar{l})$	\mathbf{a} $-\mathbf{a}$ \mathbf{b} $-\mathbf{b}$ $-(\mathbf{a} + \mathbf{b})$ $(\mathbf{a} + \mathbf{b})$	$n(\mathbf{a} + 2\mathbf{b}) - m\mathbf{c}$ $n(\mathbf{a} + 2\mathbf{b}) + m\mathbf{c}$ $-n(2\mathbf{a} + \mathbf{b}) - m\mathbf{c}$ $-n(2\mathbf{a} + \mathbf{b}) + m\mathbf{c}$ $n(\mathbf{a} - \mathbf{b}) - m\mathbf{c}$ $n(\mathbf{a} - \mathbf{b}) + m\mathbf{c}$	$p(\mathbf{a} + 2\mathbf{b}) + q\mathbf{c}$ $p(\mathbf{a} + 2\mathbf{b}) - q\mathbf{c}$ $-p(2\mathbf{a} + \mathbf{b}) + q\mathbf{c}$ $-p(2\mathbf{a} + \mathbf{b}) - q\mathbf{c}$ $p(\mathbf{a} - \mathbf{b}) + q\mathbf{c}$ $p(\mathbf{a} - \mathbf{b}) - q\mathbf{c}$	$Cm11$ $Im11$ $Bm11$	$s\mathbf{d}$ $[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$ $[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$cm11$ $pm11$ $pm11$	L13 L11 L11
$(\bar{h}2h\bar{h}l)$ $(\bar{h}2hhl)$ $(\bar{h}h2hl)$ $(\bar{h}h2h\bar{l})$ $(2h\bar{h}hl)$ $(2h\bar{h}h\bar{l})$	$2\mathbf{a} + \mathbf{b}$ $-(2\mathbf{a} + \mathbf{b})$ $\mathbf{b} - \mathbf{a}$ $\mathbf{a} - \mathbf{b}$ $-(\mathbf{a} + 2\mathbf{b})$ $\mathbf{a} + 2\mathbf{b}$	$n\mathbf{b} - m\mathbf{c}$ $n\mathbf{b} + m\mathbf{c}$ $-n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$ $-n(\mathbf{a} + \mathbf{b}) + m\mathbf{c}$ $na - m\mathbf{c}$ $na + m\mathbf{c}$	$p\mathbf{b} + q\mathbf{c}$ $p\mathbf{b} - q\mathbf{c}$ $-p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$ $-p(\mathbf{a} + \mathbf{b}) - q\mathbf{c}$ $pa + q\mathbf{c}$ $pa - q\mathbf{c}$	$C211$ $I211$ $B211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$ $[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$ $[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$c211$ $\widehat{p}1$ $p211$ $p2_111 (\mathbf{b}'/4)$ $p1$ $p211$ $p2_111$ $p1$	L10 L01 L08 L09 L01 L08 L09 L01
$l \text{ odd} \Rightarrow n = l, m = 2h; l \text{ even} \Rightarrow n = l/2, m = h$							

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}				
$(\overline{mnm} + n0)$ $(\overline{m} + nm0)$ $(nm + nm0)$ $(\overline{nm} + n0)$ $(\overline{m} + nm0)$ $(mm + nn0)$ ($c/4$)	\mathbf{c} \mathbf{c} \mathbf{c} $-\mathbf{c}$ \mathbf{c} $-\mathbf{c}$	$n\mathbf{a} - m\mathbf{b}$ $m\mathbf{a} + (m+n)\mathbf{b}$ $-(m+n)\mathbf{a} - n\mathbf{b}$ $m\mathbf{a} - n\mathbf{b}$ $n\mathbf{a} + (m+n)\mathbf{b}$ $-(m+n)\mathbf{a} - m\mathbf{b}$	$p\mathbf{a} + q\mathbf{b}$ $-q\mathbf{a} + (p-q)\mathbf{b}$ $(q-p)\mathbf{a} - p\mathbf{b}$ $-q\mathbf{a} - p\mathbf{b}$ $p\mathbf{a} + (p-q)\mathbf{b}$ $(q-p)\mathbf{a} + q\mathbf{b}$	$Pm11$	$s\mathbf{d}$	$pm11$	L11
$(0h\bar{h}l)$ $(0hhl)$ $(\bar{h}0hl)$ $(\bar{h}0h\bar{l})$ $(h\bar{h}0l)$ $(h\bar{h}0\bar{l})$	\mathbf{a} $-\mathbf{a}$ \mathbf{b} $-\mathbf{b}$ $-(\mathbf{a} + \mathbf{b})$ $(\mathbf{a} + \mathbf{b})$	$n(\mathbf{a} + 2\mathbf{b}) - m\mathbf{c}$ $n(\mathbf{a} + 2\mathbf{b}) + m\mathbf{c}$ $-n(2\mathbf{a} + \mathbf{b}) - m\mathbf{c}$ $-n(2\mathbf{a} + \mathbf{b}) + m\mathbf{c}$ $n(\mathbf{a} - \mathbf{b}) - m\mathbf{c}$ $n(\mathbf{a} - \mathbf{b}) + m\mathbf{c}$	$p(\mathbf{a} + 2\mathbf{b}) + q\mathbf{c}$ $p(\mathbf{a} + 2\mathbf{b}) - q\mathbf{c}$ $-p(2\mathbf{a} + \mathbf{b}) + q\mathbf{c}$ $-p(2\mathbf{a} + \mathbf{b}) - q\mathbf{c}$ $p(\mathbf{a} - \mathbf{b}) + q\mathbf{c}$ $p(\mathbf{a} - \mathbf{b}) - q\mathbf{c}$	$Cc11$ $Bb11$ $Ib11$ $Ic11$ $Bn11$ $Cn11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$ $[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$ $[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$ $[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$ $[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$ $[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$ $pb11$ $pb11$ $pb11 (\mathbf{a}'/4)$ $pb11 (\mathbf{a}'/4)$ $\hat{p}1$	L01 L12 L12 L12 L12 L01
$(\bar{h}2h\bar{h}l)$ $(\bar{h}2hhl)$ $(\bar{h}\bar{h}2hl)$ $(\bar{h}\bar{h}2h\bar{l})$ $(2h\bar{h}hl)$ $(2h\bar{h}h\bar{l})$	$2\mathbf{a} + \mathbf{b}$ $-(2\mathbf{a} + \mathbf{b})$ $\mathbf{b} - \mathbf{a}$ $\mathbf{a} - \mathbf{b}$ $-(\mathbf{a} + 2\mathbf{b})$ $\mathbf{a} + 2\mathbf{b}$	$n\mathbf{b} - m\mathbf{c}$ $n\mathbf{b} + m\mathbf{c}$ $-n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$ $-n(\mathbf{a} + \mathbf{b}) + m\mathbf{c}$ $n\mathbf{a} - m\mathbf{c}$ $n\mathbf{a} + m\mathbf{c}$	$p\mathbf{b} + q\mathbf{c}$ $p\mathbf{b} - q\mathbf{c}$ $-p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$ $-p(\mathbf{a} + \mathbf{b}) - q\mathbf{c}$ $p\mathbf{a} + q\mathbf{c}$ $p\mathbf{a} - q\mathbf{c}$	$C211$ $I211$ $B211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$ $[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$ $[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$c211$ $\hat{p}1$ $p211$ $p2_111 (\mathbf{b}'/4)$ $p1$ $p211$ $p2_111$ $p1$	L10 L01 L08 L09 L01 L08 L09 L01
$l \text{ odd} \Rightarrow n = l, m = 2h; l \text{ even} \Rightarrow n = l/2, m = h$							

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$					
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}								
$(m\bar{m} + n0)$	\mathbf{c}	$n\mathbf{a} - m\mathbf{b}$	$p\mathbf{a} + q\mathbf{b}$	$Pm11$	$s\mathbf{d}$	$pm11$	L11				
$(\bar{m} + nm0)$	\mathbf{c}	$m\mathbf{a} + (m+n)\mathbf{b}$	$-q\mathbf{a} + (p-q)\mathbf{b}$								
$(nm + nm0)$	\mathbf{c}	$-(m+n)\mathbf{a} - n\mathbf{b}$	$(q-p)\mathbf{a} - p\mathbf{b}$								
$(nm\bar{m} + n0)$	$-\mathbf{c}$	$m\mathbf{a} - n\mathbf{b}$	$-q\mathbf{a} - p\mathbf{b}$								
$(\bar{m} + nm0)$	\mathbf{c}	$n\mathbf{a} + (m+n)\mathbf{b}$	$p\mathbf{a} + (p-q)\mathbf{b}$								
$(m\bar{m} + nm0)$	\mathbf{c}	$n\mathbf{a} + (m+n)\mathbf{b}$	$p\mathbf{a} + (p-q)\mathbf{b}$								
$(m\bar{m} + nm0)$	$-\mathbf{c}$	$-(m+n)\mathbf{a} - m\mathbf{b}$	$(q-p)\mathbf{a} + q\mathbf{b}$								
$(0h\bar{h}l)$	\mathbf{a}	$n(\mathbf{a} + 2\mathbf{b}) - m\mathbf{c}$	$p(\mathbf{a} + 2\mathbf{b}) + q\mathbf{c}$	$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$	L10				
$(0hhl)$	$-\mathbf{a}$	$n(\mathbf{a} + 2\mathbf{b}) + m\mathbf{c}$	$p(\mathbf{a} + 2\mathbf{b}) - q\mathbf{c}$								
$(\bar{h}0hl)$	\mathbf{b}	$-n(2\mathbf{a} + \mathbf{b}) - m\mathbf{c}$	$-p(2\mathbf{a} + \mathbf{b}) + q\mathbf{c}$								
$(\bar{h}0h\bar{l})$	$-\mathbf{b}$	$-n(2\mathbf{a} + \mathbf{b}) + m\mathbf{c}$	$-p(2\mathbf{a} + \mathbf{b}) - q\mathbf{c}$								
$(h\bar{h}0l)$	$-(\mathbf{a} + \mathbf{b})$	$n(\mathbf{a} - \mathbf{b}) - m\mathbf{c}$	$p(\mathbf{a} - \mathbf{b}) + q\mathbf{c}$								
$(h\bar{h}0\bar{l})$	$(\mathbf{a} + \mathbf{b})$	$n(\mathbf{a} - \mathbf{b}) + m\mathbf{c}$	$p(\mathbf{a} - \mathbf{b}) - q\mathbf{c}$								
		n odd	m even					$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111 (\mathbf{b}'/4)$ $p1$	L08 L09 L01
		m odd	q odd					$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111$ $p1$	L08 L09 L01
		p odd	q even								
		m odd	q even								
		p odd	q even								
$(\bar{h}2h\bar{h}l)$	$2\mathbf{a} + \mathbf{b}$	$n\mathbf{b} - m\mathbf{c}$	$p\mathbf{b} + q\mathbf{c}$					$C2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c2/m11$	L18
$(\bar{h}2hhl)$	$-(2\mathbf{a} + \mathbf{b})$	$n\mathbf{b} + m\mathbf{c}$	$p\mathbf{b} - q\mathbf{c}$								
$(h\bar{h}2hl)$	$\mathbf{b} - \mathbf{a}$	$-n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$	$-p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$								
$(h\bar{h}2h\bar{l})$	$\mathbf{a} - \mathbf{b}$	$-n(\mathbf{a} + \mathbf{b}) + m\mathbf{c}$	$-p(\mathbf{a} + \mathbf{b}) - q\mathbf{c}$								
$(2h\bar{h}hl)$	$-(\mathbf{a} + 2\mathbf{b})$	$n\mathbf{a} - m\mathbf{c}$	$p\mathbf{a} + q\mathbf{c}$								
$(2h\bar{h}h\bar{l})$	$\mathbf{a} + 2\mathbf{b}$	$n\mathbf{a} + m\mathbf{c}$	$p\mathbf{a} - q\mathbf{c}$								
		n odd	m even	$I2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ $p2_1/m11 [(\mathbf{a}' + \mathbf{b}')/4]$ $pm11$	L14 L15 L11				
		m odd	q odd	$B2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ $p2_1/m11 (\mathbf{a}'/4)$ $pm11$	L14 L15 L11				
		p odd	q even								
		m odd	q even								
		p odd	q even								

l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$
$(nm\bar{m} + \bar{n}0)$ $(m + nm\bar{n}0)$ $(nm + nm\bar{0})$ $(nm\bar{m} + \bar{n}0)$ $(m + nm\bar{n}0)$ $(nm + nm\bar{0})$ (c/4)	\mathbf{c} $na - mb$ $pa + qb$ \mathbf{c} $ma + (m+n)\mathbf{b}$ $-qa + (p-q)\mathbf{b}$ \mathbf{c} $-(m+n)\mathbf{a} - n\mathbf{b}$ $(q-p)\mathbf{a} - p\mathbf{b}$ $-\mathbf{c}$ $ma - n\mathbf{b}$ $-qa - p\mathbf{b}$ \mathbf{c} $na + (m+n)\mathbf{b}$ $pa + (p-q)\mathbf{b}$ $-\mathbf{c}$ $-(m+n)\mathbf{a} - m\mathbf{b}$ $(q-p)\mathbf{a} + qb$	$Pm11$	$s\mathbf{d}$	$pm11$ L11
$(0h\bar{h}l)$ $(0h\bar{h}l)$ $(\bar{h}0hl)$ $(\bar{h}0hl)$ $(hh\bar{0}l)$ $(hh\bar{0}l)$	\mathbf{a} $n(\mathbf{a} + 2\mathbf{b}) - m\mathbf{c}$ $p(\mathbf{a} + 2\mathbf{b}) + q\mathbf{c}$ $-\mathbf{a}$ $n(\mathbf{a} + 2\mathbf{b}) + m\mathbf{c}$ $p(\mathbf{a} + 2\mathbf{b}) - q\mathbf{c}$ \mathbf{b} $-n(2\mathbf{a} + \mathbf{b}) - m\mathbf{c}$ $-p(2\mathbf{a} + \mathbf{b}) + q\mathbf{c}$ $-\mathbf{b}$ $-n(2\mathbf{a} + \mathbf{b}) + m\mathbf{c}$ $-p(2\mathbf{a} + \mathbf{b}) - q\mathbf{c}$ $-(\mathbf{a} + \mathbf{b})$ $n(\mathbf{a} - \mathbf{b}) - m\mathbf{c}$ $p(\mathbf{a} - \mathbf{b}) + q\mathbf{c}$ $(\mathbf{a} + \mathbf{b})$ $n(\mathbf{a} - \mathbf{b}) + m\mathbf{c}$ $p(\mathbf{a} - \mathbf{b}) - q\mathbf{c}$	n odd m even q odd m odd q odd m odd p odd q even	$C211$ $0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$ $I211$ $[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$ $B211$ $[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$c211$ L10 $\hat{p}1$ L01 $p211$ L08 $p2_111 (\mathbf{b}'/4)$ L09 $p1$ L01 $p211$ L08 $p2_111$ L09 $p1$ L01
$(\bar{h}2h\bar{h}l)$ $(\bar{h}2h\bar{h}l)$ $(\bar{h}h2hl)$ $(\bar{h}h2h\bar{l})$ $(2h\bar{h}hl)$ $(2h\bar{h}hl)$	$2\mathbf{a} + \mathbf{b}$ $n\mathbf{b} - m\mathbf{c}$ $p\mathbf{b} + q\mathbf{c}$ $-(2\mathbf{a} + \mathbf{b})$ $n\mathbf{b} + m\mathbf{c}$ $p\mathbf{b} - q\mathbf{c}$ $\mathbf{b} - \mathbf{a}$ $-n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$ $-p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$ $\mathbf{a} - \mathbf{b}$ $-n(\mathbf{a} + \mathbf{b}) + m\mathbf{c}$ $-p(\mathbf{a} + \mathbf{b}) - q\mathbf{c}$ $-(\mathbf{a} + 2\mathbf{b})$ $na - m\mathbf{c}$ $pa + q\mathbf{c}$ $\mathbf{a} + 2\mathbf{b}$ $na + m\mathbf{c}$ $pa - q\mathbf{c}$	n odd m even p even q odd n even m odd p odd q even n even m odd p odd q odd n odd m odd p even q odd n odd m odd p odd q even n odd m even p odd q odd	$Cc11$ $[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$ $Bb11$ $[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$ $Ib11$ $[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$ $Ic11$ $[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$ $Bn11$ $[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$ $Cn11$ $[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$ L01 $pb11$ L12 $pb11$ L12 $pb11 (\mathbf{a}'/4)$ L12 $pb11 (\mathbf{a}'/4)$ L12 $\hat{p}1$ L01
l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$				

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
$(\overline{mnm} + \overline{n0})$ $(\overline{m} + \overline{nmn0})$ $(\overline{nm} + \overline{nm0})$ $(\overline{nm\overline{m}} + \overline{n0})$ $(\overline{m} + \overline{nmn0})$ $(\overline{m\overline{m}} + \overline{nn0})$	\mathbf{c} $n\mathbf{a} - m\mathbf{b}$ $p\mathbf{a} + q\mathbf{b}$ \mathbf{c} $m\mathbf{a} + (m+n)\mathbf{b}$ $-q\mathbf{a} + (p-q)\mathbf{b}$ \mathbf{c} $-(m+n)\mathbf{a} - n\mathbf{b}$ $(q-p)\mathbf{a} - p\mathbf{b}$ $-\mathbf{c}$ $m\mathbf{a} - n\mathbf{b}$ $-q\mathbf{a} - p\mathbf{b}$ \mathbf{c} $n\mathbf{a} + (m+n)\mathbf{b}$ $p\mathbf{a} + (p-q)\mathbf{b}$ $-\mathbf{c}$ $-(m+n)\mathbf{a} - m\mathbf{b}$ $(q-p)\mathbf{a} + q\mathbf{b}$	$P2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2/m11$ $pm11$	L14 L11
$(0h\overline{hl})$ $(0h\overline{hl})$ $(\overline{h}0hl)$ $(\overline{h}0h\overline{l})$ $(h\overline{h}0l)$ $(h\overline{h}0\overline{l})$	\mathbf{a} $n(\mathbf{a} + 2\mathbf{b}) - m\mathbf{c}$ $p(\mathbf{a} + 2\mathbf{b}) + q\mathbf{c}$ $-\mathbf{a}$ $n(\mathbf{a} + 2\mathbf{b}) + m\mathbf{c}$ $p(\mathbf{a} + 2\mathbf{b}) - q\mathbf{c}$ \mathbf{b} $-n(2\mathbf{a} + \mathbf{b}) - m\mathbf{c}$ $-p(2\mathbf{a} + \mathbf{b}) + q\mathbf{c}$ $-\mathbf{b}$ $-n(2\mathbf{a} + \mathbf{b}) + m\mathbf{c}$ $-p(2\mathbf{a} + \mathbf{b}) - q\mathbf{c}$ $-(\mathbf{a} + \mathbf{b})$ $n(\mathbf{a} - \mathbf{b}) - m\mathbf{c}$ $p(\mathbf{a} - \mathbf{b}) + q\mathbf{c}$ $(\mathbf{a} + \mathbf{b})$ $n(\mathbf{a} - \mathbf{b}) + m\mathbf{c}$ $p(\mathbf{a} - \mathbf{b}) - q\mathbf{c}$	$C2/m11$ $I2/m11$ $B2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$ $[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$ $[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$c2/m11$ $cm11$ $p2/m11$ $p2_1/m11 [(a' + b')/4]$ $pm11$ $p2/m11$ $p2_1/m11 (a'/4)$ $pm11$	L18 L13 L14 L15 L11 L14 L15 L11
$(\overline{h}2h\overline{hl})$ $(\overline{h}2h\overline{hl})$ $(\overline{h}h2hl)$ $(\overline{h}h2h\overline{l})$ $(2hh\overline{hl})$ $(2hh\overline{hl})$	$2\mathbf{a} + \mathbf{b}$ $n\mathbf{b} - m\mathbf{c}$ $p\mathbf{b} + q\mathbf{c}$ $-(2\mathbf{a} + \mathbf{b})$ $n\mathbf{b} + m\mathbf{c}$ $p\mathbf{b} - q\mathbf{c}$ $\mathbf{b} - \mathbf{a}$ $-n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$ $-p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$ $\mathbf{a} - \mathbf{b}$ $-n(\mathbf{a} + \mathbf{b}) + m\mathbf{c}$ $-p(\mathbf{a} + \mathbf{b}) - q\mathbf{c}$ $-(\mathbf{a} + 2\mathbf{b})$ $n\mathbf{a} - m\mathbf{c}$ $p\mathbf{a} + q\mathbf{c}$ $\mathbf{a} + 2\mathbf{b}$ $n\mathbf{a} + m\mathbf{c}$ $p\mathbf{a} - q\mathbf{c}$	$C2/m11$ $I2/m11$ $B2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$ $[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$ $[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$c2/m11$ $cm11$ $p2/m11$ $p2_1/m11 [(a' + b')/4]$ $pm11$ $p2/m11$ $p2_1/m11 (a'/4)$ $pm11$	L18 L13 L14 L15 L11 L14 L15 L11
$l \text{ odd} \Rightarrow n = l, m = 2h; l \text{ even} \Rightarrow n = l/2, m = h$					

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$					
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}								
$(\overline{mnm} + \overline{n}0)$	\mathbf{c}	$n\mathbf{a} - m\mathbf{b}$	$p\mathbf{a} + q\mathbf{b}$	$P2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [$s\mathbf{d}, -s\mathbf{d}$]	$p2/m11$ $pm11$	L14 L11				
$(\overline{m} + \overline{nmn}0)$	\mathbf{c}	$m\mathbf{a} + (m+n)\mathbf{b}$	$-q\mathbf{a} + (p-q)\mathbf{b}$								
$(\overline{nm} + \overline{nm}0)$	\mathbf{c}	$-(m+n)\mathbf{a} - n\mathbf{b}$	$(q-p)\mathbf{a} - p\mathbf{b}$								
$(\overline{nm} + \overline{nm}0)$	$-\mathbf{c}$	$m\mathbf{a} - n\mathbf{b}$	$-q\mathbf{a} - p\mathbf{b}$								
$(\overline{m} + \overline{nmn}0)$	\mathbf{c}	$n\mathbf{a} + (m+n)\mathbf{b}$	$p\mathbf{a} + (p-q)\mathbf{b}$								
$(\overline{mm} + \overline{nn}0)$	$-\mathbf{c}$	$-(m+n)\mathbf{a} - m\mathbf{b}$	$(q-p)\mathbf{a} + q\mathbf{b}$								
$(0\overline{h}\overline{h}l)$	\mathbf{a}	$n(\mathbf{a} + 2\mathbf{b}) - m\mathbf{c}$	$p(\mathbf{a} + 2\mathbf{b}) + q\mathbf{c}$	$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ [$\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	$\widehat{p}\overline{1}$ $c211$ $\widehat{p}1$	L02 L10 L01				
$(0\overline{h}\overline{h}l)$	$-\mathbf{a}$	$n(\mathbf{a} + 2\mathbf{b}) + m\mathbf{c}$	$p(\mathbf{a} + 2\mathbf{b}) - q\mathbf{c}$								
$(\overline{h}0\overline{h}l)$	\mathbf{b}	$-n(2\mathbf{a} + \mathbf{b}) - m\mathbf{c}$	$-p(2\mathbf{a} + \mathbf{b}) + q\mathbf{c}$								
$(\overline{h}0\overline{h}l)$	$-\mathbf{b}$	$-n(2\mathbf{a} + \mathbf{b}) + m\mathbf{c}$	$-p(2\mathbf{a} + \mathbf{b}) - q\mathbf{c}$								
$(\overline{h}\overline{h}0l)$	$-(\mathbf{a} + \mathbf{b})$	$n(\mathbf{a} - \mathbf{b}) - m\mathbf{c}$	$p(\mathbf{a} - \mathbf{b}) + q\mathbf{c}$								
$(\overline{h}\overline{h}0l)$	$(\mathbf{a} + \mathbf{b})$	$n(\mathbf{a} - \mathbf{b}) + m\mathbf{c}$	$p(\mathbf{a} - \mathbf{b}) - q\mathbf{c}$								
		n odd	m even					$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ [$\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	$p2/b11$ $p2_1/b11 (\mathbf{a}'/4)$ $pb11$	L16 L17 L12
		n even	m odd					$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ [$\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	$p2/b11$ $p2_1/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ $pb11$	L16 L17 L12
		p odd	q even					$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ [$\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	$p2_1/b11$ $p2/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ $pb11 (\mathbf{a}'/4)$	L17 L16 L12
		n even	m odd					$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ [$\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	$p2_1/b11$ $p2/b11 (\mathbf{a}'/4)$ $pb11 (\mathbf{a}'/4)$	L17 L16 L12
		p odd	q even					$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ [$\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	$\widehat{p}\overline{1}$ $c211 (\mathbf{b}'/4)$ $\widehat{p}1$	L02 L10 L01

Continued

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$				
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}							
$(\bar{h}2h\bar{l})$	$2\mathbf{a} + \mathbf{b}$	$n\mathbf{b} - m\mathbf{c}$	$p\mathbf{b} + q\mathbf{c}$	$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}\bar{1}$ $c211$ $\widehat{p}1$	L02			
$(\bar{h}2h\bar{l})$	$-(2\mathbf{a} + \mathbf{b})$	$n\mathbf{b} + m\mathbf{c}$	$p\mathbf{b} - q\mathbf{c}$							L10
$(\bar{h}h2hl)$	$\mathbf{b} - \mathbf{a}$	$-n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$	$-p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$							L01
$(\bar{h}h2hl)$	$\mathbf{a} - \mathbf{b}$	$-n(\mathbf{a} + \mathbf{b}) + m\mathbf{c}$	$-p(\mathbf{a} + \mathbf{b}) - q\mathbf{c}$							
$(2hh\bar{l})$	$-(\mathbf{a} + 2\mathbf{b})$	$n\mathbf{a} - m\mathbf{c}$	$p\mathbf{a} + q\mathbf{c}$							
$(2hh\bar{l})$	$\mathbf{a} + 2\mathbf{b}$	$n\mathbf{a} + m\mathbf{c}$	$p\mathbf{a} - q\mathbf{c}$							
			n odd m even				$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ $p2_1/b11 (\mathbf{a}'/4)$ $pb11$	L16 L17 L12
			p even q odd				$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ $p2_1/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ $pb11$	L16 L17 L12
			n even m odd				$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ $p2/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ $pb11 (\mathbf{a}'/4)$	L17 L16 L12
			p odd q even				$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ $p2/b11 (\mathbf{a}'/4)$ $pb11 (\mathbf{a}'/4)$	L17 L16 L12
			n odd m odd				$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}\bar{1}$ $c211 (\mathbf{b}'/4)$ $\widehat{p}1$	L02 L10 L01
			p odd q odd							

l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
$(\overline{mnm} + \overline{n0})$ $(\overline{m} + \overline{nmn0})$ $(\overline{nm} + \overline{nm0})$ $(\overline{mnm} + \overline{n0})$ $(\overline{m} + \overline{nmn0})$ $(\overline{mm} + \overline{nm0})$	\mathbf{c} $n\mathbf{a} - m\mathbf{b}$ $p\mathbf{a} + q\mathbf{b}$ \mathbf{c} $m\mathbf{a} + (m+n)\mathbf{b}$ $-q\mathbf{a} + (p-q)\mathbf{b}$ \mathbf{c} $-(m+n)\mathbf{a} - n\mathbf{b}$ $(q-p)\mathbf{a} - p\mathbf{b}$ $-\mathbf{c}$ $m\mathbf{a} - n\mathbf{b}$ $-q\mathbf{a} - p\mathbf{b}$ \mathbf{c} $n\mathbf{a} + (m+n)\mathbf{b}$ $p\mathbf{a} + (p-q)\mathbf{b}$ $-\mathbf{c}$ $-(m+n)\mathbf{a} - m\mathbf{b}$ $(q-p)\mathbf{a} + q\mathbf{b}$	$P2_1/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2_1/m11$ $pm11 (\mathbf{a}'/4)$	L15 L11
$(0h\overline{hl})$ $(0h\overline{h}\overline{l})$ $(\overline{h}0hl)$ $(\overline{h}0h\overline{l})$ $(h\overline{h}0l)$ $(h\overline{h}0\overline{l})$	\mathbf{a} $n(\mathbf{a} + 2\mathbf{b}) - m\mathbf{c}$ $p(\mathbf{a} + 2\mathbf{b}) + q\mathbf{c}$ $-\mathbf{a}$ $n(\mathbf{a} + 2\mathbf{b}) + m\mathbf{c}$ $p(\mathbf{a} + 2\mathbf{b}) - q\mathbf{c}$ \mathbf{b} $-n(2\mathbf{a} + \mathbf{b}) - m\mathbf{c}$ $-p(2\mathbf{a} + \mathbf{b}) + q\mathbf{c}$ $-\mathbf{b}$ $-n(2\mathbf{a} + \mathbf{b}) + m\mathbf{c}$ $-p(2\mathbf{a} + \mathbf{b}) - q\mathbf{c}$ $-(\mathbf{a} + \mathbf{b})$ $n(\mathbf{a} - \mathbf{b}) - m\mathbf{c}$ $p(\mathbf{a} - \mathbf{b}) + q\mathbf{c}$ $(\mathbf{a} + \mathbf{b})$ $n(\mathbf{a} - \mathbf{b}) + m\mathbf{c}$ $p(\mathbf{a} - \mathbf{b}) - q\mathbf{c}$	$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}\overline{1}$ $c211$ $\widehat{p}1$	L02 L10 L01
	n odd m even p even q odd	$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ $p2_1/b11 (\mathbf{a}'/4)$ $pb11$	L16 L17 L12
	n even m odd p odd q even	$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ $p2_1/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ $pb11$	L16 L17 L12
	n even m odd p odd q odd	$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ $p2/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ $pb11 (\mathbf{a}'/4)$	L17 L16 L12
	n odd m odd p even q odd	$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ $p2/b11 (\mathbf{a}'/4)$ $pb11 (\mathbf{a}'/4)$	L17 L16 L12
	n odd m even p odd q odd	$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}\overline{1}$ $c211 (\mathbf{b}'/4)$ $\widehat{p}1$	L02 L10 L01
$(\overline{h}2h\overline{hl})$ $(\overline{h}2h\overline{h}\overline{l})$ $(\overline{h}h2hl)$ $(\overline{h}h2h\overline{l})$ $(2h\overline{h}hl)$ $(2h\overline{h}h\overline{l})$	$2\mathbf{a} + \mathbf{b}$ $n\mathbf{b} - m\mathbf{c}$ $p\mathbf{b} + q\mathbf{c}$ $-(2\mathbf{a} + \mathbf{b})$ $n\mathbf{b} + m\mathbf{c}$ $p\mathbf{b} - q\mathbf{c}$ $\mathbf{b} - \mathbf{a}$ $-n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$ $-p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$ $\mathbf{a} - \mathbf{b}$ $-n(\mathbf{a} + \mathbf{b}) + m\mathbf{c}$ $-p(\mathbf{a} + \mathbf{b}) - q\mathbf{c}$ $-(\mathbf{a} + 2\mathbf{b})$ $n\mathbf{a} - m\mathbf{c}$ $p\mathbf{a} + q\mathbf{c}$ $\mathbf{a} + 2\mathbf{b}$ $n\mathbf{a} + m\mathbf{c}$ $p\mathbf{a} - q\mathbf{c}$	$C2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c2/m11$ $cm11$	L18 L13
	n odd m even q odd	$I2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ $p2_1/m11 [(\mathbf{a}' + \mathbf{b}')/4]$ $pm11$	L14 L15 L11
	m odd q odd	$B2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ $p2_1/m11 (\mathbf{a}'/4)$ $pm11$	L14 L15 L11
	p odd q even				
	l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$				

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
$(\overline{mnm} + n0)$	\mathbf{c} $n\mathbf{a} - m\mathbf{b}$ $p\mathbf{a} + q\mathbf{b}$	$P2_1/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [$s\mathbf{d}, -s\mathbf{d}$]	$p2_1/m11$ $pm11 (\mathbf{a}'/4)$	L15 L11
$(\overline{m} + nm0)$	\mathbf{c} $m\mathbf{a} + (m+n)\mathbf{b}$ $-q\mathbf{a} + (p-q)\mathbf{b}$				
$(\overline{nm} + nm0)$	\mathbf{c} $-(m+n)\mathbf{a} - n\mathbf{b}$ $(q-p)\mathbf{a} - p\mathbf{b}$				
$(\overline{mnm} + n0)$	$-\mathbf{c}$ $m\mathbf{a} - n\mathbf{b}$ $-q\mathbf{a} - p\mathbf{b}$				
$(\overline{m} + n\overline{nm}0)$	\mathbf{c} $n\mathbf{a} + (m+n)\mathbf{b}$ $p\mathbf{a} + (p-q)\mathbf{b}$				
$(\overline{mm} + n0)$	$-\mathbf{c}$ $-(m+n)\mathbf{a} - m\mathbf{b}$ $(q-p)\mathbf{a} + q\mathbf{b}$				
$(0h\overline{h}l)$	\mathbf{a} $n(\mathbf{a} + 2\mathbf{b}) - m\mathbf{c}$ $p(\mathbf{a} + 2\mathbf{b}) + q\mathbf{c}$	$C2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [$s\mathbf{d}, -s\mathbf{d}$]	$c2/m11$ $cm11$	L18 L13
$(0\overline{h}hl)$	$-\mathbf{a}$ $n(\mathbf{a} + 2\mathbf{b}) + m\mathbf{c}$ $p(\mathbf{a} + 2\mathbf{b}) - q\mathbf{c}$				
$(\overline{h}0hl)$	\mathbf{b} $-n(2\mathbf{a} + \mathbf{b}) - m\mathbf{c}$ $-p(2\mathbf{a} + \mathbf{b}) + q\mathbf{c}$				
$(\overline{h}0\overline{h}l)$	$-\mathbf{b}$ $-n(2\mathbf{a} + \mathbf{b}) + m\mathbf{c}$ $-p(2\mathbf{a} + \mathbf{b}) - q\mathbf{c}$				
$(h\overline{h}0l)$	$-(\mathbf{a} + \mathbf{b})$ $n(\mathbf{a} - \mathbf{b}) - m\mathbf{c}$ $p(\mathbf{a} - \mathbf{b}) + q\mathbf{c}$				
$(h\overline{h}0\overline{l})$	$(\mathbf{a} + \mathbf{b})$ $n(\mathbf{a} - \mathbf{b}) + m\mathbf{c}$ $p(\mathbf{a} - \mathbf{b}) - q\mathbf{c}$				
	n odd m even				
	q odd				
	m odd				
	q odd				
	m odd				
	p odd q even				
		$I2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	$p2/m11$ $p2_1/m11 [(\mathbf{a}' + \mathbf{b}')/4]$ $pm11$	L14 L15 L11
		$B2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	$p2/m11$ $p2_1/m11 (\mathbf{a}'/4)$ $pm11$	L14 L15 L11
$(\overline{h}2h\overline{h}l)$	$2\mathbf{a} + \mathbf{b}$ $n\mathbf{b} - m\mathbf{c}$ $p\mathbf{b} + q\mathbf{c}$	$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	$\widehat{p}\overline{1}$ $c211$ $\widehat{p}1$	L02 L10 L01
$(\overline{h}2hhl)$	$-(2\mathbf{a} + \mathbf{b})$ $n\mathbf{b} + m\mathbf{c}$ $p\mathbf{b} - q\mathbf{c}$				
$(\overline{h}h2hl)$	$\mathbf{b} - \mathbf{a}$ $-n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$ $-p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$				
$(\overline{h}h2\overline{h}l)$	$\mathbf{a} - \mathbf{b}$ $-n(\mathbf{a} + \mathbf{b}) + m\mathbf{c}$ $-p(\mathbf{a} + \mathbf{b}) - q\mathbf{c}$				
$(2h\overline{h}hl)$	$-(\mathbf{a} + 2\mathbf{b})$ $n\mathbf{a} - m\mathbf{c}$ $p\mathbf{a} + q\mathbf{c}$				
$(2h\overline{h}h\overline{h}l)$	$\mathbf{a} + 2\mathbf{b}$ $n\mathbf{a} + m\mathbf{c}$ $p\mathbf{a} - q\mathbf{c}$				
	n odd m even				
	p even q odd				
	n even m odd				
	p odd q even				
	n even m odd				
	p odd q odd				
	n odd m odd				
	p even q odd				
	n odd m odd				
	p odd q even				
	n odd m even				
	p odd q odd				
		$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	$p2/b11$ $p2_1/b11 (\mathbf{a}'/4)$ $pb11$	L16 L17 L12
		$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	$p2/b11$ $p2_1/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ $pb11$	L16 L17 L12
		$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	$p2_1/b11$ $p2/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ $pb11 (\mathbf{a}'/4)$	L17 L16 L12
		$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	$p2_1/b11$ $p2/b11 (\mathbf{a}'/4)$ $pb11 (\mathbf{a}'/4)$	L17 L16 L12
		$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	$\widehat{p}\overline{1}$ $c211 (\mathbf{b}'/4)$ $\widehat{p}1$	L02 L10 L01

 l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}				
$(mn0)$	\mathbf{c}	$n\mathbf{a} - m\mathbf{b}$	$p\mathbf{a} + q\mathbf{b}$	$P211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p211$	L08
$(\bar{m}n0)$	\mathbf{c}	$n\mathbf{a} + m\mathbf{b}$	$-p\mathbf{a} + q\mathbf{b}$				
$(0mn)$	\mathbf{a}	$n\mathbf{b} - m\mathbf{c}$	$p\mathbf{b} + q\mathbf{c}$				
$(0\bar{m}n)$	\mathbf{a}	$n\mathbf{b} + m\mathbf{c}$	$-p\mathbf{b} + q\mathbf{c}$				
$(n0m)$	\mathbf{b}	$n\mathbf{c} - m\mathbf{a}$	$p\mathbf{c} + q\mathbf{a}$				
$(n0\bar{m})$	\mathbf{b}	$n\mathbf{c} + m\mathbf{a}$	$-p\mathbf{c} + q\mathbf{a}$				
						$p1$	L01

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group a' b' d	Scanning group \mathcal{H}	Linear orbit sd	Sectional layer group $\mathcal{L}(\mathbf{sd})$		
<i>(hk0)</i> <i>(h-bar k0)</i>	c $n\hat{\mathbf{a}} - m\hat{\mathbf{b}}$ $p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$ c $n\hat{\mathbf{a}} + m\hat{\mathbf{b}}$ $-p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$	<i>I</i> 211	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p</i> 211 L08 <i>p</i> 2 ₁ 11 (b' /4) L09 <i>p</i> 1 L01		
	<i>n</i> odd <i>m</i> even <i>p</i> even <i>q</i> odd or <i>n</i> even <i>m</i> odd <i>p</i> odd <i>q</i> even <i>p</i> odd <i>q</i> odd			<i>B</i> 211	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p</i> 211 L08 <i>p</i> 2 ₁ 11 L09 <i>p</i> 1 L01
	<i>n</i> odd <i>m</i> odd			<i>C</i> 211	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	<i>c</i> 211 L10 \hat{p} 1 L01
$\hat{\mathbf{a}} = (\mathbf{a} - \mathbf{b})/2$ <i>h</i> even, <i>k</i> odd or <i>h</i> odd, <i>k</i> even $\Rightarrow n = h + k, m = h - k$ $\hat{\mathbf{b}} = (\mathbf{a} + \mathbf{b})/2$ <i>h, k</i> odd $\Rightarrow n = (h + k)/2, m = (h - k)/2$						
<i>(0hk)</i> <i>(0h-bar k)</i>	a $n\hat{\mathbf{a}} - m\hat{\mathbf{b}}$ $p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$ a $n\hat{\mathbf{a}} + m\hat{\mathbf{b}}$ $-p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$	<i>I</i> 211	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p</i> 211 L08 <i>p</i> 2 ₁ 11 (b' /4) L09 <i>p</i> 1 L01		
	<i>n</i> odd <i>m</i> even <i>p</i> even <i>q</i> odd or <i>n</i> even <i>m</i> odd <i>p</i> odd <i>q</i> even <i>p</i> odd <i>q</i> odd			<i>B</i> 211	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p</i> 211 L08 <i>p</i> 2 ₁ 11 L09 <i>p</i> 1 L01
	<i>n</i> odd <i>m</i> odd			<i>C</i> 211	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	<i>c</i> 211 L10 \hat{p} 1 L01
$\hat{\mathbf{a}} = (\mathbf{b} - \mathbf{c})/2$ <i>h</i> even, <i>k</i> odd or <i>h</i> odd, <i>k</i> even $\Rightarrow n = h + k, m = h - k$ $\hat{\mathbf{b}} = (\mathbf{b} + \mathbf{c})/2$ <i>h, k</i> odd $\Rightarrow n = (h + k)/2, m = (h - k)/2$						
<i>(k0h)</i> <i>(k0h-bar)</i>	b $n\hat{\mathbf{a}} - m\hat{\mathbf{b}}$ $p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$ b $n\hat{\mathbf{a}} + m\hat{\mathbf{b}}$ $-p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$	<i>I</i> 211	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p</i> 211 L08 <i>p</i> 2 ₁ 11 (b' /4) L09 <i>p</i> 1 L01		
	<i>n</i> odd <i>m</i> even <i>p</i> even <i>q</i> odd or <i>n</i> even <i>m</i> odd <i>p</i> odd <i>q</i> even <i>p</i> odd <i>q</i> odd			<i>B</i> 211	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p</i> 211 L08 <i>p</i> 2 ₁ 11 L09 <i>p</i> 1 L01
	<i>n</i> odd <i>m</i> odd			<i>C</i> 211	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	<i>c</i> 211 L10 \hat{p} 1 L01
$\hat{\mathbf{a}} = (\mathbf{c} - \mathbf{a})/2$ <i>h</i> even, <i>k</i> odd or <i>h</i> odd, <i>k</i> even $\Rightarrow n = h + k, m = h - k$ $\hat{\mathbf{b}} = (\mathbf{c} + \mathbf{a})/2$ <i>h, k</i> odd $\Rightarrow n = (h + k)/2, m = (h - k)/2$						

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}				
(<i>mn0</i>)	\mathbf{c}	$n\mathbf{a} - m\mathbf{b}$	$p\mathbf{a} + q\mathbf{b}$	<i>I211</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p211</i> <i>p2₁11</i> ($\mathbf{b}'/4$) <i>p1</i>	L08 L09 L01
($\overline{m}n0$)	\mathbf{c}	$n\mathbf{a} + m\mathbf{b}$	$-p\mathbf{a} + q\mathbf{b}$				
(<i>0mn</i>)	\mathbf{a}	$n\mathbf{b} - m\mathbf{c}$	$p\mathbf{b} + q\mathbf{c}$				
($0\overline{m}n$)	\mathbf{a}	$n\mathbf{b} + m\mathbf{c}$	$-p\mathbf{b} + q\mathbf{c}$				
(<i>n0m</i>)	\mathbf{b}	$nc - ma$	$pc + qa$				
($n0\overline{m}$)	\mathbf{b}	$nc + ma$	$-pc + qa$				
		<i>n</i> odd <i>m</i> even					
		<i>p</i> even <i>q</i> odd					
		or					
		<i>n</i> even <i>m</i> odd					
		<i>p</i> odd <i>q</i> even					
		<i>p</i> odd <i>q</i> odd					
		<i>n</i> odd <i>m</i> odd					
			<i>B211</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p211</i> <i>p2₁11</i> <i>p1</i>	L08 L09 L01	
			<i>C211</i>	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	<i>c211</i> $\widehat{p}1$	L10 L01	

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}				
$(mn0)$ $(\bar{m}n0)$ ($\mathbf{a}/4$)	\mathbf{c} \mathbf{c}	$n\mathbf{a} - m\mathbf{b}$ $n\mathbf{a} + m\mathbf{b}$	$p\mathbf{a} + q\mathbf{b}$ $-p\mathbf{a} + q\mathbf{b}$	$P2_111$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2_111$ $p1$	L09 L01
$(0mn)$ $(0\bar{m}n)$ ($\mathbf{b}/4$)	\mathbf{a} \mathbf{a}	$n\mathbf{b} - m\mathbf{c}$ $n\mathbf{b} + m\mathbf{c}$	$p\mathbf{b} + q\mathbf{c}$ $-p\mathbf{b} + q\mathbf{c}$	$P2_111$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2_111$ $p1$	L09 L01
$(n0m)$ $(n0\bar{m})$ ($\mathbf{c}/4$)	\mathbf{b} \mathbf{b}	$n\mathbf{c} - m\mathbf{a}$ $n\mathbf{c} + m\mathbf{a}$	$p\mathbf{c} + q\mathbf{a}$ $-p\mathbf{c} + q\mathbf{a}$	$P2_111$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2_111$ $p1$	L09 L01

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}			
$(mn0)$ $(\bar{m}n0)$ $(\mathbf{b}/4)$	\mathbf{c}	$n\mathbf{a} - m\mathbf{b}$	$p\mathbf{a} + q\mathbf{b}$	$I211$ $B211$ $C211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111 (\mathbf{b}'/4)$ L09 $p1$ L01
	\mathbf{c}	$n\mathbf{a} + m\mathbf{b}$	$-p\mathbf{a} + q\mathbf{b}$			
			n odd m even			
			p even q odd			
			or			
			n even m odd			
			p odd q even			
			p odd q odd			
			n odd m odd			
$(0mn)$ $(0\bar{m}n)$ $(\mathbf{c}/4)$	\mathbf{a}	$n\mathbf{b} - m\mathbf{c}$	$p\mathbf{b} + q\mathbf{c}$	$I211$ $B211$ $C211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111 (\mathbf{b}'/4)$ L09 $p1$ L01
	\mathbf{a}	$n\mathbf{b} + m\mathbf{c}$	$-p\mathbf{b} + q\mathbf{c}$			
			n odd m even			
			p even q odd			
			or			
			n even m odd			
			p odd q even			
			p odd q odd			
			n odd m odd			
$(n0m)$ $(n0\bar{m})$ $(\mathbf{a}/4)$	\mathbf{b}	$n\mathbf{c} - m\mathbf{a}$	$p\mathbf{c} + q\mathbf{a}$	$I211$ $B211$ $C211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111 (\mathbf{b}'/4)$ L09 $p1$ L01
	\mathbf{b}	$n\mathbf{c} + m\mathbf{a}$	$-p\mathbf{c} + q\mathbf{a}$			
			n odd m even			
			p even q odd			
			or			
			n even m odd			
			p odd q even			
			p odd q odd			
			n odd m odd			

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}				
($mn0$)	\mathbf{c}	$n\mathbf{a} - m\mathbf{b}$	$p\mathbf{a} + q\mathbf{b}$	$P2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [$s\mathbf{d}, -s\mathbf{d}$]	$p2/m11$	L14
($\bar{m}n0$)	\mathbf{c}	$n\mathbf{a} + m\mathbf{b}$	$-p\mathbf{a} + q\mathbf{b}$				
($0mn$)	\mathbf{a}	$n\mathbf{b} - m\mathbf{c}$	$p\mathbf{b} + q\mathbf{c}$				
($0\bar{m}n$)	\mathbf{a}	$n\mathbf{b} + m\mathbf{c}$	$-p\mathbf{b} + q\mathbf{c}$				
($n0m$)	\mathbf{b}	$n\mathbf{c} - m\mathbf{a}$	$p\mathbf{c} + q\mathbf{a}$				
($n0\bar{m}$)	\mathbf{b}	$n\mathbf{c} + m\mathbf{a}$	$-p\mathbf{c} + q\mathbf{a}$				
						$pm11$	L11

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}			
$(mn0)$	\mathbf{c}	$n\mathbf{a} - m\mathbf{b}$	$p\mathbf{a} + q\mathbf{b}$	$P2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p211 (\mathbf{b}'/4)$ $p1$
$(\bar{m}n0)$	\mathbf{c}	$n\mathbf{a} + m\mathbf{b}$	$-p\mathbf{a} + q\mathbf{b}$			
$(0mn)$	\mathbf{a}	$n\mathbf{b} - m\mathbf{c}$	$p\mathbf{b} + q\mathbf{c}$			
$(0\bar{m}n)$	\mathbf{a}	$n\mathbf{b} + m\mathbf{c}$	$-p\mathbf{b} + q\mathbf{c}$			
$(n0m)$	\mathbf{b}	$n\mathbf{c} - m\mathbf{a}$	$p\mathbf{c} + q\mathbf{a}$			
$(n0\bar{m})$	\mathbf{b}	$n\mathbf{c} + m\mathbf{a}$	$-p\mathbf{c} + q\mathbf{a}$			
$(\mathbf{a} + \mathbf{b} + \mathbf{c})/4$			n odd m even			L02
			p even q odd			L08
			or			L01
			n even m odd			
			p odd q even	$P2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p211$ $p1$
			p odd q odd			L02
						L08
						L01
			n odd m odd	$P2/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2/b11$ $pb11$
						L16
						L12

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$
$(hk0)$ $(\bar{h}k0)$	\mathbf{c} $n\hat{\mathbf{a}} - m\hat{\mathbf{b}}$ $p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$	$I2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ L14
	\mathbf{c} $n\hat{\mathbf{a}} + m\hat{\mathbf{b}}$ $-p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$			$p2_1/m11 [(a' + b')/4]$ L15
	n odd m even p even q odd or n even m odd p odd q even p odd q odd			$pm11$ L11
	n even m odd p odd q even p odd q odd	$B2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ L14 $p2_1/m11 (a'/4)$ L15 $pm11$ L11
	n odd m odd	$C2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c2/m11$ L18 $cm11$ L13
	$\hat{\mathbf{a}} = (\mathbf{a} - \mathbf{b})/2$ $\hat{\mathbf{b}} = (\mathbf{a} + \mathbf{b})/2$	h even, k odd or h odd, k even $\Rightarrow n = h + k, m = h - k$ h, k odd $\Rightarrow n = (h + k)/2, m = (h - k)/2$		
$(0hk)$ $(0\bar{h}k)$	\mathbf{a} $n\hat{\mathbf{a}} - m\hat{\mathbf{b}}$ $p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$	$I2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ L14
	\mathbf{a} $n\hat{\mathbf{a}} + m\hat{\mathbf{b}}$ $-p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$			$p2_1/m11 [(a' + b')/4]$ L15
	n odd m even p even q odd or n even m odd p odd q even p odd q odd			$pm11$ L11
	n even m odd p odd q even p odd q odd	$B2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ L14 $p2_1/m11 (a'/4)$ L15 $pm11$ L11
	n odd m odd	$C2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c2/m11$ L18 $cm11$ L13
	$\hat{\mathbf{a}} = (\mathbf{b} - \mathbf{c})/2$ $\hat{\mathbf{b}} = (\mathbf{b} + \mathbf{c})/2$	h even, k odd or h odd, k even $\Rightarrow n = h + k, m = h - k$ h, k odd $\Rightarrow n = (h + k)/2, m = (h - k)/2$		
$(k0h)$ $(k0\bar{h})$	\mathbf{b} $n\hat{\mathbf{a}} - m\hat{\mathbf{b}}$ $p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$	$I2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ L14
	\mathbf{b} $n\hat{\mathbf{a}} + m\hat{\mathbf{b}}$ $-p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$			$p2_1/m11 [(a' + b')/4]$ L15
	n odd m even p even q odd or n even m odd p odd q even p odd q odd			$pm11$ L11
	n even m odd p odd q even p odd q odd	$B2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ L14 $p2_1/m11 (a'/4)$ L15 $pm11$ L11
	n odd m odd	$C2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c2/m11$ L18 $cm11$ L13
	$\hat{\mathbf{a}} = (\mathbf{c} - \mathbf{a})/2$ $\hat{\mathbf{b}} = (\mathbf{c} + \mathbf{a})/2$	h even, k odd or h odd, k even $\Rightarrow n = h + k, m = h - k$ h, k odd $\Rightarrow n = (h + k)/2, m = (h - k)/2$		

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$			
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}						
$(hk0)$ $(\bar{h}k0)$ $(\mathbf{a} + \mathbf{b} + \mathbf{c})/8$	\mathbf{c}	$n\hat{\mathbf{a}} - m\hat{\mathbf{b}}$	$p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$	$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ $p2/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ $pb11 (\mathbf{a}'/4)$	L17 L16 L12		
	\mathbf{c}	$n\hat{\mathbf{a}} + m\hat{\mathbf{b}}$	$-p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$					n odd m even p even q odd	
				n even m odd p odd q even	$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ $p2_1/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ $pb11$	L16 L17 L12	
				n even m odd p odd q odd	$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ $p2_1/b11 (\mathbf{a}'/4)$ $pb11$	L16 L17 L12	
				n odd m odd p even q odd	$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}\bar{1}$ $c211$ $\hat{p}1$	L02 L10 L01	
				n odd m odd p odd q even	$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}\bar{1}$ $c211 (\mathbf{b}'/4)$ $\hat{p}1$	L02 L10 L01	
				n odd m even p odd q odd	$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ $p2/b11 (\mathbf{a}'/4)$ $pb11 (\mathbf{a}'/4)$	L17 L16 L12	
	$\hat{\mathbf{a}} = (\mathbf{a} - \mathbf{b})/2$ $\hat{\mathbf{b}} = (\mathbf{a} + \mathbf{b})/2$			h even, k odd or h odd, k even $\Rightarrow n = h + k, m = h - k$ h, k odd $\Rightarrow n = (h + k)/2, m = (h - k)/2$					
	$(0hk)$ $(0\bar{h}k)$ $(\mathbf{a} + \mathbf{b} + \mathbf{c})/8$	\mathbf{a}	$n\hat{\mathbf{a}} - m\hat{\mathbf{b}}$	$p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$	$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ $p2/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ $pb11 (\mathbf{a}'/4)$	L17 L16 L12	
		\mathbf{a}	$n\hat{\mathbf{a}} + m\hat{\mathbf{b}}$	$-p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$					n odd m even p even q odd
					n even m odd p odd q even	$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ $p2_1/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ $pb11$	L16 L17 L12
					n even m odd p odd q odd	$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ $p2_1/b11 (\mathbf{a}'/4)$ $pb11$	L16 L17 L12
					n odd m odd p even q odd	$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}\bar{1}$ $c211$ $\hat{p}1$	L02 L10 L01
					n odd m odd p odd q even	$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}\bar{1}$ $c211 (\mathbf{b}'/4)$ $\hat{p}1$	L02 L10 L01
				n odd m even p odd q odd	$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ $p2/b11 (\mathbf{a}'/4)$ $pb11 (\mathbf{a}'/4)$	L17 L16 L12	
$\hat{\mathbf{a}} = (\mathbf{b} - \mathbf{c})/2$ $\hat{\mathbf{b}} = (\mathbf{b} + \mathbf{c})/2$			h even, k odd or h odd, k even $\Rightarrow n = h + k, m = h - k$ h, k odd $\Rightarrow n = (h + k)/2, m = (h - k)/2$						

Continued

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}			
$(k0h)$ $(k0\bar{h})$ $(\mathbf{a} + \mathbf{b} + \mathbf{c})/8$	\mathbf{b}	$n\hat{\mathbf{a}} - m\hat{\mathbf{b}}$	$p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$	$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ L17
	\mathbf{b}	$n\hat{\mathbf{a}} + m\hat{\mathbf{b}}$	$-p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$			$p2/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ L16
			n odd m even			$pb11 (\mathbf{a}'/4)$ L12
			p even q odd			
			n even m odd	$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ L16
			p odd q even			$p2_1/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ L17
			n even m odd			$pb11$ L12
			p odd q odd	$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ L16
			n odd m odd			$p2_1/b11 (\mathbf{a}'/4)$ L17
			p even q odd	$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}\bar{1}$ L02 $c211$ L10 $\hat{p}1$ L01
		n odd m odd			$\hat{p}\bar{1}$ L02	
		p odd q even	$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$c211 (\mathbf{b}'/4)$ L10 $\hat{p}1$ L01	
		n odd m even			$p2_1/b11$ L17	
		p odd q odd	$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11 (\mathbf{a}'/4)$ L16 $pb11 (\mathbf{a}'/4)$ L12	
	$\hat{\mathbf{a}} = (\mathbf{c} - \mathbf{a})/2$			h even, k odd or h odd, k even $\Rightarrow n = h + k, m = h - k$		
	$\hat{\mathbf{b}} = (\mathbf{c} + \mathbf{a})/2$			h, k odd $\Rightarrow n = (h + k)/2, m = (h - k)/2$		

Continued

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$		
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}					
$(hk0)$ $(\bar{h}k0)$	\mathbf{c}	$n\hat{\mathbf{a}} - m\hat{\mathbf{b}}$	$p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$	$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ L17		
	\mathbf{c}	$n\hat{\mathbf{a}} + m\hat{\mathbf{b}}$	$-p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$			$p2/b11 [(a' + b')/4]$ L16		
		n odd	m even			$pb11 (a'/4)$ L12		
		p even	q odd					
		n even	m odd			$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2/b11$ L16
		p odd	q even				$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2_1/b11 [(a' + b')/4]$ L17
							$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11$ L12
		n even	m odd			$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2/b11$ L16
		p odd	q odd				$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2_1/b11 (a'/4)$ L17
							$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11$ L12
		n odd	m odd			$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$\hat{p}\bar{1}$ L02
		p even	q odd				$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$c211$ L10
							$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$ L01
		n odd	m odd			$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$\hat{p}\bar{1}$ L02
	p odd	q even		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$c211 (b'/4)$ L10			
				$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$ L01			
	n odd	m even	$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2_1/b11$ L17			
	p odd	q odd		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2/b11 (a'/4)$ L16			
				$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11 (a'/4)$ L12			
				h even, k odd or h odd, k even $\Rightarrow n = h + k, m = h - k$				
				h, k odd $\Rightarrow n = (h + k)/2, m = (h - k)/2$				
$(0hk)$ $(0\bar{h}k)$	\mathbf{a}	$n\hat{\mathbf{a}} - m\hat{\mathbf{b}}$	$p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$	$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ L17		
	\mathbf{a}	$n\hat{\mathbf{a}} + m\hat{\mathbf{b}}$	$-p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$			$p2/b11 [(a' + b')/4]$ L16		
		n odd	m even			$pb11 (a'/4)$ L12		
		p even	q odd					
		n even	m odd			$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2/b11$ L16
		p odd	q even				$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2_1/b11 [(a' + b')/4]$ L17
							$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11$ L12
		n even	m odd			$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2/b11$ L16
		p odd	q odd				$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2_1/b11 (a'/4)$ L17
							$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11$ L12
		n odd	m odd			$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$\hat{p}\bar{1}$ L02
		p even	q odd				$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$c211$ L10
							$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$ L01
		n odd	m odd			$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$\hat{p}\bar{1}$ L02
	p odd	q even		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$c211 (b'/4)$ L10			
				$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$ L01			
	n odd	m even	$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2_1/b11$ L17			
	p odd	q odd		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2/b11 (a'/4)$ L16			
				$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11 (a'/4)$ L12			
				h even, k odd or h odd, k even $\Rightarrow n = h + k, m = h - k$				
				h, k odd $\Rightarrow n = (h + k)/2, m = (h - k)/2$				
				$\hat{\mathbf{a}} = (\mathbf{a} - \mathbf{b})/2$				
				$\hat{\mathbf{b}} = (\mathbf{a} + \mathbf{b})/2$				
				$\hat{\mathbf{a}} = (\mathbf{b} - \mathbf{c})/2$				
				$\hat{\mathbf{b}} = (\mathbf{b} + \mathbf{c})/2$				

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}			
$(k0h)$	\mathbf{b}	$n\hat{\mathbf{a}} - m\hat{\mathbf{b}}$	$p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$			
$(k0\bar{h})$	\mathbf{b}	$n\hat{\mathbf{a}} + m\hat{\mathbf{b}}$	$-p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$			
		n odd	m even	$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ L17 $p2/b11 [(a' + b')/4]$ L16 $pb11 (a'/4)$ L12
		p even	q odd			
		n even	m odd	$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ L16 $p2_1/b11 [(a' + b')/4]$ L17 $pb11$ L12
		p odd	q even			
		n even	m odd	$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ L16 $p2_1/b11 (a'/4)$ L17 $pb11$ L12
		p odd	q odd			
		n odd	m odd	$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}\bar{1}$ L02 $c211$ L10 $\hat{p}1$ L01
		p even	q odd			
		n odd	m odd	$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}\bar{1}$ L02 $c211 (b'/4)$ L10 $\hat{p}1$ L01
		p odd	q even			
		n odd	m even	$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ L17 $p2/b11 (a'/4)$ L16 $pb11 (a'/4)$ L12
		p odd	q odd			
	$\hat{\mathbf{a}} = (\mathbf{c} - \mathbf{a})/2$	h even, k odd or h odd, k even $\Rightarrow n = h + k, m = h - k$				
	$\hat{\mathbf{b}} = (\mathbf{c} + \mathbf{a})/2$	h, k odd $\Rightarrow n = (h + k)/2, m = (h - k)/2$				

$$\mathcal{G} = I_m^2\bar{3}$$

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$																									
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}																												
(<i>mn0</i>)	\mathbf{c}	$n\mathbf{a} - m\mathbf{b}$	$p\mathbf{a} + q\mathbf{b}$	<i>I2/m11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p2/m11</i>	L14																								
($\bar{m}n0$)	\mathbf{c}	$n\mathbf{a} + m\mathbf{b}$	$-p\mathbf{a} + q\mathbf{b}$				<i>B2/m11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p2₁/m11</i> [($\mathbf{a}' + \mathbf{b}'$)/4]	L15																					
(<i>0mn</i>)	\mathbf{a}	$n\mathbf{b} - m\mathbf{c}$	$p\mathbf{b} + q\mathbf{c}$							<i>C2/m11</i>	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	<i>pm11</i>	L11																		
($0\bar{m}n$)	\mathbf{a}	$n\mathbf{b} + m\mathbf{c}$	$-p\mathbf{b} + q\mathbf{c}$										<i>c2/m11</i>	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	<i>cm11</i>	L18															
(<i>n0m</i>)	\mathbf{b}	$n\mathbf{c} - m\mathbf{a}$	$p\mathbf{c} + q\mathbf{a}$													<i>c2/m11</i>	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	<i>cm11</i>	L13												
($n0\bar{m}$)	\mathbf{b}	$n\mathbf{c} + m\mathbf{a}$	$-p\mathbf{c} + q\mathbf{a}$																<i>c2/m11</i>	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	<i>cm11</i>	L13									
			<i>n odd m even</i>																			<i>c2/m11</i>	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	<i>cm11</i>	L13						
			<i>p even q odd</i>																						<i>c2/m11</i>	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	<i>cm11</i>	L13			
			or																									<i>c2/m11</i>	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	<i>cm11</i>	L13
			<i>n even m odd</i>																												<i>c2/m11</i>
			<i>p odd q even</i>	<i>c2/m11</i>	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	<i>cm11</i>																									
			<i>p odd q odd</i>				<i>c2/m11</i>	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	<i>cm11</i>																						
			<i>n odd m odd</i>							<i>c2/m11</i>	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	<i>cm11</i>																			

$$\mathcal{G} = P_a^2\bar{3}$$

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}			
(<i>mn0</i>)	\mathbf{c}	$n\mathbf{a} - m\mathbf{b}$	$p\mathbf{a} + q\mathbf{b}$			
($\bar{m}n0$)	\mathbf{c}	$n\mathbf{a} + m\mathbf{b}$	$-p\mathbf{a} + q\mathbf{b}$			
(<i>0mn</i>)	\mathbf{a}	$n\mathbf{b} - m\mathbf{c}$	$p\mathbf{b} + q\mathbf{c}$			
($0\bar{m}n$)	\mathbf{a}	$n\mathbf{b} + m\mathbf{c}$	$-p\mathbf{b} + q\mathbf{c}$			
(<i>n0m</i>)	\mathbf{b}	$nc - ma$	$pc + qa$			
($n0\bar{m}$)	\mathbf{b}	$nc + ma$	$-pc + qa$			
			<i>n</i> odd <i>m</i> even	$P2_1/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2_1/b11$ L17 $pb11 (\mathbf{a}'/4)$ L12
			<i>q</i> odd	$P2_1/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ L02 $p2_111 (\mathbf{b}'/4)$ L09 $p1$ L01
			<i>m</i> odd			
			<i>q</i> odd	$P2_1/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ L02 $p2_111$ L09 $p1$ L01
			<i>m</i> odd			
			<i>p</i> odd <i>q</i> even			

$$\mathcal{G} = I_a^2\bar{3}$$

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}				
(<i>mn0</i>)	\mathbf{c}	$n\mathbf{a} - m\mathbf{b}$	$p\mathbf{a} + q\mathbf{b}$				
($\bar{m}n0$)	\mathbf{c}	$n\mathbf{a} + m\mathbf{b}$	$-p\mathbf{a} + q\mathbf{b}$				
(<i>0mn</i>)	\mathbf{a}	$n\mathbf{b} - m\mathbf{c}$	$p\mathbf{b} + q\mathbf{c}$				
($0\bar{m}n$)	\mathbf{a}	$n\mathbf{b} + m\mathbf{c}$	$-p\mathbf{b} + q\mathbf{c}$				
(<i>n0m</i>)	\mathbf{b}	$n\mathbf{c} - m\mathbf{a}$	$p\mathbf{c} + q\mathbf{a}$				
($n0\bar{m}$)	\mathbf{b}	$n\mathbf{c} + m\mathbf{a}$	$-p\mathbf{c} + q\mathbf{a}$				
			<i>n</i> odd <i>m</i> even	$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2_1/b11$	L17
			<i>p</i> even <i>q</i> odd		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2/b11 [(a' + b')/4]$	L16
					$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11 (a'/4)$	L12
			<i>n</i> even <i>m</i> odd	$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2/b11$	L16
			<i>p</i> odd <i>q</i> even		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2_1/b11 [(a' + b')/4]$	L17
					$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11$	L12
			<i>n</i> even <i>m</i> odd	$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2/b11$	L16
			<i>p</i> odd <i>q</i> odd		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2_1/b11 (a'/4)$	L17
					$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11$	L12
			<i>n</i> odd <i>m</i> odd	$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$\widehat{p}\bar{1}$	L02
			<i>p</i> even <i>q</i> odd		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$c211$	L10
					$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}1$	L01
			<i>n</i> odd <i>m</i> odd	$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$\widehat{p}\bar{1}$	L02
			<i>p</i> odd <i>q</i> even		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$c211 (b'/4)$	L10
					$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}1$	L01
			<i>n</i> odd <i>m</i> even	$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2_1/b11$	L17
			<i>p</i> odd <i>q</i> odd		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2/b11 (a'/4)$	L16
					$\pm s\mathbf{d}, \pm s \frac{1}{2} \mathbf{d}$	$pb11 (a'/4)$	L12

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$					
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}								
(<i>mn0</i>)	\mathbf{c}	$n\mathbf{a} - m\mathbf{b}$	$p\mathbf{a} + q\mathbf{b}$	<i>P</i> 211	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [$s\mathbf{d}, -s\mathbf{d}$]	<i>p</i> 211	L08				
($\overline{m}n0$)	\mathbf{c}	$n\mathbf{a} + m\mathbf{b}$	$-p\mathbf{a} + q\mathbf{b}$								
(<i>nm0</i>)	\mathbf{c}	$m\mathbf{a} - n\mathbf{b}$	$q\mathbf{a} + p\mathbf{b}$								
($\overline{n}m0$)	\mathbf{c}	$m\mathbf{a} + n\mathbf{b}$	$-q\mathbf{a} + p\mathbf{b}$								
(<i>0mn</i>)	\mathbf{a}	$n\mathbf{b} - m\mathbf{c}$	$p\mathbf{b} + q\mathbf{c}$								
($0\overline{m}n$)	\mathbf{a}	$n\mathbf{b} + m\mathbf{c}$	$-p\mathbf{b} + q\mathbf{c}$								
(<i>0nm</i>)	\mathbf{a}	$m\mathbf{b} - n\mathbf{c}$	$q\mathbf{b} + p\mathbf{c}$								
($0\overline{n}m$)	\mathbf{a}	$m\mathbf{b} + n\mathbf{c}$	$-q\mathbf{b} + p\mathbf{c}$								
(<i>n0m</i>)	\mathbf{b}	$n\mathbf{c} - m\mathbf{a}$	$p\mathbf{c} + q\mathbf{a}$								
($n0\overline{m}$)	\mathbf{b}	$n\mathbf{c} + m\mathbf{a}$	$-p\mathbf{c} + q\mathbf{a}$								
(<i>m0n</i>)	\mathbf{b}	$m\mathbf{c} - n\mathbf{a}$	$q\mathbf{c} + p\mathbf{a}$								
($m0\overline{n}$)	\mathbf{b}	$m\mathbf{c} + n\mathbf{a}$	$-q\mathbf{c} + p\mathbf{a}$								
(<i>hhl</i>)	$\mathbf{a} - \mathbf{b}$	$n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$	$p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$	<i>B</i> 211	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ [$\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	<i>p</i> 211	L08				
($\overline{h}hl$)	$\mathbf{a} - \mathbf{b}$	$n(\mathbf{a} + \mathbf{b}) + m\mathbf{c}$	$-p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$								
(<i>hh\overline{l}</i>)	$\mathbf{a} + \mathbf{b}$	$n(\mathbf{b} - \mathbf{a}) - m\mathbf{c}$	$p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$								
($\overline{h}h\overline{l}$)	$\mathbf{a} + \mathbf{b}$	$n(\mathbf{b} - \mathbf{a}) + m\mathbf{c}$	$-p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$								
(<i>lhh</i>)	$\mathbf{b} - \mathbf{c}$	$n(\mathbf{b} + \mathbf{c}) - m\mathbf{a}$	$p(\mathbf{b} + \mathbf{c}) + q\mathbf{a}$								
($\overline{l}h\overline{h}$)	$\mathbf{b} - \mathbf{c}$	$n(\mathbf{b} + \mathbf{c}) + m\mathbf{a}$	$-p(\mathbf{b} + \mathbf{c}) + q\mathbf{a}$								
(<i>lh\overline{h}</i>)	$\mathbf{b} + \mathbf{c}$	$n(\mathbf{c} - \mathbf{b}) - m\mathbf{a}$	$p(\mathbf{c} - \mathbf{b}) + q\mathbf{a}$								
($\overline{l}h\overline{h}$)	$\mathbf{b} + \mathbf{c}$	$n(\mathbf{c} - \mathbf{b}) + m\mathbf{a}$	$-p(\mathbf{c} - \mathbf{b}) + q\mathbf{a}$								
(<i>hlh</i>)	$\mathbf{c} - \mathbf{a}$	$n(\mathbf{c} + \mathbf{a}) - m\mathbf{b}$	$p(\mathbf{c} + \mathbf{a}) + q\mathbf{b}$								
($\overline{h}l\overline{h}$)	$\mathbf{c} - \mathbf{a}$	$n(\mathbf{c} + \mathbf{a}) + m\mathbf{b}$	$-p(\mathbf{c} + \mathbf{a}) + q\mathbf{b}$								
(<i>h$\overline{l}h$</i>)	$\mathbf{c} + \mathbf{a}$	$n(\mathbf{a} - \mathbf{c}) - m\mathbf{b}$	$p(\mathbf{a} - \mathbf{c}) + q\mathbf{b}$								
($\overline{h}l\overline{h}$)	$\mathbf{c} + \mathbf{a}$	$n(\mathbf{a} - \mathbf{c}) + m\mathbf{b}$	$-p(\mathbf{a} - \mathbf{c}) + q\mathbf{b}$								
		<i>n</i> odd						<i>C</i> 211	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [$s\mathbf{d}, -s\mathbf{d}$]	<i>c</i> 211	L10
		<i>p</i> even <i>q</i> odd						<i>I</i> 211	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ [$\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	$\widehat{p}1$	L01
		<i>n</i> even <i>m</i> odd									
		<i>p</i> odd									
		<i>n</i> odd									
		<i>p</i> odd									
l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$											

Orientation orbit (hkl)	Conventional basis of the scanning group $\mathbf{a}' \quad \mathbf{b}' \quad \mathbf{d}$	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$
$(mn0)$ $(\bar{m}n0)$ $(nm0)$ $(\bar{n}m0)$ $(0mn)$ $(0\bar{m}n)$ $(0nm)$ $(0\bar{n}m)$ $(n0m)$ $(n0\bar{m})$ $(m0n)$ $(m0\bar{n})$	$\mathbf{c} \quad na - mb \quad pa + qb$ $\mathbf{c} \quad na + mb \quad -pa + qb$ $\mathbf{c} \quad ma - nb \quad qa + pb$ $\mathbf{c} \quad ma + nb \quad -qa + pb$ $\mathbf{a} \quad nb - mc \quad pb + qc$ $\mathbf{a} \quad nb + mc \quad -pb + qc$ $\mathbf{a} \quad mb - nc \quad qb + pc$ $\mathbf{a} \quad mb + nc \quad -qb + pc$ $\mathbf{b} \quad nc - ma \quad pc + qa$ $\mathbf{b} \quad nc + ma \quad -pc + qa$ $\mathbf{b} \quad mc - na \quad qc + pa$ $\mathbf{b} \quad mc + na \quad -qc + pa$	$P211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p211$ $p1$ L08 L01
(hhl) $(\bar{h}hl)$ $(h\bar{h}l)$ $(\bar{h}\bar{h}l)$ $(\mathbf{a} + \mathbf{c})/4$	$\mathbf{a} - \mathbf{b} \quad n(\mathbf{a} + \mathbf{b}) - mc \quad p(\mathbf{a} + \mathbf{b}) + qc$ $\mathbf{a} - \mathbf{b} \quad n(\mathbf{a} + \mathbf{b}) + mc \quad -p(\mathbf{a} + \mathbf{b}) + qc$ $\mathbf{a} + \mathbf{b} \quad n(\mathbf{b} - \mathbf{a}) - mc \quad p(\mathbf{b} - \mathbf{a}) + qc$ $\mathbf{a} + \mathbf{b} \quad n(\mathbf{b} - \mathbf{a}) + mc \quad -p(\mathbf{b} - \mathbf{a}) + qc$ $n \text{ odd}$ $p \text{ even} \quad q \text{ odd}$ $n \text{ even} \quad m \text{ odd}$ $p \text{ odd}$ $n \text{ odd}$ $p \text{ odd}$	$B211$ $C211$ $I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$ $0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$ $[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111$ $p1$ $c211$ $\hat{p}1$ $p211$ $p2_111 (\mathbf{b}'/4)$ $p1$ L08 L09 L01 L10 L01 L08 L09 L01
(lhh) $(l\bar{h}h)$ $(l\bar{h}\bar{h})$ $(\bar{l}h\bar{h})$ $(\mathbf{b} + \mathbf{a})/4$	$\mathbf{b} - \mathbf{c} \quad n(\mathbf{b} + \mathbf{c}) - ma \quad p(\mathbf{b} + \mathbf{c}) + qa$ $\mathbf{b} - \mathbf{c} \quad n(\mathbf{b} + \mathbf{c}) + ma \quad -p(\mathbf{b} + \mathbf{c}) + qa$ $\mathbf{b} + \mathbf{c} \quad n(\mathbf{c} - \mathbf{b}) - ma \quad p(\mathbf{c} - \mathbf{b}) + qa$ $\mathbf{b} + \mathbf{c} \quad n(\mathbf{c} - \mathbf{b}) + ma \quad -p(\mathbf{c} - \mathbf{b}) + qa$ $n \text{ odd}$ $p \text{ even} \quad q \text{ odd}$ $n \text{ even} \quad m \text{ odd}$ $p \text{ odd}$ $n \text{ odd}$ $p \text{ odd}$	$B211$ $C211$ $I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$ $0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$ $[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111$ $p1$ $c211$ $\hat{p}1$ $p211$ $p2_111 (\mathbf{b}'/4)$ $p1$ L08 L09 L01 L10 L01 L08 L09 L01
(hlh) $(\bar{h}lh)$ $(\bar{h}l\bar{h})$ $(h\bar{l}h)$ $(\mathbf{c} + \mathbf{b})/4$	$\mathbf{c} - \mathbf{a} \quad n(\mathbf{c} + \mathbf{a}) - mb \quad p(\mathbf{c} + \mathbf{a}) + qb$ $\mathbf{c} - \mathbf{a} \quad n(\mathbf{c} + \mathbf{a}) + mb \quad -p(\mathbf{c} + \mathbf{a}) + qb$ $\mathbf{c} + \mathbf{a} \quad n(\mathbf{a} - \mathbf{c}) - mb \quad p(\mathbf{a} - \mathbf{c}) + qb$ $\mathbf{c} + \mathbf{a} \quad n(\mathbf{a} - \mathbf{c}) + mb \quad -p(\mathbf{a} - \mathbf{c}) + qb$ $n \text{ odd}$ $p \text{ even} \quad q \text{ odd}$ $n \text{ even} \quad m \text{ odd}$ $p \text{ odd}$ $n \text{ odd}$ $p \text{ odd}$	$B211$ $C211$ $I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$ $0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$ $[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111$ $p1$ $c211$ $\hat{p}1$ $p211$ $p2_111 (\mathbf{b}'/4)$ $p1$ L08 L09 L01 L10 L01 L08 L09 L01
$l \text{ odd} \Rightarrow n = l, m = 2h; l \text{ even} \Rightarrow n = l/2, m = h$				

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}				
(<i>hk0</i>)	\mathbf{c}	$n\hat{\mathbf{a}} - m\hat{\mathbf{b}}$	$p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$	<i>I</i> 211	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p</i> 211	L08
($\bar{h}k0$)	\mathbf{c}	$n\hat{\mathbf{a}} + m\hat{\mathbf{b}}$	$-p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$				L09
(<i>kh0</i>)	\mathbf{c}	$m\hat{\mathbf{a}} + n\hat{\mathbf{b}}$	$q\hat{\mathbf{a}} + p\hat{\mathbf{b}}$				L01
($\bar{k}h0$)	\mathbf{c}	$m\hat{\mathbf{a}} - n\hat{\mathbf{b}}$	$-q\hat{\mathbf{a}} + p\hat{\mathbf{b}}$				
			<i>n</i> odd <i>m</i> even				
			<i>p</i> even <i>q</i> odd				
			or				
			<i>n</i> even <i>m</i> odd				
			<i>p</i> odd <i>q</i> even				
			<i>p</i> odd <i>q</i> odd				
			<i>n</i> odd <i>m</i> odd	<i>B</i> 211	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p</i> 211	L08
						<i>p</i> 2 ₁ 11	L09
						<i>p</i> 1	L01
				<i>C</i> 211	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	<i>c</i> 211	L10
						$\hat{p}1$	L01
	$\hat{\mathbf{a}} = (\mathbf{a} - \mathbf{b})/2$ $\hat{\mathbf{b}} = (\mathbf{a} + \mathbf{b})/2$			<i>h</i> even, <i>k</i> odd or <i>h</i> odd, <i>k</i> even $\Rightarrow n = h + k, m = h - k$ <i>h</i> , <i>k</i> odd $\Rightarrow n = (h + k)/2, m = (h - k)/2$			
(<i>Ohk</i>)	\mathbf{a}	$n\hat{\mathbf{a}} - m\hat{\mathbf{b}}$	$p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$	<i>I</i> 211	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p</i> 211	L08
(<i>0hk</i>)	\mathbf{a}	$n\hat{\mathbf{a}} + m\hat{\mathbf{b}}$	$-p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$				L09
(<i>Okh</i>)	\mathbf{a}	$m\hat{\mathbf{a}} - n\hat{\mathbf{b}}$	$q\hat{\mathbf{a}} + p\hat{\mathbf{b}}$				L01
(<i>0kh</i>)	\mathbf{a}	$m\hat{\mathbf{a}} + n\hat{\mathbf{b}}$	$-q\hat{\mathbf{a}} + p\hat{\mathbf{b}}$				
			<i>n</i> odd <i>m</i> even				
			<i>p</i> even <i>q</i> odd				
			or				
			<i>n</i> even <i>m</i> odd				
			<i>p</i> odd <i>q</i> even				
			<i>p</i> odd <i>q</i> odd				
			<i>n</i> odd <i>m</i> odd	<i>B</i> 211	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p</i> 211	L08
						<i>p</i> 2 ₁ 11	L09
						<i>p</i> 1	L01
				<i>C</i> 211	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	<i>c</i> 211	L10
						$\hat{p}1$	L01
	$\hat{\mathbf{a}} = (\mathbf{b} - \mathbf{c})/2$ $\hat{\mathbf{b}} = (\mathbf{b} + \mathbf{c})/2$			<i>h</i> even, <i>k</i> odd or <i>h</i> odd, <i>k</i> even $\Rightarrow n = h + k, m = h - k$ <i>h</i> , <i>k</i> odd $\Rightarrow n = (h + k)/2, m = (h - k)/2$			
(<i>k0h</i>)	\mathbf{b}	$n\hat{\mathbf{a}} - m\hat{\mathbf{b}}$	$p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$	<i>I</i> 211	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p</i> 211	L08
(<i>k0h</i>)	\mathbf{b}	$n\hat{\mathbf{a}} + m\hat{\mathbf{b}}$	$-p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$				L09
(<i>h0k</i>)	\mathbf{b}	$m\hat{\mathbf{a}} - n\hat{\mathbf{b}}$	$q\hat{\mathbf{a}} + p\hat{\mathbf{b}}$				L01
(<i>h0k</i>)	\mathbf{b}	$m\hat{\mathbf{a}} + n\hat{\mathbf{b}}$	$-q\hat{\mathbf{a}} + p\hat{\mathbf{b}}$				
			<i>n</i> odd <i>m</i> even				
			<i>p</i> even <i>q</i> odd				
			or				
			<i>n</i> even <i>m</i> odd				
			<i>p</i> odd <i>q</i> even				
			<i>p</i> odd <i>q</i> odd				
			<i>n</i> odd <i>m</i> odd	<i>B</i> 211	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p</i> 211	L08
						<i>p</i> 2 ₁ 11	L09
						<i>p</i> 1	L01
				<i>C</i> 211	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	<i>c</i> 211	L10
						$\hat{p}1$	L01
	$\hat{\mathbf{a}} = (\mathbf{c} - \mathbf{a})/2$ $\hat{\mathbf{b}} = (\mathbf{c} + \mathbf{a})/2$			<i>h</i> even, <i>k</i> odd or <i>h</i> odd, <i>k</i> even $\Rightarrow n = h + k, m = h - k$ <i>h</i> , <i>k</i> odd $\Rightarrow n = (h + k)/2, m = (h - k)/2$			

Continued

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}				
<i>(hhl)</i> <i>(\bar{h}hl)</i>	$(\mathbf{a} - \mathbf{b})/2$	$n\hat{\mathbf{a}} - m\mathbf{c}$	$p\hat{\mathbf{a}} + q\mathbf{c}$	<i>I211</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p211</i> <i>p2₁11</i> ($\mathbf{b}'/4$) <i>p1</i>	L08
	$(\mathbf{a} - \mathbf{b})/2$	$n\hat{\mathbf{a}} + m\mathbf{c}$	$-p\hat{\mathbf{a}} + q\mathbf{c}$				L09
			<i>n</i> odd <i>m</i> even <i>p</i> even <i>q</i> odd or <i>n</i> even <i>m</i> odd <i>p</i> odd <i>q</i> even <i>p</i> odd <i>q</i> odd				L01
			<i>n</i> odd <i>m</i> odd	<i>B211</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p211</i> <i>p2₁11</i> <i>p1</i>	L08 L09 L01
			<i>n</i> odd <i>m</i> odd	<i>C211</i>	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	<i>c211</i> $\hat{p}1$	L10 L01
$\hat{\mathbf{a}} = (\mathbf{a} + \mathbf{b})/2$							
<i>(\bar{h}\bar{h}l)</i> <i>(\bar{h}hl)</i>	$(\mathbf{a} + \mathbf{b})/2$	$n\hat{\mathbf{a}} - m\mathbf{c}$	$p\hat{\mathbf{a}} + q\mathbf{c}$	<i>I211</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p211</i> <i>p2₁11</i> ($\mathbf{b}'/4$) <i>p1</i>	L08
	$(\mathbf{a} + \mathbf{b})/2$	$n\hat{\mathbf{a}} + m\mathbf{c}$	$-p\hat{\mathbf{a}} + q\mathbf{c}$				L09
			<i>n</i> odd <i>m</i> even <i>p</i> even <i>q</i> odd or <i>n</i> even <i>m</i> odd <i>p</i> odd <i>q</i> even <i>p</i> odd <i>q</i> odd				L01
			<i>n</i> odd <i>m</i> odd	<i>B211</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p211</i> <i>p2₁11</i> <i>p1</i>	L08 L09 L01
			<i>n</i> odd <i>m</i> odd	<i>C211</i>	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	<i>c211</i> $\hat{p}1$	L10 L01
$\hat{\mathbf{a}} = (\mathbf{b} - \mathbf{a})/2$							
<i>(lhh)</i> <i>(l\bar{h}\bar{h})</i>	$(\mathbf{b} - \mathbf{c})/2$	$n\hat{\mathbf{a}} - m\mathbf{a}$	$p\hat{\mathbf{a}} + q\mathbf{a}$	<i>I211</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p211</i> <i>p2₁11</i> ($\mathbf{b}'/4$) <i>p1</i>	L08
	$(\mathbf{b} - \mathbf{c})/2$	$n\hat{\mathbf{a}} + m\mathbf{a}$	$-p\hat{\mathbf{a}} + q\mathbf{a}$				L09
			<i>n</i> odd <i>m</i> even <i>p</i> even <i>q</i> odd or <i>n</i> even <i>m</i> odd <i>p</i> odd <i>q</i> even <i>p</i> odd <i>q</i> odd				L01
			<i>n</i> odd <i>m</i> odd	<i>B211</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p211</i> <i>p2₁11</i> <i>p1</i>	L08 L09 L01
			<i>n</i> odd <i>m</i> odd	<i>C211</i>	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	<i>c211</i> $\hat{p}1$	L10 L01
$\hat{\mathbf{a}} = (\mathbf{b} + \mathbf{c})/2$							

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}			
$(lh\bar{h})$ $(\bar{l}h\bar{h})$	$(\mathbf{b} + \mathbf{c})/2$	$n\hat{\mathbf{a}} - m\mathbf{a}$	$p\hat{\mathbf{a}} + q\mathbf{a}$	<i>I</i> 211	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p</i> 211 L08
	$(\mathbf{b} + \mathbf{c})/2$	$n\hat{\mathbf{a}} + m\mathbf{a}$	$-p\hat{\mathbf{a}} + q\mathbf{a}$			<i>p</i> 2 ₁ 11 ($\mathbf{b}'/4$) L09
						<i>p</i> 1 L01
		<i>n</i> odd <i>m</i> even <i>p</i> even <i>q</i> odd or <i>n</i> even <i>m</i> odd <i>p</i> odd <i>q</i> even <i>p</i> odd <i>q</i> odd		<i>B</i> 211	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p</i> 211 L08 <i>p</i> 2 ₁ 11 L09 <i>p</i> 1 L01
		<i>n</i> odd <i>m</i> odd		<i>C</i> 211	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	<i>c</i> 211 L10 $\hat{p}1$ L01
$\hat{\mathbf{a}} = (\mathbf{c} - \mathbf{b})/2$						
(hlh) $(\bar{h}l\bar{h})$	$(\mathbf{c} - \mathbf{a})/2$	$n\hat{\mathbf{a}} - m\mathbf{b}$	$p\hat{\mathbf{a}} + q\mathbf{b}$	<i>I</i> 211	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p</i> 211 L08
	$(\mathbf{c} - \mathbf{a})/2$	$n\hat{\mathbf{a}} + m\mathbf{b}$	$-p\hat{\mathbf{a}} + q\mathbf{b}$			<i>p</i> 2 ₁ 11 ($\mathbf{b}'/4$) L09
						<i>p</i> 1 L01
		<i>n</i> odd <i>m</i> even <i>p</i> even <i>q</i> odd or <i>n</i> even <i>m</i> odd <i>p</i> odd <i>q</i> even <i>p</i> odd <i>q</i> odd		<i>B</i> 211	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p</i> 211 L08 <i>p</i> 2 ₁ 11 L09 <i>p</i> 1 L01
		<i>n</i> odd <i>m</i> odd		<i>C</i> 211	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	<i>c</i> 211 L10 $\hat{p}1$ L01
$\hat{\mathbf{a}} = (\mathbf{c} + \mathbf{a})/2$						
$(\bar{h}lh)$ $(h\bar{l}\bar{h})$	$(\mathbf{c} + \mathbf{a})/2$	$n\hat{\mathbf{a}} - m\mathbf{b}$	$p\hat{\mathbf{a}} + q\mathbf{b}$	<i>I</i> 211	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p</i> 211 L08
	$(\mathbf{c} + \mathbf{a})/2$	$n\hat{\mathbf{a}} + m\mathbf{b}$	$-p\hat{\mathbf{a}} + q\mathbf{b}$			<i>p</i> 2 ₁ 11 ($\mathbf{b}'/4$) L09
						<i>p</i> 1 L01
		<i>n</i> odd <i>m</i> even <i>p</i> even <i>q</i> odd or <i>n</i> even <i>m</i> odd <i>p</i> odd <i>q</i> even <i>p</i> odd <i>q</i> odd		<i>B</i> 211	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p</i> 211 L08 <i>p</i> 2 ₁ 11 L09 <i>p</i> 1 L01
		<i>n</i> odd <i>m</i> odd		<i>C</i> 211	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	<i>c</i> 211 L10 $\hat{p}1$ L01
$\hat{\mathbf{a}} = (\mathbf{a} - \mathbf{c})/2$						

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}				
$(hk0)$	\mathbf{c}	$n\hat{\mathbf{a}} - m\hat{\mathbf{b}}$	$p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$	$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111 (\mathbf{b}'/4)$ $p1$	L08
$(\bar{h}k0)$	\mathbf{c}	$n\hat{\mathbf{a}} + m\hat{\mathbf{b}}$	$-p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$				L09
$(kh0)$	\mathbf{c}	$m\hat{\mathbf{a}} + n\hat{\mathbf{b}}$	$q\hat{\mathbf{a}} + p\hat{\mathbf{b}}$				L01
$(\bar{k}h0)$	\mathbf{c}	$m\hat{\mathbf{a}} - n\hat{\mathbf{b}}$	$-q\hat{\mathbf{a}} + p\hat{\mathbf{b}}$				
		n odd	m even				
		p even	q odd				
		or					
		n even	m odd				
		p odd	q even				
		p odd	q odd				
		n odd	m odd	$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111$ $p1$	L08 L09 L01
		n odd	m odd	$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$ $\hat{p}1$	L10 L01
$\hat{\mathbf{a}} = (\mathbf{a} - \mathbf{b})/2$ $\hat{\mathbf{b}} = (\mathbf{a} + \mathbf{b})/2$				h even, k odd or h odd, k even $\Rightarrow n = h + k, m = h - k$ h, k odd $\Rightarrow n = (h + k)/2, m = (h - k)/2$			
$(0hk)$	\mathbf{a}	$n\hat{\mathbf{a}} - m\hat{\mathbf{b}}$	$p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$	$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111 (\mathbf{b}'/4)$ $p1$	L08
$(0\bar{h}k)$	\mathbf{a}	$n\hat{\mathbf{a}} + m\hat{\mathbf{b}}$	$-p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$				L09
$(0kh)$	\mathbf{a}	$m\hat{\mathbf{a}} - n\hat{\mathbf{b}}$	$q\hat{\mathbf{a}} + p\hat{\mathbf{b}}$				L01
$(0\bar{k}h)$	\mathbf{a}	$m\hat{\mathbf{a}} + n\hat{\mathbf{b}}$	$-q\hat{\mathbf{a}} + p\hat{\mathbf{b}}$				
		n odd	m even				
		p even	q odd				
		or					
		n even	m odd				
		p odd	q even				
		p odd	q odd				
		n odd	m odd	$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111$ $p1$	L08 L09 L01
		n odd	m odd	$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$ $\hat{p}1$	L10 L01
$\hat{\mathbf{a}} = (\mathbf{b} - \mathbf{c})/2$ $\hat{\mathbf{b}} = (\mathbf{b} + \mathbf{c})/2$				h even, k odd or h odd, k even $\Rightarrow n = h + k, m = h - k$ h, k odd $\Rightarrow n = (h + k)/2, m = (h - k)/2$			
$(k0h)$	\mathbf{b}	$n\hat{\mathbf{a}} - m\hat{\mathbf{b}}$	$p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$	$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111 (\mathbf{b}'/4)$ $p1$	L08
$(k0\bar{h})$	\mathbf{b}	$n\hat{\mathbf{a}} + m\hat{\mathbf{b}}$	$-p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$				L09
$(h0k)$	\mathbf{b}	$m\hat{\mathbf{a}} - n\hat{\mathbf{b}}$	$q\hat{\mathbf{a}} + p\hat{\mathbf{b}}$				L01
$(h0\bar{k})$	\mathbf{b}	$m\hat{\mathbf{a}} + n\hat{\mathbf{b}}$	$-q\hat{\mathbf{a}} + p\hat{\mathbf{b}}$				
		n odd	m even				
		p even	q odd				
		or					
		n even	m odd				
		p odd	q even				
		p odd	q odd				
		n odd	m odd	$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111$ $p1$	L08 L09 L01
		n odd	m odd	$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$ $\hat{p}1$	L10 L01
$\hat{\mathbf{a}} = (\mathbf{c} - \mathbf{a})/2$ $\hat{\mathbf{b}} = (\mathbf{c} + \mathbf{a})/2$				h even, k odd or h odd, k even $\Rightarrow n = h + k, m = h - k$ h, k odd $\Rightarrow n = (h + k)/2, m = (h - k)/2$			

Continued

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}			
(hhl) (\overline{hhl}) $(\mathbf{a}/4 + \mathbf{c}/8)$	$(\mathbf{a} - \mathbf{b})/2$	$n\hat{\mathbf{a}} - m\mathbf{c}$	$p\hat{\mathbf{a}} + q\mathbf{c}$	$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111 (\mathbf{b}'/4)$ L09 $p1$ L01
	$(\mathbf{a} - \mathbf{b})/2$	$n\hat{\mathbf{a}} + m\mathbf{c}$	$-p\hat{\mathbf{a}} + q\mathbf{c}$			
			n odd m even p even q odd or n even m odd p odd q even p odd q odd			
			n odd m odd	$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111$ L09 $p1$ L01
			n odd m odd	$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$ L10 $\hat{p}1$ L01
$\hat{\mathbf{a}} = (\mathbf{a} + \mathbf{b})/2$						
(\overline{hhl}) (hhl) $(\mathbf{a}/4 + 3\mathbf{c}/8)$	$(\mathbf{a} + \mathbf{b})/2$	$n\hat{\mathbf{a}} - m\mathbf{c}$	$p\hat{\mathbf{a}} + q\mathbf{c}$	$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111 (\mathbf{b}'/4)$ L09 $p1$ L01
	$(\mathbf{a} + \mathbf{b})/2$	$n\hat{\mathbf{a}} + m\mathbf{c}$	$-p\hat{\mathbf{a}} + q\mathbf{c}$			
			n odd m even p even q odd or n even m odd p odd q even p odd q odd			
			n odd m odd	$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111$ L09 $p1$ L01
			n odd m odd	$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$ L10 $\hat{p}1$ L01
$\hat{\mathbf{a}} = (\mathbf{b} - \mathbf{a})/2$						
(lhh) (\overline{lhh}) $(\mathbf{b}/4 + \mathbf{a}/8)$	$(\mathbf{b} - \mathbf{c})/2$	$n\hat{\mathbf{a}} - m\mathbf{a}$	$p\hat{\mathbf{a}} + q\mathbf{a}$	$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111 (\mathbf{b}'/4)$ L09 $p1$ L01
	$(\mathbf{b} - \mathbf{c})/2$	$n\hat{\mathbf{a}} + m\mathbf{a}$	$-p\hat{\mathbf{a}} + q\mathbf{a}$			
			n odd m even p even q odd or n even m odd p odd q even p odd q odd			
			n odd m odd	$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111$ L09 $p1$ L01
			n odd m odd	$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$ L10 $\hat{p}1$ L01
$\hat{\mathbf{a}} = (\mathbf{b} + \mathbf{c})/2$						

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}				
$(lh\bar{h})$ $(l\bar{h}h)$ $(\mathbf{b}/4 + 3\mathbf{a}/8)$	$(\mathbf{b} + \mathbf{c})/2$	$n\hat{\mathbf{a}} - m\mathbf{a}$	$p\hat{\mathbf{a}} + q\mathbf{a}$	$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111 (\mathbf{b}'/4)$ $p1$	L08
	$(\mathbf{b} + \mathbf{c})/2$	$n\hat{\mathbf{a}} + m\mathbf{a}$	$-p\hat{\mathbf{a}} + q\mathbf{a}$				L09
							L01
		n odd	m even	$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111$ $p1$	L08
		p even	q odd				L09
							L01
			or	$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$ $\hat{p}1$	L10
		n even	m odd				L01
		p odd	q even				
		p odd	q odd				
		n odd	m odd				
$\hat{\mathbf{a}} = (\mathbf{c} - \mathbf{b})/2$							
(hlh) $(\bar{h}l\bar{h})$ $(\mathbf{c}/4 + \mathbf{b}/8)$	$(\mathbf{c} - \mathbf{a})/2$	$n\hat{\mathbf{a}} - m\mathbf{b}$	$p\hat{\mathbf{a}} + q\mathbf{b}$	$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111 (\mathbf{b}'/4)$ $p1$	L08
	$(\mathbf{c} - \mathbf{a})/2$	$n\hat{\mathbf{a}} + m\mathbf{b}$	$-p\hat{\mathbf{a}} + q\mathbf{b}$				L09
							L01
		n odd	m even	$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111$ $p1$	L08
		p even	q odd				L09
							L01
		n even	m odd	$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$ $\hat{p}1$	L10
		p odd	q even				L01
		p odd	q odd				
		n odd	m odd				
$\hat{\mathbf{a}} = (\mathbf{c} + \mathbf{a})/2$							
$(\bar{h}lh)$ $(h\bar{h}\bar{h})$ $(\mathbf{c}/4 + 3\mathbf{b}/8)$	$(\mathbf{c} + \mathbf{a})/2$	$n\hat{\mathbf{a}} - m\mathbf{b}$	$p\hat{\mathbf{a}} + q\mathbf{b}$	$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111 (\mathbf{b}'/4)$ $p1$	L08
	$(\mathbf{c} + \mathbf{a})/2$	$n\hat{\mathbf{a}} + m\mathbf{b}$	$-p\hat{\mathbf{a}} + q\mathbf{b}$				L09
							L01
		n odd	m even	$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111$ $p1$	L08
		p even	q odd				L09
							L01
		n even	m odd	$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$ $\hat{p}1$	L10
		p odd	q even				L01
		p odd	q odd				
		n odd	m odd				
$\hat{\mathbf{a}} = (\mathbf{a} - \mathbf{c})/2$							

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
(lhh) ($\bar{l}hh$)	$\mathbf{b} - \mathbf{c}$ $n\hat{\mathbf{a}} - m\mathbf{a}$ $p\hat{\mathbf{a}} + q\mathbf{a}$	C211	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [$s\mathbf{d}, -s\mathbf{d}$]	c211 $\hat{p}1$	L10
	$\mathbf{b} - \mathbf{c}$ $n\hat{\mathbf{a}} + ma$ $-p\hat{\mathbf{a}} + qa$				L01
	n odd m even q odd m odd q odd				I211
	p odd q even	B211	[$0\mathbf{d}, \frac{1}{2}\mathbf{d}$] [$\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	p211 p2 ₁ 11 p1	L08 L09 L01
$\hat{\mathbf{a}} = (\mathbf{b} + \mathbf{c} + \mathbf{a})/2$ l odd $\Rightarrow n = 2l, m = 2h + l; l$ even $\Rightarrow n = l, m = h + l/2$					
(lh \bar{h}) ($\bar{l}h\bar{h}$)	$\mathbf{b} + \mathbf{c}$ $n\hat{\mathbf{a}} - m\mathbf{a}$ $p\hat{\mathbf{a}} + q\mathbf{a}$	C211	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [$s\mathbf{d}, -s\mathbf{d}$]	c211 $\hat{p}1$	L10
	$\mathbf{b} + \mathbf{c}$ $n\hat{\mathbf{a}} + ma$ $-p\hat{\mathbf{a}} + qa$				L01
	n odd m even q odd m odd q odd				I211
	p odd q even	B211	[$0\mathbf{d}, \frac{1}{2}\mathbf{d}$] [$\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	p211 p2 ₁ 11 p1	L08 L09 L01
$\hat{\mathbf{a}} = (\mathbf{c} - \mathbf{b} + \mathbf{a})/2$ l odd $\Rightarrow n = 2l, m = 2h + l; l$ even $\Rightarrow n = l, m = h + l/2$					
(hlh) ($\bar{h}l\bar{h}$)	$\mathbf{c} - \mathbf{a}$ $n\hat{\mathbf{a}} - m\mathbf{b}$ $p\hat{\mathbf{a}} + q\mathbf{b}$	C211	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [$s\mathbf{d}, -s\mathbf{d}$]	c211 $\hat{p}1$	L10
	$\mathbf{c} - \mathbf{a}$ $n\hat{\mathbf{a}} + m\mathbf{b}$ $-p\hat{\mathbf{a}} + q\mathbf{b}$				L01
	n odd m even q odd m odd q odd				I211
	p odd q even	B211	[$0\mathbf{d}, \frac{1}{2}\mathbf{d}$] [$\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	p211 p2 ₁ 11 p1	L08 L09 L01
$\hat{\mathbf{a}} = (\mathbf{c} + \mathbf{a} + \mathbf{b})/2$ l odd $\Rightarrow n = 2l, m = 2h + l; l$ even $\Rightarrow n = l, m = h + l/2$					
(h $\bar{l}h$) ($h\bar{l}h$)	$\mathbf{c} + \mathbf{a}$ $n\hat{\mathbf{a}} - m\mathbf{b}$ $p\hat{\mathbf{a}} + q\mathbf{b}$	C211	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [$s\mathbf{d}, -s\mathbf{d}$]	c211 $\hat{p}1$	L10
	$\mathbf{c} + \mathbf{a}$ $n\hat{\mathbf{a}} + m\mathbf{b}$ $-p\hat{\mathbf{a}} + q\mathbf{b}$				L01
	n odd m even q odd m odd q odd				I211
	p odd q even	B211	[$0\mathbf{d}, \frac{1}{2}\mathbf{d}$] [$\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	p211 p2 ₁ 11 p1	L08 L09 L01
$\hat{\mathbf{a}} = (\mathbf{a} - \mathbf{c} + \mathbf{b})/2$ l odd $\Rightarrow n = 2l, m = 2h + l; l$ even $\Rightarrow n = l, m = h + l/2$					

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}				
$(mn0)$ $(\bar{m}n0)$ $(nm0)$ $(\bar{n}m0)$ $(\mathbf{a}/4)$	\mathbf{c}	$n\mathbf{a} - m\mathbf{b}$	$p\mathbf{a} + q\mathbf{b}$	$P2_111$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2_111$ $p1$	L09 L01
$(0mn)$ $(0\bar{m}n)$ $(0nm)$ $(0\bar{n}m)$ $(\mathbf{b}/4)$	\mathbf{a}	$n\mathbf{b} - m\mathbf{c}$	$p\mathbf{b} + q\mathbf{c}$				
	\mathbf{a}	$n\mathbf{b} + m\mathbf{c}$	$-p\mathbf{b} + q\mathbf{c}$				
	\mathbf{a}	$m\mathbf{b} - n\mathbf{c}$	$q\mathbf{b} + p\mathbf{c}$				
$(n0m)$ $(n0\bar{m})$ $(m0n)$ $(m0\bar{n})$ $(\mathbf{c}/4)$	\mathbf{b}	$n\mathbf{c} - m\mathbf{a}$	$p\mathbf{c} + q\mathbf{a}$	$P2_111$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2_111$ $p1$	L09 L01
	\mathbf{b}	$n\mathbf{c} + m\mathbf{a}$	$-p\mathbf{c} + q\mathbf{a}$				
	\mathbf{b}	$m\mathbf{c} - n\mathbf{a}$	$q\mathbf{c} + p\mathbf{a}$				
	\mathbf{b}	$m\mathbf{c} + n\mathbf{a}$	$-q\mathbf{c} + p\mathbf{a}$				
(hhl) $(\bar{h}hl)$ $(\mathbf{a} + \mathbf{c})/8$	$\mathbf{a} - \mathbf{b}$	$n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$	$p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$	$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111$ $p1$	L08 L09 L01
	$\mathbf{a} - \mathbf{b}$	$n(\mathbf{a} + \mathbf{b}) + m\mathbf{c}$	$-p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$				
		n odd	q odd				
		p even	q odd				
		n even	m odd				
		p odd	m odd				
		n odd	p odd				
		p odd	p odd				
		p odd	p odd				
$(h\bar{h}l)$ $(\bar{h}hl)$ $3(\mathbf{b} + \mathbf{c})/8$	$\mathbf{a} + \mathbf{b}$	$n(\mathbf{b} - \mathbf{a}) - m\mathbf{c}$	$p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$	$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111$ $p1$	L08 L09 L01
	$\mathbf{a} + \mathbf{b}$	$n(\mathbf{b} - \mathbf{a}) + m\mathbf{c}$	$-p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$				
		n odd	q odd				
		p even	q odd				
		n even	m odd				
		p odd	m odd				
		n odd	p odd				
		p odd	p odd				
		p odd	p odd				
		p odd	p odd				

Continued

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$			
(lhh) $(\overline{l}h\overline{h})$ $(\mathbf{b} + \mathbf{a})/8$	$\mathbf{b} - \mathbf{c}$ $n(\mathbf{b} + \mathbf{c}) - m\mathbf{a}$ $p(\mathbf{b} + \mathbf{c}) + q\mathbf{a}$ $\mathbf{b} - \mathbf{c}$ $n(\mathbf{b} + \mathbf{c}) + m\mathbf{a}$ $-p(\mathbf{b} + \mathbf{c}) + q\mathbf{a}$ n odd p even q odd	$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111$ $p1$	L08 L09 L01		
		$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$ $\widehat{p}1$	L10 L01		
		$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111 (\mathbf{b}'/4)$ $p1$	L08 L09 L01		
	(lhh) $(\overline{l}h\overline{h})$ $3(\mathbf{c} + \mathbf{a})/8$	$\mathbf{b} + \mathbf{c}$ $n(\mathbf{c} - \mathbf{b}) - m\mathbf{a}$ $p(\mathbf{c} - \mathbf{b}) + q\mathbf{a}$ $\mathbf{b} + \mathbf{c}$ $n(\mathbf{c} - \mathbf{b}) + m\mathbf{a}$ $-p(\mathbf{c} - \mathbf{b}) + q\mathbf{a}$ n odd p even q odd	$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111$ $p1$	L08 L09 L01	
			$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$ $\widehat{p}1$	L10 L01	
			$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111 (\mathbf{b}'/4)$ $p1$	L08 L09 L01	
		(hlh) $(\overline{h}l\overline{h})$ $(\mathbf{c} + \mathbf{b})/8$	$\mathbf{c} - \mathbf{a}$ $n(\mathbf{c} + \mathbf{a}) - m\mathbf{b}$ $p(\mathbf{c} + \mathbf{a}) + q\mathbf{b}$ $\mathbf{c} - \mathbf{a}$ $n(\mathbf{c} + \mathbf{a}) + m\mathbf{b}$ $-p(\mathbf{c} + \mathbf{a}) + q\mathbf{b}$ n odd p even q odd	$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111$ $p1$	L08 L09 L01
				$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$ $\widehat{p}1$	L10 L01
				$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111 (\mathbf{b}'/4)$ $p1$	L08 L09 L01
(hlh) $(\overline{h}l\overline{h})$ $3(\mathbf{a} + \mathbf{b})/8$			$\mathbf{c} + \mathbf{a}$ $n(\mathbf{a} - \mathbf{c}) - m\mathbf{b}$ $p(\mathbf{a} - \mathbf{c}) + q\mathbf{b}$ $\mathbf{c} + \mathbf{a}$ $n(\mathbf{a} - \mathbf{c}) + m\mathbf{b}$ $-p(\mathbf{a} - \mathbf{c}) + q\mathbf{b}$ n odd p even q odd	$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111$ $p1$	L08 L09 L01
				$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$ $\widehat{p}1$	L10 L01
				$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111 (\mathbf{b}'/4)$ $p1$	L08 L09 L01

l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}				
$(mn0)$ $(\bar{m}n0)$ $(nm0)$ $(\bar{n}m0)$ $(\mathbf{a}/4)$	\mathbf{c}	$n\mathbf{a} - m\mathbf{b}$	$p\mathbf{a} + q\mathbf{b}$	$P2_111$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2_111$ $p1$	L09
	\mathbf{c}	$n\mathbf{a} + m\mathbf{b}$	$-p\mathbf{a} + q\mathbf{b}$				L01
	\mathbf{c}	$m\mathbf{a} - n\mathbf{b}$	$q\mathbf{a} + p\mathbf{b}$				
	\mathbf{c}	$m\mathbf{a} + n\mathbf{b}$	$-q\mathbf{a} + p\mathbf{b}$				
$(0mn)$ $(0\bar{m}n)$ $(0nm)$ $(0\bar{n}m)$ $(\mathbf{b}/4)$	\mathbf{a}	$n\mathbf{b} - m\mathbf{c}$	$p\mathbf{b} + q\mathbf{c}$	$P2_111$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2_111$ $p1$	L09
	\mathbf{a}	$n\mathbf{b} + m\mathbf{c}$	$-p\mathbf{b} + q\mathbf{c}$				L01
	\mathbf{a}	$m\mathbf{b} - n\mathbf{c}$	$q\mathbf{b} + p\mathbf{c}$				
	\mathbf{a}	$m\mathbf{b} + n\mathbf{c}$	$-q\mathbf{b} + p\mathbf{c}$				
$(n0m)$ $(n0\bar{m})$ $(m0n)$ $(m0\bar{n})$ $(\mathbf{c}/4)$	\mathbf{b}	$n\mathbf{c} - m\mathbf{a}$	$p\mathbf{c} + q\mathbf{a}$	$P2_111$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2_111$ $p1$	L09
	\mathbf{b}	$n\mathbf{c} + m\mathbf{a}$	$-p\mathbf{c} + q\mathbf{a}$				L01
	\mathbf{b}	$m\mathbf{c} - n\mathbf{a}$	$q\mathbf{c} + p\mathbf{a}$				
	\mathbf{b}	$m\mathbf{c} + n\mathbf{a}$	$-q\mathbf{c} + p\mathbf{a}$				
(hhl) $(\bar{h}hl)$ $3(\mathbf{a} + \mathbf{c})/8$	$\mathbf{a} - \mathbf{b}$	$n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$	$p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$	$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111$ $p1$	L08
	$\mathbf{a} - \mathbf{b}$	$n(\mathbf{a} + \mathbf{b}) + m\mathbf{c}$	$-p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$				L09
		n odd	q odd				L01
		p even	m odd				L10
		p odd	$\hat{p}1$				L01
		n even					
		p odd					
		n odd					
		p odd					
$(\bar{h}\bar{h}l)$ $(\bar{h}hl)$ $(\mathbf{b} + \mathbf{c})/8$	$\mathbf{a} + \mathbf{b}$	$n(\mathbf{b} - \mathbf{a}) - m\mathbf{c}$	$p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$	$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111$ $p1$	L08
	$\mathbf{a} + \mathbf{b}$	$n(\mathbf{b} - \mathbf{a}) + m\mathbf{c}$	$-p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$				L09
		n odd	q odd				L01
		p even	m odd				L10
		p odd	$\hat{p}1$				L01
		n even					
		p odd					
		n odd					
		p odd					
		p odd					
		n odd					
		p odd					

Continued

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$		
(lhh) $(\overline{l}h\overline{h})$ $3(\mathbf{b} + \mathbf{a})/8$	$\mathbf{b} - \mathbf{c}$ $n(\mathbf{b} + \mathbf{c}) - m\mathbf{a}$ $p(\mathbf{b} + \mathbf{c}) + q\mathbf{a}$ $\mathbf{b} - \mathbf{c}$ $n(\mathbf{b} + \mathbf{c}) + m\mathbf{a}$ $-p(\mathbf{b} + \mathbf{c}) + q\mathbf{a}$ n odd p even q odd	$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111$ L09 $p1$ L01		
		$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$ L10 $\widehat{p}1$ L01		
		$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111 (\mathbf{b}'/4)$ L09 $p1$ L01		
	(lhh) $(\overline{l}\overline{h}h)$ $(\mathbf{c} + \mathbf{a})/8$	$\mathbf{b} + \mathbf{c}$ $n(\mathbf{c} - \mathbf{b}) - m\mathbf{a}$ $p(\mathbf{c} - \mathbf{b}) + q\mathbf{a}$ $\mathbf{b} + \mathbf{c}$ $n(\mathbf{c} - \mathbf{b}) + m\mathbf{a}$ $-p(\mathbf{c} - \mathbf{b}) + q\mathbf{a}$ n odd p even q odd	$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111$ L09 $p1$ L01	
			$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$ L10 $\widehat{p}1$ L01	
			$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111 (\mathbf{b}'/4)$ L09 $p1$ L01	
		(hlh) $(\overline{h}l\overline{h})$ $3(\mathbf{c} + \mathbf{b})/8$	$\mathbf{c} - \mathbf{a}$ $n(\mathbf{c} + \mathbf{a}) - m\mathbf{b}$ $p(\mathbf{c} + \mathbf{a}) + q\mathbf{b}$ $\mathbf{c} - \mathbf{a}$ $n(\mathbf{c} + \mathbf{a}) + m\mathbf{b}$ $-p(\mathbf{c} + \mathbf{a}) + q\mathbf{b}$ n odd p even q odd	$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111$ L09 $p1$ L01
				$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$ L10 $\widehat{p}1$ L01
				$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111 (\mathbf{b}'/4)$ L09 $p1$ L01
(hlh) $(\overline{h}l\overline{h})$ $(\mathbf{a} + \mathbf{b})/8$			$\mathbf{c} + \mathbf{a}$ $n(\mathbf{a} - \mathbf{c}) - m\mathbf{b}$ $p(\mathbf{a} - \mathbf{c}) + q\mathbf{b}$ $\mathbf{c} + \mathbf{a}$ $n(\mathbf{a} - \mathbf{c}) + m\mathbf{b}$ $-p(\mathbf{a} - \mathbf{c}) + q\mathbf{b}$ n odd p even q odd	$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111$ L09 $p1$ L01
				$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$ L10 $\widehat{p}1$ L01
				$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111 (\mathbf{b}'/4)$ L09 $p1$ L01

l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$				
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}							
$(mn0)$	\mathbf{c}	$n\mathbf{a} - m\mathbf{b}$	$p\mathbf{a} + q\mathbf{b}$	$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111 (\mathbf{b}'/4)$ $p1$	L08			
$(\bar{m}n0)$	\mathbf{c}	$n\mathbf{a} + m\mathbf{b}$	$-p\mathbf{a} + q\mathbf{b}$							L09
$(nm0)$	\mathbf{c}	$m\mathbf{a} - n\mathbf{b}$	$q\mathbf{a} + p\mathbf{b}$							L01
$(\bar{n}m0)$	\mathbf{c}	$m\mathbf{a} + n\mathbf{b}$	$-q\mathbf{a} + p\mathbf{b}$							
$(\mathbf{b}/4)$			n odd m even							
			p even q odd							
			or							
			n even m odd							
			p odd q even							
			p odd q odd					$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111$ $p1$
		n odd m odd					$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$ $\hat{p}1$	L10 L01
$(0mn)$	\mathbf{a}	$n\mathbf{b} - m\mathbf{c}$	$p\mathbf{b} + q\mathbf{c}$				$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111 (\mathbf{b}'/4)$ $p1$	L08
$(0\bar{m}n)$	\mathbf{a}	$n\mathbf{b} + m\mathbf{c}$	$-p\mathbf{b} + q\mathbf{c}$							L09
$(0nm)$	\mathbf{a}	$m\mathbf{b} - n\mathbf{c}$	$q\mathbf{b} + p\mathbf{c}$							L01
$(0\bar{n}m)$	\mathbf{a}	$m\mathbf{b} + n\mathbf{c}$	$-q\mathbf{b} + p\mathbf{c}$							
$(\mathbf{c}/4)$			n odd m even							
			p even q odd							
			or							
			n even m odd							
			p odd q even							
			p odd q odd		$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$				$p211$ $p2_111$ $p1$
		n odd m odd		$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$ $\hat{p}1$				L10 L01
$(n0m)$	\mathbf{b}	$n\mathbf{c} - m\mathbf{a}$	$p\mathbf{c} + q\mathbf{a}$	$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111 (\mathbf{b}'/4)$ $p1$				L08
$(n0\bar{m})$	\mathbf{b}	$n\mathbf{c} + m\mathbf{a}$	$-p\mathbf{c} + q\mathbf{a}$							L09
$(m0n)$	\mathbf{b}	$m\mathbf{c} - n\mathbf{a}$	$q\mathbf{c} + p\mathbf{a}$							L01
$(m0\bar{n})$	\mathbf{b}	$m\mathbf{c} + n\mathbf{a}$	$-q\mathbf{c} + p\mathbf{a}$							
$(\mathbf{a}/4)$			n odd m even							
			p even q odd							
			or							
			n even m odd							
			p odd q even							
			p odd q odd					$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111$ $p1$
		n odd m odd					$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$ $\hat{p}1$	L10 L01

Continued

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$					
(hhl) $(\bar{h}hl)$ $(\mathbf{a} + \mathbf{c})/8$	$\mathbf{a} - \mathbf{b}$ $n\hat{\mathbf{a}} - m\mathbf{c}$ $p\hat{\mathbf{a}} + q\mathbf{c}$	$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$ $\hat{p}1$	L10				
	$\mathbf{a} - \mathbf{b}$ $n\hat{\mathbf{a}} + m\mathbf{c}$ $-p\hat{\mathbf{a}} + q\mathbf{c}$				$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	L01		
	n odd m even q odd m odd q odd						$p211$ $p2_111$ ($\mathbf{b}'/4$) $p1$	L08 L09 L01	
	p odd m odd q even				$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111$ $p1$	L08 L09 L01	
	$\hat{\mathbf{a}} = (\mathbf{a} + \mathbf{b} + \mathbf{c})/2$ l odd $\Rightarrow n = 2l, m = 2h + l; l$ even $\Rightarrow n = l, m = h + l/2$								
	$(\bar{h}\bar{h}l)$ $(\bar{h}hl)$ $3(\mathbf{a} + \mathbf{c})/8$				$\mathbf{a} + \mathbf{b}$ $n\hat{\mathbf{a}} - m\mathbf{c}$ $p\hat{\mathbf{a}} + q\mathbf{c}$	$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$ $\hat{p}1$	L10
$\mathbf{a} + \mathbf{b}$ $n\hat{\mathbf{a}} + m\mathbf{c}$ $-p\hat{\mathbf{a}} + q\mathbf{c}$		$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	L01					
n odd m even q odd m odd q odd				$p211$ $p2_111$ ($\mathbf{b}'/4$) $p1$	L08 L09 L01				
p odd m odd q even		$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111$ $p1$	L08 L09 L01				
$\hat{\mathbf{a}} = (\mathbf{b} - \mathbf{a} + \mathbf{c})/2$ l odd $\Rightarrow n = 2l, m = 2h + l; l$ even $\Rightarrow n = l, m = h + l/2$									
(lhh) $(\bar{l}\bar{h}h)$ $(\mathbf{b} + \mathbf{a})/8$		$\mathbf{b} - \mathbf{c}$ $n\hat{\mathbf{a}} - m\mathbf{a}$ $p\hat{\mathbf{a}} + q\mathbf{a}$	$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$ $\hat{p}1$				L10
	$\mathbf{b} + \mathbf{c}$ $n\hat{\mathbf{a}} + m\mathbf{a}$ $-p\hat{\mathbf{a}} + q\mathbf{a}$	$I211$				$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	L01		
	n odd m even q odd m odd q odd						$p211$ $p2_111$ ($\mathbf{b}'/4$) $p1$	L08 L09 L01	
	p odd m odd q even	$B211$				$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111$ $p1$	L08 L09 L01	
	$\hat{\mathbf{a}} = (\mathbf{b} + \mathbf{c} + \mathbf{a})/2$ l odd $\Rightarrow n = 2l, m = 2h + l; l$ even $\Rightarrow n = l, m = h + l/2$								
	$(l\bar{h}\bar{h})$ $(\bar{l}h\bar{h})$ $3(\mathbf{b} + \mathbf{a})/8$	$\mathbf{b} + \mathbf{c}$ $n\hat{\mathbf{a}} - m\mathbf{a}$ $p\hat{\mathbf{a}} + q\mathbf{a}$				$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$ $\hat{p}1$	L10
$\mathbf{b} + \mathbf{c}$ $n\hat{\mathbf{a}} + m\mathbf{a}$ $-p\hat{\mathbf{a}} + q\mathbf{a}$		$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	L01					
n odd m even q odd m odd q odd				$p211$ $p2_111$ ($\mathbf{b}'/4$) $p1$	L08 L09 L01				
p odd m odd q even		$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111$ $p1$	L08 L09 L01				
$\hat{\mathbf{a}} = (\mathbf{c} - \mathbf{b} + \mathbf{a})/2$ l odd $\Rightarrow n = 2l, m = 2h + l; l$ even $\Rightarrow n = l, m = h + l/2$									

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$
(hlh) $(\bar{h}l\bar{h})$ $(\mathbf{c} + \mathbf{b})/8$	$\mathbf{c} - \mathbf{a}$ $n\hat{\mathbf{a}} - m\mathbf{b}$ $p\hat{\mathbf{a}} + q\mathbf{b}$ $\mathbf{c} - \mathbf{a}$ $n\hat{\mathbf{a}} + m\mathbf{b}$ $-p\hat{\mathbf{a}} + q\mathbf{b}$ <i>n odd</i> <i>m even</i> <i>q odd</i> <i>m odd</i> <i>q odd</i> <i>m odd</i> <i>p odd</i> <i>q even</i>	$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$ L10 $\hat{p}1$ L01
		$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111$ ($\mathbf{b}'/4$) L09 $p1$ L01
		$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111$ L09 $p1$ L01
		$\hat{\mathbf{a}} = (\mathbf{c} + \mathbf{a} + \mathbf{b})/2$ $l \text{ odd} \Rightarrow n = 2l, m = 2h + l; l \text{ even} \Rightarrow n = l, m = h + l/2$		
$(\bar{h}lh)$ $(h\bar{l}\bar{h})$ $3(\mathbf{c} + \mathbf{b})/8$	$\mathbf{c} + \mathbf{a}$ $n\hat{\mathbf{a}} - m\mathbf{b}$ $p\hat{\mathbf{a}} + q\mathbf{b}$ $\mathbf{c} + \mathbf{a}$ $n\hat{\mathbf{a}} + m\mathbf{b}$ $-p\hat{\mathbf{a}} + q\mathbf{b}$ <i>n odd</i> <i>m even</i> <i>q odd</i> <i>m odd</i> <i>q odd</i> <i>m odd</i> <i>p odd</i> <i>q even</i>	$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$ L10 $\hat{p}1$ L01
		$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111$ ($\mathbf{b}'/4$) L09 $p1$ L01
		$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ L08 $p2_111$ L09 $p1$ L01
		$\hat{\mathbf{a}} = (\mathbf{a} - \mathbf{c} + \mathbf{b})/2$ $l \text{ odd} \Rightarrow n = 2l, m = 2h + l; l \text{ even} \Rightarrow n = l, m = h + l/2$		

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}			
$(hk0)$	\mathbf{c}	$n\hat{\mathbf{a}} - m\hat{\mathbf{b}}$	$p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$	$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111 (\mathbf{b}'/4)$ $p1$
$(\bar{h}k0)$	\mathbf{c}	$n\hat{\mathbf{a}} + m\hat{\mathbf{b}}$	$-p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$			
$(kh0)$	\mathbf{c}	$m\hat{\mathbf{a}} + n\hat{\mathbf{b}}$	$q\hat{\mathbf{a}} + p\hat{\mathbf{b}}$			
$(\bar{k}h0)$	\mathbf{c}	$m\hat{\mathbf{a}} - n\hat{\mathbf{b}}$	$-q\hat{\mathbf{a}} + p\hat{\mathbf{b}}$			
		n odd	m even			
		p even	q odd			
		or				
		n even	m odd			
		p odd	q even			
		p odd	q odd			
		n odd	m odd	$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111$ $p1$
		n odd	m odd	$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$ $\hat{p}1$
	$\hat{\mathbf{a}} = (\mathbf{a} - \mathbf{b})/2$ $\hat{\mathbf{b}} = (\mathbf{a} + \mathbf{b})/2$			h even, k odd or h odd, k even $\Rightarrow n = h + k, m = h - k$ h, k odd $\Rightarrow n = (h + k)/2, m = (h - k)/2$		
$(0hk)$	\mathbf{a}	$n\hat{\mathbf{a}} - m\hat{\mathbf{b}}$	$p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$	$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111 (\mathbf{b}'/4)$ $p1$
$(0\bar{h}k)$	\mathbf{a}	$n\hat{\mathbf{a}} + m\hat{\mathbf{b}}$	$-p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$			
$(0kh)$	\mathbf{a}	$m\hat{\mathbf{a}} - n\hat{\mathbf{b}}$	$q\hat{\mathbf{a}} + p\hat{\mathbf{b}}$			
$(0\bar{k}h)$	\mathbf{a}	$m\hat{\mathbf{a}} + n\hat{\mathbf{b}}$	$-q\hat{\mathbf{a}} + p\hat{\mathbf{b}}$			
		n odd	m even			
		p even	q odd			
		or				
		n even	m odd			
		p odd	q even			
		p odd	q odd			
		n odd	m odd	$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111$ $p1$
		n odd	m odd	$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$ $\hat{p}1$
	$\hat{\mathbf{a}} = (\mathbf{b} - \mathbf{c})/2$ $\hat{\mathbf{b}} = (\mathbf{b} + \mathbf{c})/2$			h even, k odd or h odd, k even $\Rightarrow n = h + k, m = h - k$ h, k odd $\Rightarrow n = (h + k)/2, m = (h - k)/2$		
$(k0h)$	\mathbf{b}	$n\hat{\mathbf{a}} - m\hat{\mathbf{b}}$	$p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$	$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111 (\mathbf{b}'/4)$ $p1$
$(k0\bar{h})$	\mathbf{b}	$n\hat{\mathbf{a}} + m\hat{\mathbf{b}}$	$-p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$			
$(h0k)$	\mathbf{b}	$m\hat{\mathbf{a}} - n\hat{\mathbf{b}}$	$q\hat{\mathbf{a}} + p\hat{\mathbf{b}}$			
$(h0\bar{k})$	\mathbf{b}	$m\hat{\mathbf{a}} + n\hat{\mathbf{b}}$	$-q\hat{\mathbf{a}} + p\hat{\mathbf{b}}$			
		n odd	m even			
		p even	q odd			
		or				
		n even	m odd			
		p odd	q even			
		p odd	q odd			
		n odd	m odd	$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111$ $p1$
		n odd	m odd	$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$ $\hat{p}1$
	$\hat{\mathbf{a}} = (\mathbf{c} - \mathbf{a})/2$ $\hat{\mathbf{b}} = (\mathbf{c} + \mathbf{a})/2$			h even, k odd or h odd, k even $\Rightarrow n = h + k, m = h - k$ h, k odd $\Rightarrow n = (h + k)/2, m = (h - k)/2$		

Continued

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}				
(hhl) $(\bar{h}hl)$	$(\mathbf{a} - \mathbf{b})/2$	$n\hat{\mathbf{a}} - m\mathbf{c}$	$p\hat{\mathbf{a}} + q\mathbf{c}$	$Im11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pm11$	L11
	$(\mathbf{a} - \mathbf{b})/2$	$n\hat{\mathbf{a}} + m\mathbf{c}$	$-p\hat{\mathbf{a}} + q\mathbf{c}$				
			n odd m even p even q odd or n even m odd p odd q even p odd q odd n odd m odd				
				$Bm11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pm11$	L11
				$Cm11$	$s\mathbf{d}$	$cm11$	L13
$\hat{\mathbf{a}} = (\mathbf{a} + \mathbf{b})/2$ h odd $\Rightarrow m = h, n = 2l$; h even $\Rightarrow m = h/2, n = l$							
$(\bar{h}\bar{h}l)$ $(\bar{h}hl)$	$(\mathbf{a} + \mathbf{b})/2$	$n\hat{\mathbf{a}} - m\mathbf{c}$	$p\hat{\mathbf{a}} + q\mathbf{c}$	$Im11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pm11$	L11
	$(\mathbf{a} + \mathbf{b})/2$	$n\hat{\mathbf{a}} + m\mathbf{c}$	$-p\hat{\mathbf{a}} + q\mathbf{c}$				
			n odd m even p even q odd or n even m odd p odd q even p odd q odd n odd m odd				
				$Bm11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pm11$	L11
				$Cm11$	$s\mathbf{d}$	$cm11$	L13
$\hat{\mathbf{a}} = (\mathbf{b} - \mathbf{a})/2$ h odd $\Rightarrow m = h, n = 2l$; h even $\Rightarrow m = h/2, n = l$							
(lhh) $(l\bar{h}\bar{h})$	$(\mathbf{b} - \mathbf{c})/2$	$n\hat{\mathbf{a}} - m\mathbf{a}$	$p\hat{\mathbf{a}} + q\mathbf{a}$	$Im11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pm11$	L11
	$(\mathbf{b} - \mathbf{c})/2$	$n\hat{\mathbf{a}} + m\mathbf{a}$	$-p\hat{\mathbf{a}} + q\mathbf{a}$				
			n odd m even p even q odd or n even m odd p odd q even p odd q odd n odd m odd				
				$Bm11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pm11$	L11
				$Cm11$	$s\mathbf{d}$	$cm11$	L13
$\hat{\mathbf{a}} = (\mathbf{b} + \mathbf{c})/2$ h odd $\Rightarrow m = h, n = 2l$; h even $\Rightarrow m = h/2, n = l$							

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}				
$(lh\bar{h})$ $(l\bar{h}h)$	$(\mathbf{b} + \mathbf{c})/2$	$n\hat{\mathbf{a}} - m\mathbf{a}$	$p\hat{\mathbf{a}} + q\mathbf{a}$	$Im11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pm11$	L11
	$(\mathbf{b} + \mathbf{c})/2$	$n\hat{\mathbf{a}} + m\mathbf{a}$	$-p\hat{\mathbf{a}} + q\mathbf{a}$				
			n odd m even p even q odd or n even m odd p odd q even p odd q odd n odd m odd				
				$Bm11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pm11$	L11
				$Cm11$	$s\mathbf{d}$	$cm11$	L13
$\hat{\mathbf{a}} = (\mathbf{c} - \mathbf{b})/2$ h odd $\Rightarrow m = h, n = 2l$; h even $\Rightarrow m = h/2, n = l$							
(hlh) $(\bar{h}lh)$	$(\mathbf{c} - \mathbf{a})/2$	$n\hat{\mathbf{a}} - m\mathbf{b}$	$p\hat{\mathbf{a}} + q\mathbf{b}$	$Im11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pm11$	L11
	$(\mathbf{c} - \mathbf{a})/2$	$n\hat{\mathbf{a}} + m\mathbf{b}$	$-p\hat{\mathbf{a}} + q\mathbf{b}$				
			n odd m even p even q odd or n even m odd p odd q even p odd q odd n odd m odd				
				$Bm11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pm11$	L11
				$Cm11$	$s\mathbf{d}$	$cm11$	L13
$\hat{\mathbf{a}} = (\mathbf{c} + \mathbf{a})/2$ h odd $\Rightarrow m = h, n = 2l$; h even $\Rightarrow m = h/2, n = l$							
$(\bar{h}lh)$ $(h\bar{h})$	$(\mathbf{c} + \mathbf{a})/2$	$n\hat{\mathbf{a}} - m\mathbf{b}$	$p\hat{\mathbf{a}} + q\mathbf{b}$	$Im11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pm11$	L11
	$(\mathbf{c} + \mathbf{a})/2$	$n\hat{\mathbf{a}} + m\mathbf{b}$	$-p\hat{\mathbf{a}} + q\mathbf{b}$				
			n odd m even p even q odd or n even m odd p odd q even p odd q odd n odd m odd				
				$Bm11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pm11$	L11
				$Cm11$	$s\mathbf{d}$	$cm11$	L13
$\hat{\mathbf{a}} = (\mathbf{a} - \mathbf{c})/2$ h odd $\Rightarrow m = h, n = 2l$; h even $\Rightarrow m = h/2, n = l$							

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$		
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}					
(<i>mn0</i>)	\mathbf{c}	$n\mathbf{a} - m\mathbf{b}$	$p\mathbf{a} + q\mathbf{b}$	<i>I</i> 211	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p</i> 211 <i>p</i> 2 ₁ 11 ($\mathbf{b}'/4$) <i>p</i> 1		
($\bar{m}n0$)	\mathbf{c}	$n\mathbf{a} + m\mathbf{b}$	$-p\mathbf{a} + q\mathbf{b}$					
(<i>nm0</i>)	\mathbf{c}	$m\mathbf{a} - n\mathbf{b}$	$q\mathbf{a} + p\mathbf{b}$					
($\bar{n}m0$)	\mathbf{c}	$m\mathbf{a} + n\mathbf{b}$	$-q\mathbf{a} + p\mathbf{b}$					
(<i>0mn</i>)	\mathbf{a}	$n\mathbf{b} - m\mathbf{c}$	$p\mathbf{b} + q\mathbf{c}$					
($0\bar{m}n$)	\mathbf{a}	$n\mathbf{b} + m\mathbf{c}$	$-p\mathbf{b} + q\mathbf{c}$					
(<i>0nm</i>)	\mathbf{a}	$m\mathbf{b} - n\mathbf{c}$	$q\mathbf{b} + p\mathbf{c}$					
($0\bar{n}m$)	\mathbf{a}	$m\mathbf{b} + n\mathbf{c}$	$-q\mathbf{b} + p\mathbf{c}$					
(<i>n0m</i>)	\mathbf{b}	$n\mathbf{c} - m\mathbf{a}$	$p\mathbf{c} + q\mathbf{a}$					
($n0\bar{m}$)	\mathbf{b}	$n\mathbf{c} + m\mathbf{a}$	$-p\mathbf{c} + q\mathbf{a}$					
(<i>m0n</i>)	\mathbf{b}	$m\mathbf{c} - n\mathbf{a}$	$q\mathbf{c} + p\mathbf{a}$					
($m0\bar{n}$)	\mathbf{b}	$m\mathbf{c} + n\mathbf{a}$	$-q\mathbf{c} + p\mathbf{a}$					
		<i>n</i> odd <i>m</i> even <i>p</i> even <i>q</i> odd or <i>n</i> even <i>m</i> odd <i>p</i> odd <i>q</i> even <i>p</i> odd <i>q</i> odd						
		<i>n</i> odd <i>m</i> odd	<i>B</i> 211				$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p</i> 211 <i>p</i> 2 ₁ 11 <i>p</i> 1
			<i>C</i> 211	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	<i>c</i> 211 $\widehat{p}1$	L10 L01		
(<i>hhl</i>)	$\mathbf{a} - \mathbf{b}$	$n\widehat{\mathbf{a}} - m\mathbf{c}$	$p\widehat{\mathbf{a}} + q\mathbf{c}$	<i>C</i> m11	$s\mathbf{d}$	<i>cm</i> 11		
($\bar{h}hl$)	$\mathbf{a} - \mathbf{b}$	$n\widehat{\mathbf{a}} + m\mathbf{c}$	$-p\widehat{\mathbf{a}} + q\mathbf{c}$					
		<i>n</i> odd <i>m</i> even <i>q</i> odd <i>m</i> odd <i>q</i> odd <i>m</i> odd <i>q</i> even	<i>Im</i> 11				$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	<i>pm</i> 11
		<i>p</i> odd <i>q</i> even	<i>Bm</i> 11	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	<i>pm</i> 11	L11		
	$\widehat{\mathbf{a}} = (\mathbf{a} + \mathbf{b} + \mathbf{c})/2$			<i>l</i> odd $\Rightarrow n = 2l, m = 2h + l; l$ even $\Rightarrow n = l, m = h + l/2$				
($\widehat{h}\bar{h}l$)	$\mathbf{a} + \mathbf{b}$	$n\widehat{\mathbf{a}} - m\mathbf{c}$	$p\widehat{\mathbf{a}} + q\mathbf{c}$	<i>C</i> m11	$s\mathbf{d}$	<i>cm</i> 11		
($\widehat{h}hl$)	$\mathbf{a} + \mathbf{b}$	$n\widehat{\mathbf{a}} + m\mathbf{c}$	$-p\widehat{\mathbf{a}} + q\mathbf{c}$					
		<i>n</i> odd <i>m</i> even <i>q</i> odd <i>m</i> odd <i>q</i> odd <i>m</i> odd <i>q</i> even	<i>Im</i> 11				$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	<i>pm</i> 11
		<i>p</i> odd <i>q</i> even	<i>Bm</i> 11	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	<i>pm</i> 11	L11		
	$\widehat{\mathbf{a}} = (\mathbf{b} - \mathbf{a} + \mathbf{c})/2$			<i>l</i> odd $\Rightarrow n = 2l, m = 2h + l; l$ even $\Rightarrow n = l, m = h + l/2$				

Continued

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$			
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}						
(lhh) $(\bar{l}hh)$	$\mathbf{b} - \mathbf{c}$	$n\hat{\mathbf{a}} - m\mathbf{a}$	$p\hat{\mathbf{a}} + q\mathbf{a}$	$Cm11$	$s\mathbf{d}$	$cm11$			
	$\mathbf{b} - \mathbf{c}$	$n\hat{\mathbf{a}} + m\mathbf{a}$	$-p\hat{\mathbf{a}} + q\mathbf{a}$				$Im11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pm11$
							$Bm11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pm11$
		n odd	m even			L13			
			q odd			L11			
			m odd			L11			
			q odd			L11			
		p odd	q even			L11			
$\hat{\mathbf{a}} = (\mathbf{b} + \mathbf{c} + \mathbf{a})/2$ l odd $\Rightarrow n = 2l, m = 2h + l; l$ even $\Rightarrow n = l, m = h + l/2$									
$(lh\bar{h})$ $(\bar{l}h\bar{h})$	$\mathbf{b} + \mathbf{c}$	$n\hat{\mathbf{a}} - m\mathbf{a}$	$p\hat{\mathbf{a}} + q\mathbf{a}$	$Cm11$	$s\mathbf{d}$	$cm11$			
	$\mathbf{b} + \mathbf{c}$	$n\hat{\mathbf{a}} + m\mathbf{a}$	$-p\hat{\mathbf{a}} + q\mathbf{a}$				$Im11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pm11$
							$Bm11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pm11$
		n odd	m even			L13			
			q odd			L11			
			m odd			L11			
			q odd			L11			
		p odd	q even			L11			
$\hat{\mathbf{a}} = (\mathbf{c} - \mathbf{b} + \mathbf{a})/2$ l odd $\Rightarrow n = 2l, m = 2h + l; l$ even $\Rightarrow n = l, m = h + l/2$									
(hlh) $(\bar{h}l\bar{h})$	$\mathbf{c} - \mathbf{a}$	$n\hat{\mathbf{a}} - m\mathbf{b}$	$p\hat{\mathbf{a}} + q\mathbf{b}$	$Cm11$	$s\mathbf{d}$	$cm11$			
	$\mathbf{c} - \mathbf{a}$	$n\hat{\mathbf{a}} + m\mathbf{b}$	$-p\hat{\mathbf{a}} + q\mathbf{b}$				$Im11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pm11$
							$Bm11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pm11$
		n odd	m even			L13			
			q odd			L11			
			m odd			L11			
			q odd			L11			
		p odd	q even			L11			
$\hat{\mathbf{a}} = (\mathbf{c} + \mathbf{a} + \mathbf{b})/2$ l odd $\Rightarrow n = 2l, m = 2h + l; l$ even $\Rightarrow n = l, m = h + l/2$									
$(\bar{h}lh)$ $(h\bar{l}h)$	$\mathbf{c} + \mathbf{a}$	$n\hat{\mathbf{a}} - m\mathbf{b}$	$p\hat{\mathbf{a}} + q\mathbf{b}$	$Cm11$	$s\mathbf{d}$	$cm11$			
	$\mathbf{c} + \mathbf{a}$	$n\hat{\mathbf{a}} + m\mathbf{b}$	$-p\hat{\mathbf{a}} + q\mathbf{b}$				$Im11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pm11$
							$Bm11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pm11$
		n odd	m even			L13			
			q odd			L11			
			m odd			L11			
			q odd			L11			
		p odd	q even			L11			
$\hat{\mathbf{a}} = (\mathbf{a} - \mathbf{c} + \mathbf{b})/2$ l odd $\Rightarrow n = 2l, m = 2h + l; l$ even $\Rightarrow n = l, m = h + l/2$									

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}				
$(mn0)$	\mathbf{c}	$n\mathbf{a} - m\mathbf{b}$	$p\mathbf{a} + q\mathbf{b}$	$P211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p211$ $p1$	L08 L01
$(\bar{m}n0)$	\mathbf{c}	$n\mathbf{a} + m\mathbf{b}$	$-p\mathbf{a} + q\mathbf{b}$				
$(nm0)$	\mathbf{c}	$m\mathbf{a} - n\mathbf{b}$	$q\mathbf{a} + p\mathbf{b}$				
$(\bar{n}m0)$	\mathbf{c}	$m\mathbf{a} + n\mathbf{b}$	$-q\mathbf{a} + p\mathbf{b}$				
$(0mn)$	\mathbf{a}	$n\mathbf{b} - m\mathbf{c}$	$p\mathbf{b} + q\mathbf{c}$				
$(0\bar{m}n)$	\mathbf{a}	$n\mathbf{b} + m\mathbf{c}$	$-p\mathbf{b} + q\mathbf{c}$				
$(0nm)$	\mathbf{a}	$m\mathbf{b} - n\mathbf{c}$	$q\mathbf{b} + p\mathbf{c}$				
$(0\bar{n}m)$	\mathbf{a}	$m\mathbf{b} + n\mathbf{c}$	$-q\mathbf{b} + p\mathbf{c}$				
$(n0m)$	\mathbf{b}	$n\mathbf{c} - m\mathbf{a}$	$p\mathbf{c} + q\mathbf{a}$				
$(n0\bar{m})$	\mathbf{b}	$n\mathbf{c} + m\mathbf{a}$	$-p\mathbf{c} + q\mathbf{a}$				
$(m0n)$	\mathbf{b}	$m\mathbf{c} - n\mathbf{a}$	$q\mathbf{c} + p\mathbf{a}$				
$(m0\bar{n})$	\mathbf{b}	$m\mathbf{c} + n\mathbf{a}$	$-q\mathbf{c} + p\mathbf{a}$				
(hhl)	$\mathbf{a} - \mathbf{b}$	$n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$	$p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$	$Bb11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11$	L12
$(\bar{h}hl)$	$\mathbf{a} - \mathbf{b}$	$n(\mathbf{a} + \mathbf{b}) + m\mathbf{c}$	$-p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$				
$(h\bar{h}l)$	$\mathbf{a} + \mathbf{b}$	$n(\mathbf{b} - \mathbf{a}) - m\mathbf{c}$	$p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$				
$(\bar{h}\bar{h}l)$	$\mathbf{a} + \mathbf{b}$	$n(\mathbf{b} - \mathbf{a}) + m\mathbf{c}$	$-p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$				
(lhh)	$\mathbf{b} - \mathbf{c}$	$n(\mathbf{b} + \mathbf{c}) - m\mathbf{a}$	$p(\mathbf{b} + \mathbf{c}) + q\mathbf{a}$				
$(\bar{l}hh)$	$\mathbf{b} - \mathbf{c}$	$n(\mathbf{b} + \mathbf{c}) + m\mathbf{a}$	$-p(\mathbf{b} + \mathbf{c}) + q\mathbf{a}$				
$(lh\bar{h})$	$\mathbf{b} + \mathbf{c}$	$n(\mathbf{c} - \mathbf{b}) - m\mathbf{a}$	$p(\mathbf{c} - \mathbf{b}) + q\mathbf{a}$				
$(\bar{l}h\bar{h})$	$\mathbf{b} + \mathbf{c}$	$n(\mathbf{c} - \mathbf{b}) + m\mathbf{a}$	$-p(\mathbf{c} - \mathbf{b}) + q\mathbf{a}$				
(hlh)	$\mathbf{c} - \mathbf{a}$	$n(\mathbf{c} + \mathbf{a}) - m\mathbf{b}$	$p(\mathbf{c} + \mathbf{a}) + q\mathbf{b}$				
$(\bar{h}l\bar{h})$	$\mathbf{c} - \mathbf{a}$	$n(\mathbf{c} + \mathbf{a}) + m\mathbf{b}$	$-p(\mathbf{c} + \mathbf{a}) + q\mathbf{b}$				
$(\bar{h}lh)$	$\mathbf{c} + \mathbf{a}$	$n(\mathbf{a} - \mathbf{c}) - m\mathbf{b}$	$p(\mathbf{a} - \mathbf{c}) + q\mathbf{b}$				
$(hl\bar{h})$	$\mathbf{c} + \mathbf{a}$	$n(\mathbf{a} - \mathbf{c}) + m\mathbf{b}$	$-p(\mathbf{a} - \mathbf{c}) + q\mathbf{b}$				
		n odd	m even				
		p even	q odd				
		n even	m odd				
		p odd	q even				
		n even	m odd				
		p odd	q odd				
		n odd	m odd				
		p even	q odd				
		n odd	m odd				
		p odd	q even				
		n odd	m even				
		p odd	q odd				
l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$							

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}				
$(hk0)$	\mathbf{c}	$n\hat{\mathbf{a}} - m\hat{\mathbf{b}}$	$p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$	$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111 (\mathbf{b}'/4)$ $p1$	L08
$(\bar{h}k0)$	\mathbf{c}	$n\hat{\mathbf{a}} + m\hat{\mathbf{b}}$	$-p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$				L09
$(kh0)$	\mathbf{c}	$m\hat{\mathbf{a}} + n\hat{\mathbf{b}}$	$q\hat{\mathbf{a}} + p\hat{\mathbf{b}}$				L01
$(\bar{k}h0)$	\mathbf{c}	$m\hat{\mathbf{a}} - n\hat{\mathbf{b}}$	$-q\hat{\mathbf{a}} + p\hat{\mathbf{b}}$				
			n odd m even				
			p even q odd				
			or				
			n even m odd				
			p odd q even				
			p odd q odd				
			n odd m odd	$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111$ $p1$	L08 L09 L01
				$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$ $\hat{p}1$	L10 L01
	$\hat{\mathbf{a}} = (\mathbf{a} - \mathbf{b})/2$ $\hat{\mathbf{b}} = (\mathbf{a} + \mathbf{b})/2$			h even, k odd or h odd, k even $\Rightarrow n = h + k, m = h - k$ h, k odd $\Rightarrow n = (h + k)/2, m = (h - k)/2$			
$(0hk)$	\mathbf{a}	$n\hat{\mathbf{a}} - m\hat{\mathbf{b}}$	$p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$	$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111 (\mathbf{b}'/4)$ $p1$	L08
$(0\bar{h}k)$	\mathbf{a}	$n\hat{\mathbf{a}} + m\hat{\mathbf{b}}$	$-p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$				L09
$(0kh)$	\mathbf{a}	$m\hat{\mathbf{a}} - n\hat{\mathbf{b}}$	$q\hat{\mathbf{a}} + p\hat{\mathbf{b}}$				L01
$(0\bar{k}h)$	\mathbf{a}	$m\hat{\mathbf{a}} + n\hat{\mathbf{b}}$	$-q\hat{\mathbf{a}} + p\hat{\mathbf{b}}$				
			n odd m even				
			p even q odd				
			or				
			n even m odd				
			p odd q even				
			p odd q odd				
			n odd m odd	$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111$ $p1$	L08 L09 L01
				$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$ $\hat{p}1$	L10 L01
	$\hat{\mathbf{a}} = (\mathbf{b} - \mathbf{c})/2$ $\hat{\mathbf{b}} = (\mathbf{b} + \mathbf{c})/2$			h even, k odd or h odd, k even $\Rightarrow n = h + k, m = h - k$ h, k odd $\Rightarrow n = (h + k)/2, m = (h - k)/2$			
$(k0h)$	\mathbf{b}	$n\hat{\mathbf{a}} - m\hat{\mathbf{b}}$	$p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$	$I211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111 (\mathbf{b}'/4)$ $p1$	L08
$(k0\bar{h})$	\mathbf{b}	$n\hat{\mathbf{a}} + m\hat{\mathbf{b}}$	$-p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$				L09
$(h0k)$	\mathbf{b}	$m\hat{\mathbf{a}} - n\hat{\mathbf{b}}$	$q\hat{\mathbf{a}} + p\hat{\mathbf{b}}$				L01
$(h0\bar{k})$	\mathbf{b}	$m\hat{\mathbf{a}} + n\hat{\mathbf{b}}$	$-q\hat{\mathbf{a}} + p\hat{\mathbf{b}}$				
			n odd m even				
			p even q odd				
			or				
			n even m odd				
			p odd q even				
			p odd q odd				
			n odd m odd	$B211$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p211$ $p2_111$ $p1$	L08 L09 L01
				$C211$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c211$ $\hat{p}1$	L10 L01
	$\hat{\mathbf{a}} = (\mathbf{c} - \mathbf{a})/2$ $\hat{\mathbf{b}} = (\mathbf{c} + \mathbf{a})/2$			h even, k odd or h odd, k even $\Rightarrow n = h + k, m = h - k$ h, k odd $\Rightarrow n = (h + k)/2, m = (h - k)/2$			

Continued

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}				
(hhl) $(\bar{h}hl)$	$(\mathbf{a} - \mathbf{b})/2$	$n\hat{\mathbf{a}} - m\mathbf{c}$	$p\hat{\mathbf{a}} + q\mathbf{c}$	<i>Ib</i> 11	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	<i>pb</i> 11	L12
	$(\mathbf{a} - \mathbf{b})/2$	$n\hat{\mathbf{a}} + m\mathbf{c}$	$-p\hat{\mathbf{a}} + q\mathbf{c}$				
			<i>n</i> odd <i>m</i> even				
			<i>p</i> even <i>q</i> odd				
			<i>n</i> even <i>m</i> odd				
			<i>p</i> odd <i>q</i> even				
			<i>n</i> even <i>m</i> odd				
			<i>p</i> odd <i>q</i> odd				
		<i>n</i> odd <i>m</i> odd	<i>Ic</i> 11	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	<i>pb</i> 11 ($\mathbf{a}'/4$)	L12	
		<i>p</i> odd <i>q</i> even	<i>Bn</i> 11	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	<i>pb</i> 11 ($\mathbf{a}'/4$)	L12	
		<i>n</i> even <i>m</i> odd	<i>Cn</i> 11	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$	L01	
		<i>p</i> even <i>q</i> odd	<i>Cc</i> 11	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$	L01	
		<i>n</i> odd <i>m</i> odd	<i>Bb</i> 11	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	<i>pb</i> 11	L12	
		<i>p</i> odd <i>q</i> even					
		<i>n</i> odd <i>m</i> even					
		<i>p</i> odd <i>q</i> odd					
$\hat{\mathbf{a}} = (\mathbf{a} + \mathbf{b})/2$				<i>h</i> odd $\Rightarrow m = h, n = 2l$; <i>h</i> even $\Rightarrow m = h/2, n = l$			
$(\bar{h}\bar{h}l)$ $(\bar{h}hl)$	$(\mathbf{a} + \mathbf{b})/2$	$n\hat{\mathbf{a}} - m\mathbf{c}$	$p\hat{\mathbf{a}} + q\mathbf{c}$	<i>Ic</i> 11	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	<i>pb</i> 11 ($\mathbf{a}'/4$)	L12
	$(\mathbf{a} + \mathbf{b})/2$	$n\hat{\mathbf{a}} + m\mathbf{c}$	$-p\hat{\mathbf{a}} + q\mathbf{c}$				
			<i>n</i> odd <i>m</i> even				
			<i>p</i> even <i>q</i> odd				
			<i>n</i> even <i>m</i> odd				
			<i>p</i> odd <i>q</i> even				
			<i>n</i> even <i>m</i> odd				
			<i>p</i> odd <i>q</i> odd				
		<i>n</i> odd <i>m</i> odd	<i>Bb</i> 11	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	<i>pb</i> 11	L12	
		<i>p</i> odd <i>q</i> even	<i>Cc</i> 11	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$	L01	
		<i>n</i> odd <i>m</i> odd	<i>Cn</i> 11	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$	L01	
		<i>p</i> even <i>q</i> odd	<i>Bn</i> 11	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	<i>pb</i> 11 ($\mathbf{a}'/4$)	L12	
		<i>n</i> odd <i>m</i> even					
		<i>p</i> odd <i>q</i> odd					
$\hat{\mathbf{a}} = (\mathbf{b} - \mathbf{a})/2$				<i>h</i> odd $\Rightarrow m = h, n = 2l$; <i>h</i> even $\Rightarrow m = h/2, n = l$			
(lhh) $(l\bar{h}\bar{h})$	$(\mathbf{b} - \mathbf{c})/2$	$n\hat{\mathbf{a}} - m\mathbf{a}$	$p\hat{\mathbf{a}} + q\mathbf{a}$	<i>Ib</i> 11	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	<i>pb</i> 11	L12
	$(\mathbf{b} - \mathbf{c})/2$	$n\hat{\mathbf{a}} + m\mathbf{a}$	$-p\hat{\mathbf{a}} + q\mathbf{a}$				
			<i>n</i> odd <i>m</i> even				
			<i>p</i> even <i>q</i> odd				
			<i>n</i> even <i>m</i> odd				
			<i>p</i> odd <i>q</i> even				
			<i>n</i> even <i>m</i> odd				
			<i>p</i> odd <i>q</i> odd				
		<i>n</i> odd <i>m</i> odd	<i>Ic</i> 11	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	<i>pb</i> 11 ($\mathbf{a}'/4$)	L12	
		<i>p</i> even <i>q</i> even	<i>Bn</i> 11	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	<i>pb</i> 11 ($\mathbf{a}'/4$)	L12	
		<i>n</i> even <i>m</i> odd	<i>Cn</i> 11	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$	L01	
		<i>p</i> odd <i>q</i> odd	<i>Cc</i> 11	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$	L01	
		<i>n</i> odd <i>m</i> odd	<i>Bb</i> 11	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	<i>pb</i> 11	L12	
		<i>p</i> odd <i>q</i> even					
		<i>n</i> odd <i>m</i> even					
		<i>p</i> odd <i>q</i> odd					
$\hat{\mathbf{a}} = (\mathbf{b} + \mathbf{c})/2$				<i>h</i> odd $\Rightarrow m = h, n = 2l$; <i>h</i> even $\Rightarrow m = h/2, n = l$			

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}				
$(lh\bar{h})$ $(\bar{l}h\bar{h})$	$(\mathbf{b} + \mathbf{c})/2$	$n\hat{\mathbf{a}} - m\mathbf{a}$	$p\hat{\mathbf{a}} + q\mathbf{a}$	$Ic11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$	L12
	$(\mathbf{b} + \mathbf{c})/2$	$n\hat{\mathbf{a}} + m\mathbf{a}$	$-p\hat{\mathbf{a}} + q\mathbf{a}$				
		n odd	m even				
		p even	q odd				
		n even	m odd				
		p odd	q even				
		n even	m odd				
		p odd	q odd				
	n odd	m odd	$Cc11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$	L01	
	p even	q odd	$Cn11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$	L01	
	n odd	m odd					
	p odd	q even					
	n odd	m even					
	p odd	q odd					
$\hat{\mathbf{a}} = (\mathbf{c} - \mathbf{b})/2$				h odd $\Rightarrow m = h, n = 2l$; h even $\Rightarrow m = h/2, n = l$			
(hlh) $(\bar{h}l\bar{h})$	$(\mathbf{c} - \mathbf{a})/2$	$n\hat{\mathbf{a}} - m\mathbf{b}$	$p\hat{\mathbf{a}} + q\mathbf{b}$	$Ib11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11$	L12
	$(\mathbf{c} - \mathbf{a})/2$	$n\hat{\mathbf{a}} + m\mathbf{b}$	$-p\hat{\mathbf{a}} + q\mathbf{b}$				
		n odd	m even				
		p even	q odd				
		n even	m odd				
		p odd	q even				
		n even	m odd				
		p odd	q odd				
	n odd	m odd	$Cn11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$	L01	
	p even	q odd	$Cc11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$	L01	
	n odd	m odd					
	p odd	q even					
	n odd	m even					
	p odd	q odd					
$\hat{\mathbf{a}} = (\mathbf{c} + \mathbf{a})/2$				h odd $\Rightarrow m = h, n = 2l$; h even $\Rightarrow m = h/2, n = l$			
$(\bar{h}lh)$ $(h\bar{l}\bar{h})$	$(\mathbf{c} + \mathbf{a})/2$	$n\hat{\mathbf{a}} - m\mathbf{b}$	$p\hat{\mathbf{a}} + q\mathbf{b}$	$Ic11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$	L12
	$(\mathbf{c} + \mathbf{a})/2$	$n\hat{\mathbf{a}} + m\mathbf{b}$	$-p\hat{\mathbf{a}} + q\mathbf{b}$				
		n odd	m even				
		p even	q odd				
		n even	m odd				
		p odd	q even				
		n even	m odd				
		p odd	q odd				
	n odd	m odd	$Cc11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$	L01	
	p even	q odd	$Cn11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$	L01	
	n odd	m odd					
	p odd	q even					
	n odd	m even					
	p odd	q odd					
$\hat{\mathbf{a}} = (\mathbf{a} - \mathbf{c})/2$				h odd $\Rightarrow m = h, n = 2l$; h even $\Rightarrow m = h/2, n = l$			

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$								
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}											
$(mn0)$ $(\bar{m}n0)$ $(nm0)$ $(\bar{n}m0)$ $(\mathbf{b}/4)$	\mathbf{c}	$n\mathbf{a} - m\mathbf{b}$	$p\mathbf{a} + q\mathbf{b}$	<i>I</i> 211	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p</i> 211	L08							
	\mathbf{c}	$n\mathbf{a} + m\mathbf{b}$	$-p\mathbf{a} + q\mathbf{b}$				<i>p</i> even	<i>q</i> odd	$p2_111$ ($\mathbf{b}'/4$)	L09				
	\mathbf{c}	$m\mathbf{a} - n\mathbf{b}$	$q\mathbf{a} + p\mathbf{b}$				or			<i>p</i> 1	L01			
	\mathbf{c}	$m\mathbf{a} + n\mathbf{b}$	$-q\mathbf{a} + p\mathbf{b}$				<i>n</i> odd	<i>m</i> even	<i>p</i> 211		L08			
							<i>p</i> odd	<i>q</i> even		$p2_111$	L09			
							<i>p</i> odd	<i>q</i> odd			<i>p</i> 1	L01		
							<i>n</i> odd	<i>m</i> odd		<i>c</i> 211		L10		
											$\widehat{p}1$	L01		
	$(0mn)$ $(0\bar{m}n)$ $(0nm)$ $(0\bar{n}m)$ $(\mathbf{c}/4)$	\mathbf{a}	$n\mathbf{b} - m\mathbf{c}$				$p\mathbf{b} + q\mathbf{c}$	<i>I</i> 211		$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p</i> 211	L08		
		\mathbf{a}	$n\mathbf{b} + m\mathbf{c}$				$-p\mathbf{b} + q\mathbf{c}$		<i>p</i> even			<i>q</i> odd	$p2_111$ ($\mathbf{b}'/4$)	L09
		\mathbf{a}	$m\mathbf{b} - n\mathbf{c}$				$q\mathbf{b} + p\mathbf{c}$		or			<i>p</i> 1		L01
		\mathbf{a}	$m\mathbf{b} + n\mathbf{c}$				$-q\mathbf{b} + p\mathbf{c}$		<i>n</i> odd				<i>m</i> even	<i>p</i> 211
				<i>p</i> odd	<i>q</i> even	$p2_111$	L09							
				<i>p</i> odd	<i>q</i> odd		<i>p</i> 1		L01					
				<i>n</i> odd	<i>m</i> odd	<i>c</i> 211			L10					
							$\widehat{p}1$		L01					
$(n0m)$ $(n0\bar{m})$ $(m0n)$ $(m0\bar{n})$ $(\mathbf{a}/4)$		\mathbf{b}	$n\mathbf{c} - m\mathbf{a}$	$p\mathbf{c} + q\mathbf{a}$	<i>I</i> 211	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p</i> 211		L08					
		\mathbf{b}	$n\mathbf{c} + m\mathbf{a}$	$-p\mathbf{c} + q\mathbf{a}$					<i>p</i> even			<i>q</i> odd	$p2_111$ ($\mathbf{b}'/4$)	L09
		\mathbf{b}	$m\mathbf{c} - n\mathbf{a}$	$q\mathbf{c} + p\mathbf{a}$					or			<i>p</i> 1		L01
		\mathbf{b}	$m\mathbf{c} + n\mathbf{a}$	$-q\mathbf{c} + p\mathbf{a}$					<i>n</i> odd				<i>m</i> even	<i>p</i> 211
				<i>p</i> odd				<i>q</i> even	$p2_111$	L09				
				<i>p</i> odd				<i>q</i> odd		<i>p</i> 1	L01			
				<i>n</i> odd				<i>m</i> odd	<i>c</i> 211		L10			
										$\widehat{p}1$	L01			

Continued

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}				
(hhl) ($\bar{h}\bar{h}l$)	$\mathbf{a} - \mathbf{b}$	$n\hat{\mathbf{a}} - m\mathbf{c}$	$p\hat{\mathbf{a}} + q\mathbf{c}$	Cc11	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$	L01
	$\mathbf{a} - \mathbf{b}$	$n\hat{\mathbf{a}} + m\mathbf{c}$	$-p\hat{\mathbf{a}} + q\mathbf{c}$				
			n odd m even				
			p even q odd				
			n even m odd				
			p odd q even				
			n even m odd				
			p odd q odd				
		n odd m odd	Bb11	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11$	L12	
		p odd q even	Ib11	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11$	L12	
		n even m odd	Ic11	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$	L12	
		p even q odd	Bn11	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$	L12	
		n odd m odd	Cn11	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$	L01	
		p odd q even					
		n odd m even					
		p odd q odd					
$\hat{\mathbf{a}} = (\mathbf{a} + \mathbf{b} + \mathbf{c})/2$ l odd $\Rightarrow n = 2l, m = 2h + l; l$ even $\Rightarrow n = l, m = h + l/2$							
(h \bar{h} l) ($\bar{h}hl$)	$\mathbf{a} + \mathbf{b}$	$n\hat{\mathbf{a}} - m\mathbf{c}$	$p\hat{\mathbf{a}} + q\mathbf{c}$	Cc11	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$	L01
	$\mathbf{a} + \mathbf{b}$	$n\hat{\mathbf{a}} + m\mathbf{c}$	$-p\hat{\mathbf{a}} + q\mathbf{c}$				
			n odd m even				
			p even q odd				
			n even m odd				
			p odd q even				
			n even m odd				
			p odd q odd				
		n odd m odd	Bb11	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11$	L12	
		p odd q even	Ib11	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11$	L12	
		n even m odd	Ic11	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$	L12	
		p even q odd	Bn11	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$	L12	
		n odd m odd	Cn11	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$	L01	
		p odd q even					
		n odd m even					
		p odd q odd					
$\hat{\mathbf{a}} = (\mathbf{b} - \mathbf{a} + \mathbf{c})/2$ l odd $\Rightarrow n = 2l, m = 2h + l; l$ even $\Rightarrow n = l, m = h + l/2$							
(lhh) ($\bar{l}\bar{h}\bar{h}$)	$\mathbf{b} - \mathbf{c}$	$n\hat{\mathbf{a}} - m\mathbf{a}$	$p\hat{\mathbf{a}} + q\mathbf{a}$	Cc11	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$	L01
	$\mathbf{b} - \mathbf{c}$	$n\hat{\mathbf{a}} + m\mathbf{a}$	$-p\hat{\mathbf{a}} + q\mathbf{a}$				
			n odd m even				
			p even q odd				
			n even m odd				
			p odd q even				
			n even m odd				
			p odd q odd				
		n odd m odd	Bb11	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11$	L12	
		p odd q even	Ib11	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11$	L12	
		n even m odd	Ic11	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$	L12	
		p even q odd	Bn11	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$	L12	
		n odd m odd	Cn11	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$	L01	
		p odd q even					
		n odd m even					
		p odd q odd					
$\hat{\mathbf{a}} = (\mathbf{b} + \mathbf{c} + \mathbf{a})/2$ l odd $\Rightarrow n = 2l, m = 2h + l; l$ even $\Rightarrow n = l, m = h + l/2$							

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}				
$(lh\bar{h})$ $(\bar{l}h\bar{h})$	$\mathbf{b} + \mathbf{c}$	$n\hat{\mathbf{a}} - m\mathbf{a}$	$p\hat{\mathbf{a}} + q\mathbf{a}$	$Cc11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$	L01
	$\mathbf{b} + \mathbf{c}$	$n\hat{\mathbf{a}} + m\mathbf{a}$	$-p\hat{\mathbf{a}} + q\mathbf{a}$				
		n odd	m even				
		p even	q odd				
		n even	m odd				
		p odd	q even				
		n even	m odd				
		p odd	q odd				
	n odd	m odd	$Bb11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11$	L12	
	p even	q even	$Ib11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11$	L12	
	n even	m odd	$Ic11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$	L12	
	p odd	q odd	$Bn11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$	L12	
	n odd	m odd	$Cn11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$	L01	
	p even	q odd					
	n odd	m even					
	p odd	q odd					
$\hat{\mathbf{a}} = (\mathbf{c} - \mathbf{b} + \mathbf{a})/2$ l odd $\Rightarrow n = 2l, m = 2h + l; l$ even $\Rightarrow n = l, m = h + l/2$							
(hlh) $(\bar{h}l\bar{h})$	$\mathbf{c} - \mathbf{a}$	$n\hat{\mathbf{a}} - m\mathbf{b}$	$p\hat{\mathbf{a}} + q\mathbf{b}$	$Cc11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$	L01
	$\mathbf{c} - \mathbf{a}$	$n\hat{\mathbf{a}} + m\mathbf{b}$	$-p\hat{\mathbf{a}} + q\mathbf{b}$				
		n odd	m even				
		p even	q odd				
		n even	m odd				
		p odd	q even				
		n even	m odd				
		p odd	q odd				
	n odd	m odd	$Bb11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11$	L12	
	p even	q even	$Ib11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11$	L12	
	n odd	m odd	$Ic11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$	L12	
	p even	q odd	$Bn11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$	L12	
	n odd	m odd	$Cn11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$	L01	
	p odd	q even					
	n odd	m even					
	p odd	q odd					
$\hat{\mathbf{a}} = (\mathbf{c} + \mathbf{a} + \mathbf{b})/2$ l odd $\Rightarrow n = 2l, m = 2h + l; l$ even $\Rightarrow n = l, m = h + l/2$							
$(\bar{h}l\bar{h})$ $(hl\bar{h})$	$\mathbf{c} + \mathbf{a}$	$n\hat{\mathbf{a}} - m\mathbf{b}$	$p\hat{\mathbf{a}} + q\mathbf{b}$	$Cc11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$	L01
	$\mathbf{c} + \mathbf{a}$	$n\hat{\mathbf{a}} + m\mathbf{b}$	$-p\hat{\mathbf{a}} + q\mathbf{b}$				
		n odd	m even				
		p even	q odd				
		n even	m odd				
		p odd	q even				
		n even	m odd				
		p odd	q odd				
	n odd	m odd	$Bb11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11$	L12	
	p even	q even	$Ib11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11$	L12	
	n odd	m odd	$Ic11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$	L12	
	p even	q odd	$Bn11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$	L12	
	n odd	m odd	$Cn11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$	L01	
	p odd	q even					
	n odd	m even					
	p odd	q odd					
$\hat{\mathbf{a}} = (\mathbf{a} - \mathbf{c} + \mathbf{b})/2$ l odd $\Rightarrow n = 2l, m = 2h + l; l$ even $\Rightarrow n = l, m = h + l/2$							

$$\mathcal{G} = P_m^4 \bar{3}_m^2$$

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$					
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}								
(<i>mn0</i>)	\mathbf{c}	$n\mathbf{a} - m\mathbf{b}$	$p\mathbf{a} + q\mathbf{b}$	$P2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [$s\mathbf{d}, -s\mathbf{d}$]	$p2/m11$	L14				
($\bar{m}n0$)	\mathbf{c}	$n\mathbf{a} + m\mathbf{b}$	$-p\mathbf{a} + q\mathbf{b}$								
(<i>nm0</i>)	\mathbf{c}	$m\mathbf{a} - n\mathbf{b}$	$q\mathbf{a} + p\mathbf{b}$								
($\bar{n}m0$)	\mathbf{c}	$m\mathbf{a} + n\mathbf{b}$	$-q\mathbf{a} + p\mathbf{b}$								
(<i>0mn</i>)	\mathbf{a}	$n\mathbf{b} - m\mathbf{c}$	$p\mathbf{b} + q\mathbf{c}$								
($0\bar{m}n$)	\mathbf{a}	$n\mathbf{b} + m\mathbf{c}$	$-p\mathbf{b} + q\mathbf{c}$								
(<i>0nm</i>)	\mathbf{a}	$m\mathbf{b} - n\mathbf{c}$	$q\mathbf{b} + p\mathbf{c}$								
($0\bar{0}\bar{n}m$)	\mathbf{a}	$m\mathbf{b} + n\mathbf{c}$	$-q\mathbf{b} + p\mathbf{c}$								
(<i>n0m</i>)	\mathbf{b}	$n\mathbf{c} - m\mathbf{a}$	$p\mathbf{c} + q\mathbf{a}$								
($n0\bar{m}$)	\mathbf{b}	$n\mathbf{c} + m\mathbf{a}$	$-p\mathbf{c} + q\mathbf{a}$								
(<i>m0n</i>)	\mathbf{b}	$m\mathbf{c} - n\mathbf{a}$	$q\mathbf{c} + p\mathbf{a}$								
($m0\bar{n}$)	\mathbf{b}	$m\mathbf{c} + n\mathbf{a}$	$-q\mathbf{c} + p\mathbf{a}$								
(<i>hhl</i>)	$\mathbf{a} - \mathbf{b}$	$n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$	$p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$					$B2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ [$\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	$p2/m11$	L14
($\bar{h}hl$)	$\mathbf{a} - \mathbf{b}$	$n(\mathbf{a} + \mathbf{b}) + m\mathbf{c}$	$-p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$								
(<i>hhl</i>)	$\mathbf{a} + \mathbf{b}$	$n(\mathbf{b} - \mathbf{a}) - m\mathbf{c}$	$p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$								
($\bar{h}hl$)	$\mathbf{a} + \mathbf{b}$	$n(\mathbf{b} - \mathbf{a}) + m\mathbf{c}$	$-p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$								
(<i>lhh</i>)	$\mathbf{b} - \mathbf{c}$	$n(\mathbf{b} + \mathbf{c}) - m\mathbf{a}$	$p(\mathbf{b} + \mathbf{c}) + q\mathbf{a}$								
($\bar{l}hh$)	$\mathbf{b} - \mathbf{c}$	$n(\mathbf{b} + \mathbf{c}) + m\mathbf{a}$	$-p(\mathbf{b} + \mathbf{c}) + q\mathbf{a}$								
(<i>lhh</i>)	$\mathbf{b} + \mathbf{c}$	$n(\mathbf{c} - \mathbf{b}) - m\mathbf{a}$	$p(\mathbf{c} - \mathbf{b}) + q\mathbf{a}$								
($\bar{l}hh$)	$\mathbf{b} + \mathbf{c}$	$n(\mathbf{c} - \mathbf{b}) + m\mathbf{a}$	$-p(\mathbf{c} - \mathbf{b}) + q\mathbf{a}$								
(<i>hlh</i>)	$\mathbf{c} - \mathbf{a}$	$n(\mathbf{c} + \mathbf{a}) - m\mathbf{b}$	$p(\mathbf{c} + \mathbf{a}) + q\mathbf{b}$								
($\bar{h}lh$)	$\mathbf{c} - \mathbf{a}$	$n(\mathbf{c} + \mathbf{a}) + m\mathbf{b}$	$-p(\mathbf{c} + \mathbf{a}) + q\mathbf{b}$								
(<i>hlh</i>)	$\mathbf{c} + \mathbf{a}$	$n(\mathbf{a} - \mathbf{c}) - m\mathbf{b}$	$p(\mathbf{a} - \mathbf{c}) + q\mathbf{b}$								
($\bar{h}lh$)	$\mathbf{c} + \mathbf{a}$	$n(\mathbf{a} - \mathbf{c}) + m\mathbf{b}$	$-p(\mathbf{a} - \mathbf{c}) + q\mathbf{b}$								
		n odd		$C2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [$s\mathbf{d}, -s\mathbf{d}$]	$c2/m11$	L18				
		p even	q odd			$cm11$	L13				
		n even	m odd	$I2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ [$\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	$p2/m11$	L14				
		p odd				$p2_1/m11$ [($\mathbf{a}' + \mathbf{b}'$)/4]	L15				
		n odd				$pm11$	L11				
		p odd									

l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$					
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}								
(<i>mn0</i>)	c	$n\mathbf{a} - m\mathbf{b}$	$p\mathbf{a} + q\mathbf{b}$	$P2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p211 (\mathbf{b}'/4)$ $p1$	L02 L08 L01				
($\bar{m}n0$)	c	$n\mathbf{a} + m\mathbf{b}$	$-p\mathbf{a} + q\mathbf{b}$								
(<i>nm0</i>)	c	$m\mathbf{a} - n\mathbf{b}$	$q\mathbf{a} + p\mathbf{b}$								
($\bar{n}m0$)	c	$m\mathbf{a} + n\mathbf{b}$	$-q\mathbf{a} + p\mathbf{b}$								
(<i>0mn</i>)	a	$n\mathbf{b} - m\mathbf{c}$	$p\mathbf{b} + q\mathbf{c}$								
($0\bar{m}n$)	a	$n\mathbf{b} + m\mathbf{c}$	$-p\mathbf{b} + q\mathbf{c}$								
(<i>0nm</i>)	a	$m\mathbf{b} - n\mathbf{c}$	$q\mathbf{b} + p\mathbf{c}$								
($0\bar{n}m$)	a	$m\mathbf{b} + n\mathbf{c}$	$-q\mathbf{b} + p\mathbf{c}$								
(<i>n0m</i>)	b	$n\mathbf{c} - m\mathbf{a}$	$p\mathbf{c} + q\mathbf{a}$								
($n0\bar{m}$)	b	$n\mathbf{c} + m\mathbf{a}$	$-p\mathbf{c} + q\mathbf{a}$								
(<i>m0n</i>)	b	$m\mathbf{c} - n\mathbf{a}$	$q\mathbf{c} + p\mathbf{a}$								
($m0\bar{n}$)	b	$m\mathbf{c} + n\mathbf{a}$	$-q\mathbf{c} + p\mathbf{a}$								
$(\mathbf{a} + \mathbf{b} + \mathbf{c})/4$			n odd m even p even q odd or n even m odd p odd q even p odd q odd								
			n odd m odd					$P2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p211$ $p1$	L02 L08 L01
			n odd m odd	$P2/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2/b11$ $pb11$	L16 L12				
$(\mathbf{a} + \mathbf{b} + \mathbf{c})/4$	(<i>hhl</i>)	$\mathbf{a} - \mathbf{b}$	$n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$	$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ $p2/b11 (\mathbf{a}'/4)$ $pb11 (\mathbf{a}'/4)$	L17 L16 L12				
	($\bar{h}hl$)	$\mathbf{a} - \mathbf{b}$	$n(\mathbf{a} + \mathbf{b}) + m\mathbf{c}$								
			n odd m even p even q odd								
			n even m odd p odd q even					$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}\bar{1}$ $c211 (\mathbf{b}'/4)$ $\hat{p}1$	L02 L10 L01
			n even m odd p odd q odd					$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}\bar{1}$ $c211$ $\hat{p}1$	L02 L10 L01
			n odd m odd p even q odd					$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ $p2_1/b11 (\mathbf{a}'/4)$ $pb11$	L16 L17 L12
			n odd m odd p odd q even					$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ $p2_1/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ $pb11$	L16 L17 L12
			n odd m even p odd q odd					$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ $p2/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ $pb11 (\mathbf{a}'/4)$	L17 L16 L12

Continued

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$																
(hhl) $(\bar{h}hl)$ $(\mathbf{a} + \mathbf{b} + \mathbf{c})/4$	$\mathbf{a} + \mathbf{b}$ $n(\mathbf{b} - \mathbf{a}) - m\mathbf{c}$ $p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$	$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ $p2_1/b11 (\mathbf{a}'/4)$ $pb11$	L16															
	$\mathbf{a} + \mathbf{b}$ $n(\mathbf{b} - \mathbf{a}) + m\mathbf{c}$ $-p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$				$\widehat{p}\bar{1}$	L17														
	n odd m even				$c211$	L12														
	p even q odd				$\widehat{p}1$	L01														
	n even m odd				$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}\bar{1}$	L02												
	p odd q even							$c211$	L12											
	n even m odd							$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}1$	L02									
	p odd q odd										$c211 (\mathbf{b}'/4)$	L10								
	n odd m odd										$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ $p2/b11 (\mathbf{a}'/4)$ $pb11 (\mathbf{a}'/4)$	L17						
	p even q odd													$p2/b11 (\mathbf{a}'/4)$	L16					
	n odd m odd													$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ $p2/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ $pb11 (\mathbf{a}'/4)$	L17			
	p odd q even																$p2/b11 [(\mathbf{a}' + \mathbf{b}')/4]$	L16		
n odd m even	$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ $p2_1/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ $pb11$	L16																
p odd q odd				$p2_1/b11 [(\mathbf{a}' + \mathbf{b}')/4]$													L17			
																		L12		
																		L16		
						L17														
						L12														
						L16														
						L17														
						L12														
						L16														
						L17														
						L12														
(lhh) $(\bar{l}hh)$ $(\mathbf{a} + \mathbf{b} + \mathbf{c})/4$	$\mathbf{b} - \mathbf{c}$ $n(\mathbf{b} + \mathbf{c}) - m\mathbf{a}$ $p(\mathbf{b} + \mathbf{c}) + q\mathbf{a}$	$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ $p2/b11 (\mathbf{a}'/4)$ $pb11 (\mathbf{a}'/4)$	L17															
	$\mathbf{b} - \mathbf{c}$ $n(\mathbf{b} + \mathbf{c}) + m\mathbf{a}$ $-p(\mathbf{b} + \mathbf{c}) + q\mathbf{a}$				$p2/b11 (\mathbf{a}'/4)$	L16														
	n odd m even				$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}\bar{1}$ $c211 (\mathbf{b}'/4)$ $\widehat{p}1$	L12												
	p even q odd							$\widehat{p}1$	L02											
	n even m odd							$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}\bar{1}$ $c211$ $\widehat{p}1$	L10									
	p odd q even										$\widehat{p}1$	L01								
	n even m odd										$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ $p2_1/b11 (\mathbf{a}'/4)$ $pb11$	L02						
	p odd q odd													$p2/b11$	L16					
	n odd m odd													$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ $p2/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ $pb11$	L17			
	p even q odd																$p2_1/b11 (\mathbf{a}'/4)$	L16		
	n odd m odd																$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ $p2/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ $pb11 (\mathbf{a}'/4)$	L17
	p odd q even																			$p2/b11 [(\mathbf{a}' + \mathbf{b}')/4]$
n odd m even	$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ $p2/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ $pb11 (\mathbf{a}'/4)$	L17																
p odd q odd				$p2/b11 [(\mathbf{a}' + \mathbf{b}')/4]$																L16
						L17														
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						L17														
						L16														
						L17														
						L16														

Continued

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$				
$(lh\bar{h})$ $(\bar{l}h\bar{h})$ $(\mathbf{a} + \mathbf{b} + \mathbf{c})/4$	$\mathbf{b} + \mathbf{c}$ $n(\mathbf{c} - \mathbf{b}) - m\mathbf{a}$ $p(\mathbf{c} - \mathbf{b}) + q\mathbf{a}$	$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ $p2_1/b11 (\mathbf{a}'/4)$ $pb11$	L16			
	$\mathbf{b} + \mathbf{c}$ $n(\mathbf{c} - \mathbf{b}) + m\mathbf{a}$ $-p(\mathbf{c} - \mathbf{b}) + q\mathbf{a}$				n odd m even	L17		
					p even q odd	L12		
					n even m odd	$C2/c11$	$\widehat{p}\bar{1}$	L02
					p odd q even	$c211$	$\widehat{p}1$	L12
						$C2/n11$	$\widehat{p}\bar{1}$	L01
					n even m odd	$c211 (\mathbf{b}'/4)$		L10
					p odd q odd	$\widehat{p}1$		L01
					n odd m odd	$B2/n11$	$p2_1/b11$	L17
					p even q odd	$p2/b11 (\mathbf{a}'/4)$		L16
						$pb11 (\mathbf{a}'/4)$		L12
					n odd m odd	$I2/c11$	$p2_1/b11$	L17
	p odd q even	$p2/b11 [(\mathbf{a}' + \mathbf{b}')/4]$		L16				
		$pb11 (\mathbf{a}'/4)$		L12				
	n odd m even	$I2/b11$	$p2/b11$	L16				
	p odd q odd	$p2_1/b11 [(\mathbf{a}' + \mathbf{b}')/4]$		L17				
		$pb11$		L12				
(hlh) $(\bar{h}l\bar{h})$ $(\mathbf{a} + \mathbf{b} + \mathbf{c})/4$	$\mathbf{c} - \mathbf{a}$ $n(\mathbf{c} + \mathbf{a}) - m\mathbf{b}$ $p(\mathbf{c} + \mathbf{a}) + q\mathbf{b}$	$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ $p2/b11 (\mathbf{a}'/4)$ $pb11 (\mathbf{a}'/4)$	L17			
	$\mathbf{c} - \mathbf{a}$ $n(\mathbf{c} + \mathbf{a}) + m\mathbf{b}$ $-p(\mathbf{c} + \mathbf{a}) + q\mathbf{b}$				n odd m even	L16		
					p even q odd	L12		
					n even m odd	$C2/n11$	$\widehat{p}\bar{1}$	L02
					p odd q even	$c211 (\mathbf{b}'/4)$		L10
						$C2/c11$	$\widehat{p}1$	L01
					n even m odd	$c211$		L10
					p odd q odd	$\widehat{p}1$		L01
					n odd m odd	$B2/b11$	$p2/b11$	L16
					p even q odd	$p2_1/b11 (\mathbf{a}'/4)$		L17
						$pb11$		L12
					n odd m odd	$I2/b11$	$p2/b11$	L16
	p odd q even	$p2_1/b11 [(\mathbf{a}' + \mathbf{b}')/4]$		L17				
		$pb11$		L12				
	n odd m even	$I2/c11$	$p2_1/b11$	L17				
	p odd q odd	$p2/b11 [(\mathbf{a}' + \mathbf{b}')/4]$		L16				
		$pb11 (\mathbf{a}'/4)$		L12				

Continued

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}				
$(\bar{h}lh)$	$\mathbf{c} + \mathbf{a}$	$n(\mathbf{a} - \mathbf{c}) - m\mathbf{b}$	$p(\mathbf{a} - \mathbf{c}) + q\mathbf{b}$				
$(hl\bar{h})$	$\mathbf{c} + \mathbf{a}$	$n(\mathbf{a} - \mathbf{c}) + m\mathbf{b}$	$-p(\mathbf{a} - \mathbf{c}) + q\mathbf{b}$				
$(\mathbf{a} + \mathbf{b} + \mathbf{c})/4$			n odd m even p even q odd	$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ $p2_1/b11 (\mathbf{a}'/4)$ $pb11$	L16 L17 L12
			n even m odd p odd q even	$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}\bar{1}$ $c211$ $\widehat{p}\bar{1}$	L02 L12 L01
			n even m odd p odd q odd	$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}\bar{1}$ $c211 (\mathbf{b}'/4)$ $\widehat{p}\bar{1}$	L02 L10 L01
			n odd m odd p even q odd	$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ $p2/b11 (\mathbf{a}'/4)$ $pb11 (\mathbf{a}'/4)$	L17 L16 L12
			n odd m odd p odd q even	$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ $p2/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ $pb11 (\mathbf{a}'/4)$	L17 L16 L12
			n odd m even p odd q odd	$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ $p2_1/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ $pb11$	L16 L17 L12
l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$							

Continued

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$				
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}							
(<i>mn0</i>)	c	$n\mathbf{a} - m\mathbf{b}$	$p\mathbf{a} + q\mathbf{b}$	$P2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p211 (\mathbf{b}'/4)$ $p1$	L02 L08 L01			
($\bar{m}n0$)	c	$n\mathbf{a} + m\mathbf{b}$	$-p\mathbf{a} + q\mathbf{b}$							
(<i>nm0</i>)	c	$m\mathbf{a} - n\mathbf{b}$	$q\mathbf{a} + p\mathbf{b}$							
($\bar{n}m0$)	c	$m\mathbf{a} + n\mathbf{b}$	$-q\mathbf{a} + p\mathbf{b}$							
(<i>0mn</i>)	a	$n\mathbf{b} - m\mathbf{c}$	$p\mathbf{b} + q\mathbf{c}$							
($0\bar{m}n$)	a	$n\mathbf{b} + m\mathbf{c}$	$-p\mathbf{b} + q\mathbf{c}$							
(<i>0nm</i>)	a	$m\mathbf{b} - n\mathbf{c}$	$q\mathbf{b} + p\mathbf{c}$							
($0\bar{n}m$)	a	$m\mathbf{b} + n\mathbf{c}$	$-q\mathbf{b} + p\mathbf{c}$							
(<i>n0m</i>)	b	$n\mathbf{c} - m\mathbf{a}$	$p\mathbf{c} + q\mathbf{a}$							
($n0\bar{m}$)	b	$n\mathbf{c} + m\mathbf{a}$	$-p\mathbf{c} + q\mathbf{a}$							
(<i>m0n</i>)	b	$m\mathbf{c} - n\mathbf{a}$	$q\mathbf{c} + p\mathbf{a}$							
($m0\bar{n}$)	b	$m\mathbf{c} + n\mathbf{a}$	$-q\mathbf{c} + p\mathbf{a}$							
		n odd m even p even q odd or n even m odd p odd q even p odd q odd								
		n odd m odd	$P2/c11$					$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p211$ $p1$	L02 L08 L01
			$P2/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2/b11$ $pb11$	L16 L12				
(<i>hhl</i>)	a - b	$n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$	$p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$	$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ $p2/b11 (\mathbf{a}'/4)$ $pb11 (\mathbf{a}'/4)$	L17 L16 L12			
($\bar{h}h\bar{l}$)	a - b	$n(\mathbf{a} + \mathbf{b}) + m\mathbf{c}$	$-p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$							
		n odd m even p even q odd								
		n even m odd p odd q even	$C2/n11$					$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}\bar{1}$ $c211 (\mathbf{b}'/4)$ $\hat{p}1$	L02 L10 L01
		n even m odd p odd q odd	$C2/c11$					$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}\bar{1}$ $c211$ $\hat{p}1$	L02 L10 L01
		n odd m odd p even q odd	$B2/b11$					$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ $p2_1/b11 (\mathbf{a}'/4)$ $pb11$	L16 L17 L12
		n odd m odd p odd q even	$I2/b11$					$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ $p2_1/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ $pb11$	L16 L17 L12
		n odd m even p odd q odd	$I2/c11$					$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ $p2/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ $pb11 (\mathbf{a}'/4)$	L17 L16 L12

Continued

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}				
(<i>hhl</i>)	$\mathbf{a} + \mathbf{b}$	$n(\mathbf{b} - \mathbf{a}) - m\mathbf{c}$	$p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$	<i>B2/b11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p2/b11</i>	L16
($\bar{h}hl$)	$\mathbf{a} + \mathbf{b}$	$n(\mathbf{b} - \mathbf{a}) + m\mathbf{c}$	$-p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$				<i>p2₁/b11</i> ($\mathbf{a}'/4$)
		<i>n odd</i>	<i>m even</i>	<i>C2/c11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}\bar{1}$	L02
		<i>p even</i>	<i>q odd</i>				<i>c211</i>
		<i>n even</i>	<i>m odd</i>	<i>C2/n11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}1$	L01
		<i>p odd</i>	<i>q even</i>				<i>c211</i> ($\mathbf{b}'/4$)
		<i>n even</i>	<i>m odd</i>	<i>B2/n11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}1$	L01
		<i>p odd</i>	<i>q odd</i>				<i>p2₁/b11</i>
		<i>n odd</i>	<i>m odd</i>	<i>I2/c11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p2₁/b11</i>	L17
		<i>p even</i>	<i>q odd</i>				<i>p2/b11</i> ($\mathbf{a}'/4$)
		<i>n odd</i>	<i>m odd</i>	<i>I2/b11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p2/b11</i>	L16
		<i>p odd</i>	<i>q odd</i>				<i>p2/b11</i> ($\mathbf{a}'/4$)
		<i>n odd</i>	<i>m even</i>	<i>I2/c11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p2₁/b11</i>	L17
		<i>p odd</i>	<i>q even</i>				<i>p2/b11</i> [$(\mathbf{a}' + \mathbf{b}')/4$]
		<i>n odd</i>	<i>m even</i>	<i>I2/b11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p2₁/b11</i>	L17
		<i>p odd</i>	<i>q odd</i>				<i>p2/b11</i> [$(\mathbf{a}' + \mathbf{b}')/4$]
		<i>n odd</i>	<i>m even</i>	<i>I2/c11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p2₁/b11</i>	L17
		<i>p odd</i>	<i>q odd</i>				<i>p2/b11</i> [$(\mathbf{a}' + \mathbf{b}')/4$]
		<i>n odd</i>	<i>m even</i>	<i>I2/b11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p2₁/b11</i>	L17
		<i>p odd</i>	<i>q odd</i>				<i>p2/b11</i> ($\mathbf{a}'/4$)
		<i>n even</i>	<i>m odd</i>	<i>C2/n11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}\bar{1}$	L02
		<i>p odd</i>	<i>q even</i>				<i>c211</i> ($\mathbf{b}'/4$)
		<i>n even</i>	<i>m odd</i>	<i>C2/c11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}1$	L01
		<i>p odd</i>	<i>q odd</i>				<i>c211</i>
		<i>n odd</i>	<i>m odd</i>	<i>B2/b11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p2/b11</i>	L16
		<i>p even</i>	<i>q odd</i>				<i>p2₁/b11</i> ($\mathbf{a}'/4$)
		<i>n odd</i>	<i>m odd</i>	<i>I2/b11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p2/b11</i>	L16
		<i>p even</i>	<i>q odd</i>				<i>p2₁/b11</i> ($\mathbf{a}'/4$)
		<i>n odd</i>	<i>m odd</i>	<i>I2/c11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p2₁/b11</i>	L17
		<i>p odd</i>	<i>q even</i>				<i>p2/b11</i> [$(\mathbf{a}' + \mathbf{b}')/4$]
		<i>n odd</i>	<i>m even</i>	<i>I2/b11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p2₁/b11</i>	L17
		<i>p odd</i>	<i>q odd</i>				<i>p2/b11</i> ($\mathbf{a}'/4$)
		<i>n odd</i>	<i>m even</i>	<i>I2/c11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p2₁/b11</i>	L17
		<i>p odd</i>	<i>q odd</i>				<i>p2/b11</i> [$(\mathbf{a}' + \mathbf{b}')/4$]
		<i>n odd</i>	<i>m even</i>	<i>I2/b11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p2₁/b11</i>	L17
		<i>p odd</i>	<i>q odd</i>				<i>p2/b11</i> ($\mathbf{a}'/4$)

Continued

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$		
$(lh\bar{h})$ $(\bar{l}h\bar{h})$	$\mathbf{b} + \mathbf{c}$ $n(\mathbf{c} - \mathbf{b}) - m\mathbf{a}$ $p(\mathbf{c} - \mathbf{b}) + q\mathbf{a}$	$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ L16		
	$\mathbf{b} + \mathbf{c}$ $n(\mathbf{c} - \mathbf{b}) + m\mathbf{a}$ $-p(\mathbf{c} - \mathbf{b}) + q\mathbf{a}$			$p2_1/b11 (\mathbf{a}'/4)$ L17		
	n odd m even			$pb11$ L12		
	p even q odd					
	n even m odd			$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}\bar{1}$ L02
	p odd q even				$c211$ L12	
					$\widehat{p}1$ L01	
	n even m odd			$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}\bar{1}$ L02
	p odd q odd				$c211 (\mathbf{b}'/4)$ L10	
					$\widehat{p}1$ L01	
	n odd m odd			$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ L17
	p even q odd				$p2/b11 (\mathbf{a}'/4)$ L16	
		$pb11 (\mathbf{a}'/4)$ L12				
n odd m odd	$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ L17			
p odd q even		$p2/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ L16				
		$pb11 (\mathbf{a}'/4)$ L12				
n odd m even	$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ L16			
p odd q odd		$p2_1/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ L17				
		$pb11$ L12				
(hlh) $(\bar{h}l\bar{h})$	$\mathbf{c} - \mathbf{a}$ $n(\mathbf{c} + \mathbf{a}) - m\mathbf{b}$ $p(\mathbf{c} + \mathbf{a}) + q\mathbf{b}$	$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ L17		
	$\mathbf{c} - \mathbf{a}$ $n(\mathbf{c} + \mathbf{a}) + m\mathbf{b}$ $-p(\mathbf{c} + \mathbf{a}) + q\mathbf{b}$			$p2/b11 (\mathbf{a}'/4)$ L16		
	n odd m even			$pb11 (\mathbf{a}'/4)$ L12		
	p even q odd					
	n even m odd			$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}\bar{1}$ L02
	p odd q even				$c211 (\mathbf{b}'/4)$ L10	
					$\widehat{p}1$ L01	
	n even m odd			$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}\bar{1}$ L02
	p odd q odd				$c211$ L10	
					$\widehat{p}1$ L01	
	n odd m odd			$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ L16
	p even q odd				$p2_1/b11 (\mathbf{a}'/4)$ L17	
		$pb11$ L12				
n odd m odd	$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ L16			
p odd q even		$p2_1/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ L17				
		$pb11$ L12				
n odd m even	$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ L17			
p odd q odd		$p2/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ L16				
		$pb11 (\mathbf{a}'/4)$ L12				

Continued

Orientation orbit (hkl)	Conventional basis of the scanning group \mathbf{a}' \mathbf{b}' \mathbf{d}	Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
$(\bar{h}lh)$	$\mathbf{c} + \mathbf{a}$ $n(\mathbf{a} - \mathbf{c}) - m\mathbf{b}$ $p(\mathbf{a} - \mathbf{c}) + q\mathbf{b}$				
$(h\bar{l}h)$	$\mathbf{c} + \mathbf{a}$ $n(\mathbf{a} - \mathbf{c}) + m\mathbf{b}$ $-p(\mathbf{a} - \mathbf{c}) + q\mathbf{b}$				
	n odd m even	$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2/b11$	L16
	p even q odd		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2_1/b11 (\mathbf{a}'/4)$	L17
			$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11$	L12
	n even m odd	$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$\widehat{p}\bar{1}$	L02
	p odd q even		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$c211$	L12
			$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}\bar{1}$	L01
	n even m odd	$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$\widehat{p}\bar{1}$	L02
	p odd q odd		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$c211 (\mathbf{b}'/4)$	L10
			$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p}\bar{1}$	L01
	n odd m odd	$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2_1/b11$	L17
	p even q odd		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2/b11 (\mathbf{a}'/4)$	L16
			$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$	L12
	n odd m odd	$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2_1/b11$	L17
	p odd q even		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2/b11 [(\mathbf{a}' + \mathbf{b}')/4]$	L16
			$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$	L12
	n odd m even	$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2/b11$	L16
	p odd q odd		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2_1/b11 [(\mathbf{a}' + \mathbf{b}')/4]$	L17
			$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11$	L12
l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$					

$$\mathcal{G} = P_m^{42} \bar{3}_n^2$$

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$					
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}								
(<i>mn0</i>)	\mathbf{c}	$n\mathbf{a} - m\mathbf{b}$	$p\mathbf{a} + q\mathbf{b}$	<i>P2/m11</i>	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [$s\mathbf{d}, -s\mathbf{d}$]	<i>p2/m11</i> <i>pm11</i>	L14 L11				
($\bar{m}n0$)	\mathbf{c}	$n\mathbf{a} + m\mathbf{b}$	$-p\mathbf{a} + q\mathbf{b}$								
(<i>nm0</i>)	\mathbf{c}	$m\mathbf{a} - n\mathbf{b}$	$q\mathbf{a} + p\mathbf{b}$								
($\bar{n}m0$)	\mathbf{c}	$m\mathbf{a} + n\mathbf{b}$	$-q\mathbf{a} + p\mathbf{b}$								
(<i>0mn</i>)	\mathbf{a}	$n\mathbf{b} - m\mathbf{c}$	$p\mathbf{b} + q\mathbf{c}$								
($0\bar{m}n$)	\mathbf{a}	$n\mathbf{b} + m\mathbf{c}$	$-p\mathbf{b} + q\mathbf{c}$								
(<i>0nm</i>)	\mathbf{a}	$m\mathbf{b} - n\mathbf{c}$	$q\mathbf{b} + p\mathbf{c}$								
($0\bar{n}m$)	\mathbf{a}	$m\mathbf{b} + n\mathbf{c}$	$-q\mathbf{b} + p\mathbf{c}$								
(<i>n0m</i>)	\mathbf{b}	$n\mathbf{c} - m\mathbf{a}$	$p\mathbf{c} + q\mathbf{a}$								
($n0\bar{m}$)	\mathbf{b}	$n\mathbf{c} + m\mathbf{a}$	$-p\mathbf{c} + q\mathbf{a}$								
(<i>m0n</i>)	\mathbf{b}	$m\mathbf{c} - n\mathbf{a}$	$q\mathbf{c} + p\mathbf{a}$								
($m0\bar{n}$)	\mathbf{b}	$m\mathbf{c} + n\mathbf{a}$	$-q\mathbf{c} + p\mathbf{a}$								
(<i>hhl</i>)	$\mathbf{a} - \mathbf{b}$	$n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$	$p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$					<i>B2/n11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ [$\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	<i>p2₁/b11</i> <i>p2/b11 (a'/4)</i> <i>pb11 (a'/4)</i>	L17 L16 L12
($\bar{h}hl$)	$\mathbf{a} - \mathbf{b}$	$n(\mathbf{a} + \mathbf{b}) + m\mathbf{c}$	$-p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$								
(<i>hh\bar{l}</i>)	$\mathbf{a} + \mathbf{b}$	$n(\mathbf{b} - \mathbf{a}) - m\mathbf{c}$	$p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$								
($\bar{h}h\bar{l}$)	$\mathbf{a} + \mathbf{b}$	$n(\mathbf{b} - \mathbf{a}) + m\mathbf{c}$	$-p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$								
(<i>lhh</i>)	$\mathbf{b} - \mathbf{c}$	$n(\mathbf{b} + \mathbf{c}) - m\mathbf{a}$	$p(\mathbf{b} + \mathbf{c}) + q\mathbf{a}$								
($\bar{l}h\bar{h}$)	$\mathbf{b} - \mathbf{c}$	$n(\mathbf{b} + \mathbf{c}) + m\mathbf{a}$	$-p(\mathbf{b} + \mathbf{c}) + q\mathbf{a}$								
(<i>lh\bar{h}</i>)	$\mathbf{b} + \mathbf{c}$	$n(\mathbf{c} - \mathbf{b}) - m\mathbf{a}$	$p(\mathbf{c} - \mathbf{b}) + q\mathbf{a}$								
($\bar{l}h\bar{h}$)	$\mathbf{b} + \mathbf{c}$	$n(\mathbf{c} - \mathbf{b}) + m\mathbf{a}$	$-p(\mathbf{c} - \mathbf{b}) + q\mathbf{a}$								
(<i>hlh</i>)	$\mathbf{c} - \mathbf{a}$	$n(\mathbf{c} + \mathbf{a}) - m\mathbf{b}$	$p(\mathbf{c} + \mathbf{a}) + q\mathbf{b}$								
($\bar{h}l\bar{h}$)	$\mathbf{c} - \mathbf{a}$	$n(\mathbf{c} + \mathbf{a}) + m\mathbf{b}$	$-p(\mathbf{c} + \mathbf{a}) + q\mathbf{b}$								
(<i>hl\bar{h}</i>)	$\mathbf{c} + \mathbf{a}$	$n(\mathbf{a} - \mathbf{c}) - m\mathbf{b}$	$p(\mathbf{a} - \mathbf{c}) + q\mathbf{b}$								
($\bar{h}l\bar{h}$)	$\mathbf{c} + \mathbf{a}$	$n(\mathbf{a} - \mathbf{c}) + m\mathbf{b}$	$-p(\mathbf{a} - \mathbf{c}) + q\mathbf{b}$								
		n odd m even p even q odd		<i>C2/n11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ [$\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	$\widehat{p}\bar{1}$ <i>c211 (b'/4)</i> $\widehat{p}1$	L02 L10 L01				
		n even m odd p odd q even		<i>C2/c11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ [$\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	$\widehat{p}\bar{1}$ <i>c211</i> $\widehat{p}1$	L02 L10 L01				
		n even m odd p odd q odd		<i>B2/b11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ [$\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	<i>p2/b11</i> <i>p2₁/b11 (a'/4)</i> <i>pb11</i>	L16 L17 L12				
		n odd m odd p even q odd		<i>I2/b11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ [$\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	<i>p2/b11</i> <i>p2₁/b11 [(a' + b')/4]</i> <i>pb11</i>	L16 L17 L12				
		n odd m even p odd q odd		<i>I2/c11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ [$\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}$] [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	<i>p2₁/b11</i> <i>p2/b11 [(a' + b')/4]</i> <i>pb11 (a'/4)</i>	L17 L16 L12				
l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$											

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$					
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}								
(<i>mn0</i>)	\mathbf{c}	$n\mathbf{a} - m\mathbf{b}$	$p\mathbf{a} + q\mathbf{b}$	$P2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p211 (\mathbf{b}'/4)$ $p1$	L02				
($\bar{m}n0$)	\mathbf{c}	$n\mathbf{a} + m\mathbf{b}$	$-p\mathbf{a} + q\mathbf{b}$				L08				
(<i>nm0</i>)	\mathbf{c}	$m\mathbf{a} - n\mathbf{b}$	$q\mathbf{a} + p\mathbf{b}$				L01				
($\bar{n}m0$)	\mathbf{c}	$m\mathbf{a} + n\mathbf{b}$	$-q\mathbf{a} + p\mathbf{b}$								
(<i>0mn</i>)	\mathbf{a}	$n\mathbf{b} - m\mathbf{c}$	$p\mathbf{b} + q\mathbf{c}$								
($0\bar{m}n$)	\mathbf{a}	$n\mathbf{b} + m\mathbf{c}$	$-p\mathbf{b} + q\mathbf{c}$								
(<i>0nm</i>)	\mathbf{a}	$m\mathbf{b} - n\mathbf{c}$	$q\mathbf{b} + p\mathbf{c}$								
($0\bar{0}m$)	\mathbf{a}	$m\mathbf{b} + n\mathbf{c}$	$-q\mathbf{b} + p\mathbf{c}$								
(<i>n0m</i>)	\mathbf{b}	$n\mathbf{c} - m\mathbf{a}$	$p\mathbf{c} + q\mathbf{a}$								
($n0\bar{m}$)	\mathbf{b}	$n\mathbf{c} + m\mathbf{a}$	$-p\mathbf{c} + q\mathbf{a}$								
(<i>m0n</i>)	\mathbf{b}	$m\mathbf{c} - n\mathbf{a}$	$q\mathbf{c} + p\mathbf{a}$								
($m0\bar{n}$)	\mathbf{b}	$m\mathbf{c} + n\mathbf{a}$	$-q\mathbf{c} + p\mathbf{a}$								
$(\mathbf{a} + \mathbf{b} + \mathbf{c})/4$			n odd m even p even q odd or n even m odd p odd q even p odd q odd				$P2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p211$ $p1$	L02 L08 L01	
			n odd m odd				$P2/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2/b11$ $pb11$	L16 L12	
$(\mathbf{a} + \mathbf{b} + \mathbf{c})/4$	(<i>hhl</i>)	$\mathbf{a} - \mathbf{b}$	$n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$	$p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$	$B2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ $p2_1/m11 (\mathbf{a}'/4)$ $pm11$	L14			
	($\bar{h}hl$)	$\mathbf{a} \ \mathbf{b}$	$n \ \mathbf{a} \ \mathbf{b} \ \mathbf{m}\mathbf{c}$	$p \ \mathbf{a} \ \mathbf{b} \ \mathbf{q}\mathbf{c}$				L15			
				n odd p even q odd				L11			
				n even m odd p odd				$C2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c2/m11$ $cm11$	L18 L13
				n odd p odd				$I2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ $p2_1/m11 [(\mathbf{a}' + \mathbf{b}')/4]$ $pm11$	L14 L15 L11
$(3\mathbf{a} + \mathbf{b} + \mathbf{c})/4$ or $(\mathbf{a} + 3\mathbf{b} + \mathbf{c})/4$	(<i>hhl</i>)	$\mathbf{a} + \mathbf{b}$	$n(\mathbf{b} - \mathbf{a}) - m\mathbf{c}$	$p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$	$B2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ $p2_1/m11 (\mathbf{a}'/4)$ $pm11$	L14			
	($\bar{h}hl$)	$\mathbf{a} + \mathbf{b}$	$n(\mathbf{b} - \mathbf{a}) + m\mathbf{c}$	$-p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$				L15			
				n odd p even q odd				L11			
				n even m odd p odd				$C2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c2/m11$ $cm11$	L18 L13
				n odd p odd				$I2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ $p2_1/m11 [(\mathbf{a}' + \mathbf{b}')/4]$ $pm11$	L14 L15 L11

Continued

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$				
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}							
(lhh) $(l\bar{h}\bar{h})$ $(\mathbf{a} + \mathbf{b} + \mathbf{c})/4$	$\mathbf{b} - \mathbf{c}$	$n(\mathbf{b} + \mathbf{c}) - m\mathbf{a}$	$p(\mathbf{b} + \mathbf{c}) + q\mathbf{a}$	$B2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$	L14			
	\mathbf{b}	$n\mathbf{b}$	\mathbf{c}				$q\mathbf{a}$	$p2_1/m11 (\mathbf{a}'/4)$	L15	
			n odd				p even	q odd	$pm11$	L11
$(l\bar{h}\bar{h})$ $(l\bar{h}\bar{h})$ $(\mathbf{a} + 3\mathbf{b} + \mathbf{c})/4$ or $(\mathbf{a} + \mathbf{b} + 3\mathbf{c})/4$	$\mathbf{b} + \mathbf{c}$	$n(\mathbf{c} - \mathbf{b}) - m\mathbf{a}$	$p(\mathbf{c} - \mathbf{b}) + q\mathbf{a}$	$B2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$	L14			
	$\mathbf{b} + \mathbf{c}$	$n(\mathbf{c} - \mathbf{b}) + m\mathbf{a}$	$-p(\mathbf{c} - \mathbf{b}) + q\mathbf{a}$				$p2_1/m11 (\mathbf{a}'/4)$	L15		
			n odd				p even	q odd	$pm11$	L11
(lhh) $(\bar{h}\bar{h}\bar{h})$ $(\mathbf{a} + \mathbf{b} + \mathbf{c})/4$	$\mathbf{c} - \mathbf{a}$	$n(\mathbf{c} + \mathbf{a}) - m\mathbf{b}$	$p(\mathbf{c} + \mathbf{a}) + q\mathbf{b}$	$B2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$	L14			
	$\mathbf{c} - \mathbf{a}$	$n(\mathbf{c} + \mathbf{a}) + m\mathbf{b}$	$-p(\mathbf{c} + \mathbf{a}) + q\mathbf{b}$				$p2_1/m11 (\mathbf{a}'/4)$	L15		
			n odd				p even	q odd	$pm11$	L11
$(\bar{h}\bar{h}\bar{h})$ $(h\bar{h}\bar{h})$ $(\mathbf{a} + \mathbf{b} + 3\mathbf{c})/4$ or $(3\mathbf{a} + \mathbf{b} + \mathbf{c})/4$	$\mathbf{c} + \mathbf{a}$	$n(\mathbf{a} - \mathbf{c}) - m\mathbf{b}$	$p(\mathbf{a} - \mathbf{c}) + q\mathbf{b}$	$B2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$	L14			
	$\mathbf{c} + \mathbf{a}$	$n(\mathbf{a} - \mathbf{c}) + m\mathbf{b}$	$-p(\mathbf{a} - \mathbf{c}) + q\mathbf{b}$				$p2_1/m11 (\mathbf{a}'/4)$	L15		
			n odd				p even	q odd	$pm11$	L11
$(\bar{h}\bar{h}\bar{h})$ $(h\bar{h}\bar{h})$ $(\mathbf{a} + \mathbf{b} + 3\mathbf{c})/4$ or $(3\mathbf{a} + \mathbf{b} + \mathbf{c})/4$	$\mathbf{c} + \mathbf{a}$	$n(\mathbf{a} - \mathbf{c}) - m\mathbf{b}$	$p(\mathbf{a} - \mathbf{c}) + q\mathbf{b}$	$C2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c2/m11$	L18			
			n even				p odd	m odd	$cm11$	L13
			n odd				p odd	m odd		
$(\bar{h}\bar{h}\bar{h})$ $(h\bar{h}\bar{h})$ $(\mathbf{a} + \mathbf{b} + 3\mathbf{c})/4$ or $(3\mathbf{a} + \mathbf{b} + \mathbf{c})/4$	$\mathbf{c} + \mathbf{a}$	$n(\mathbf{a} - \mathbf{c}) - m\mathbf{b}$	$p(\mathbf{a} - \mathbf{c}) + q\mathbf{b}$	$I2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$	L14			
			n odd				p odd	m odd	$p2_1/m11 [(\mathbf{a}' + \mathbf{b}')/4]$	L15
			p odd						$pm11$	L11

l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$

Continued

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$				
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}							
($mn0$)	\mathbf{c}	$n\mathbf{a} - m\mathbf{b}$	$p\mathbf{a} + q\mathbf{b}$	$P2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p211 (\mathbf{b}'/4)$ $p1$	L02			
($\bar{m}n0$)	\mathbf{c}	$n\mathbf{a} + m\mathbf{b}$	$-p\mathbf{a} + q\mathbf{b}$				L08			
($nm0$)	\mathbf{c}	$m\mathbf{a} - n\mathbf{b}$	$q\mathbf{a} + p\mathbf{b}$				L01			
($\bar{n}m0$)	\mathbf{c}	$m\mathbf{a} + n\mathbf{b}$	$-q\mathbf{a} + p\mathbf{b}$							
($0mn$)	\mathbf{a}	$n\mathbf{b} - m\mathbf{c}$	$p\mathbf{b} + q\mathbf{c}$							
($0\bar{m}n$)	\mathbf{a}	$n\mathbf{b} + m\mathbf{c}$	$-p\mathbf{b} + q\mathbf{c}$							
($0nm$)	\mathbf{a}	$m\mathbf{b} - n\mathbf{c}$	$q\mathbf{b} + p\mathbf{c}$							
($0\bar{n}m$)	\mathbf{a}	$m\mathbf{b} + n\mathbf{c}$	$-q\mathbf{b} + p\mathbf{c}$							
($n0m$)	\mathbf{b}	$n\mathbf{c} - m\mathbf{a}$	$p\mathbf{c} + q\mathbf{a}$							
($n0\bar{m}$)	\mathbf{b}	$n\mathbf{c} + m\mathbf{a}$	$-p\mathbf{c} + q\mathbf{a}$							
($m0n$)	\mathbf{b}	$m\mathbf{c} - n\mathbf{a}$	$q\mathbf{c} + p\mathbf{a}$							
($m0\bar{n}$)	\mathbf{b}	$m\mathbf{c} + n\mathbf{a}$	$-q\mathbf{c} + p\mathbf{a}$							
		n odd	m even				$P2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p211$ $p1$	L02 L08 L01
		p even	q odd							
			or							
		n even	m odd	$P2/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2/b11$ $pb11$	L16 L12			
		p odd	q even							
		p odd	q odd							
		n odd	m odd							
(hhl)	$\mathbf{a} - \mathbf{b}$	$n(\mathbf{a} + \mathbf{b}) - m\mathbf{c}$	$p(\mathbf{a} + \mathbf{b}) + q\mathbf{c}$	$B2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ $p2_1/m11 (\mathbf{a}'/4)$ $pm11$	L14			
($\bar{h}hl$)	$\mathbf{a} \ \mathbf{b}$	$n \ \mathbf{a} \ \mathbf{b} \ \mathbf{m}\mathbf{c}$	$p \ \mathbf{a} \ \mathbf{b} \ \mathbf{q}\mathbf{c}$				L15			
		n odd					L11			
		p even	q odd							
		n even	m odd				$C2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c2/m11$ $cm11$	L18 L13
		p odd								
		n odd					$I2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ $p2_1/m11 [(\mathbf{a}' + \mathbf{b}')/4]$ $pm11$	L14 L15 L11
		p odd								
(hhl)	$\mathbf{a} + \mathbf{b}$	$n(\mathbf{b} - \mathbf{a}) - m\mathbf{c}$	$p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$				$B2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ $p2_1/m11 (\mathbf{a}'/4)$ $pm11$	L14
($\bar{h}hl$)	$\mathbf{a} + \mathbf{b}$	$n(\mathbf{b} - \mathbf{a}) + m\mathbf{c}$	$-p(\mathbf{b} - \mathbf{a}) + q\mathbf{c}$							L15
($\mathbf{a}/2$ or $\mathbf{b}/2$)		n odd								L11
		p even	q odd							
		n even	m odd	$C2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c2/m11$ $cm11$				L18 L13
		p odd								
		n odd		$I2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ $p2_1/m11 [(\mathbf{a}' + \mathbf{b}')/4]$ $pm11$				L14 L15 L11
		p odd								

Continued

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$			
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}						
(lhh) $(\bar{l}h\bar{h})$	$\mathbf{b} - \mathbf{c}$	$n(\mathbf{b} + \mathbf{c}) - m\mathbf{a}$	$p(\mathbf{b} + \mathbf{c}) + q\mathbf{a}$	$B2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$	L14		
	\mathbf{b}	$n\mathbf{b}$	\mathbf{c}				$q\mathbf{a}$	$p2_1/m11 (\mathbf{a}'/4)$	L15
			n odd				p even	q odd	$pm11$
			n even	m odd	$C2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$	$c2/m11$	L18	
			p odd			$[s\mathbf{d}, -s\mathbf{d}]$	$cm11$	L13	
			n odd		$I2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2/m11$	L14	
			p odd			$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2_1/m11 [(\mathbf{a}' + \mathbf{b}')/4]$	L15	
						$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pm11$	L11	
	$(l\bar{h}\bar{h})$ $(\bar{l}h\bar{h})$ ($\mathbf{b}/2$ or $\mathbf{c}/2$)	$\mathbf{b} + \mathbf{c}$	$n(\mathbf{c} - \mathbf{b}) - m\mathbf{a}$	$p(\mathbf{c} - \mathbf{b}) + q\mathbf{a}$	$B2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$	L14	
$\mathbf{b} + \mathbf{c}$		$n(\mathbf{c} - \mathbf{b}) + m\mathbf{a}$	$-p(\mathbf{c} - \mathbf{b}) + q\mathbf{a}$	$p2_1/m11 (\mathbf{a}'/4)$				L15	
			n odd	p even				q odd	$pm11$
			n even	m odd	$C2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$	$c2/m11$	L18	
			p odd			$[s\mathbf{d}, -s\mathbf{d}]$	$cm11$	L13	
			n odd		$I2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2/m11$	L14	
			p odd			$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2_1/m11 [(\mathbf{a}' + \mathbf{b}')/4]$	L15	
						$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pm11$	L11	
(lhh) $(\bar{l}h\bar{h})$		$\mathbf{c} - \mathbf{a}$	$n(\mathbf{c} + \mathbf{a}) - m\mathbf{b}$	$p(\mathbf{c} + \mathbf{a}) + q\mathbf{b}$	$B2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$	L14	
	$\mathbf{c} - \mathbf{a}$	$n(\mathbf{c} + \mathbf{a}) + m\mathbf{b}$	$-p(\mathbf{c} + \mathbf{a}) + q\mathbf{b}$	$p2_1/m11 (\mathbf{a}'/4)$				L15	
			n odd	p even				q odd	$pm11$
			n even	m odd	$C2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$	$c2/m11$	L18	
			p odd			$[s\mathbf{d}, -s\mathbf{d}]$	$cm11$	L13	
			n odd		$I2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2/m11$	L14	
			p odd			$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2_1/m11 [(\mathbf{a}' + \mathbf{b}')/4]$	L15	
						$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pm11$	L11	
	$(\bar{l}h\bar{h})$ $(h\bar{l}h)$ ($\mathbf{c}/2$ or $\mathbf{a}/2$)	$\mathbf{c} + \mathbf{a}$	$n(\mathbf{a} - \mathbf{c}) - m\mathbf{b}$	$p(\mathbf{a} - \mathbf{c}) + q\mathbf{b}$	$B2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$	L14	
$\mathbf{c} + \mathbf{a}$		$n(\mathbf{a} - \mathbf{c}) + m\mathbf{b}$	$-p(\mathbf{a} - \mathbf{c}) + q\mathbf{b}$	$p2_1/m11 (\mathbf{a}'/4)$				L15	
			n odd	p even				q odd	$pm11$
			n even	m odd	$C2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$	$c2/m11$	L18	
			p odd			$[s\mathbf{d}, -s\mathbf{d}]$	$cm11$	L13	
			n odd		$I2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2/m11$	L14	
			p odd			$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2_1/m11 [(\mathbf{a}' + \mathbf{b}')/4]$	L15	
						$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pm11$	L11	

 l odd $\Rightarrow n = l, m = 2h; l$ even $\Rightarrow n = l/2, m = h$

$$\mathcal{G} = F \frac{4\sqrt{3}}{n} \frac{2}{m}$$

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}				
($hk0$)	\mathbf{c}	$n\hat{\mathbf{a}} - m\hat{\mathbf{b}}$	$p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$	$I2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ $p2_1/m11 [(a' + b')/4]$ $pm11$	L14
($\bar{h}k0$)	\mathbf{c}	$n\hat{\mathbf{a}} + m\hat{\mathbf{b}}$	$-p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$				L15
($kh0$)	\mathbf{c}	$m\hat{\mathbf{a}} + n\hat{\mathbf{b}}$	$q\hat{\mathbf{a}} + p\hat{\mathbf{b}}$				L11
($\bar{k}h0$)	\mathbf{c}	$m\hat{\mathbf{a}} - n\hat{\mathbf{b}}$	$-q\hat{\mathbf{a}} + p\hat{\mathbf{b}}$				
			n odd m even				
			p even q odd				
			or				
			n even m odd				
			p odd q even				
			p odd q odd				
			n odd m odd				
							$B2/m11$
				$C2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c2/m11$ $cm11$	L18 L13
	$\hat{\mathbf{a}} = (\mathbf{a} - \mathbf{b})/2$ $\hat{\mathbf{b}} = (\mathbf{a} + \mathbf{b})/2$			h even, k odd or h odd, k even $\Rightarrow n = h + k, m = h - k$ h, k odd $\Rightarrow n = (h + k)/2, m = (h - k)/2$			
($0hk$)	\mathbf{a}	$n\hat{\mathbf{a}} - m\hat{\mathbf{b}}$	$p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$	$I2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ $p2_1/m11 [(a' + b')/4]$ $pm11$	L14
($0\bar{h}k$)	\mathbf{a}	$n\hat{\mathbf{a}} + m\hat{\mathbf{b}}$	$-p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$				L15
($0kh$)	\mathbf{a}	$m\hat{\mathbf{a}} - n\hat{\mathbf{b}}$	$q\hat{\mathbf{a}} + p\hat{\mathbf{b}}$				L11
($0\bar{k}h$)	\mathbf{a}	$m\hat{\mathbf{a}} + n\hat{\mathbf{b}}$	$-q\hat{\mathbf{a}} + p\hat{\mathbf{b}}$				
			n odd m even				
			p even q odd				
			or				
			n even m odd				
			p odd q even				
			p odd q odd				
			n odd m odd				
							$B2/m11$
				$C2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c2/m11$ $cm11$	L18 L13
	$\hat{\mathbf{a}} = (\mathbf{b} - \mathbf{c})/2$ $\hat{\mathbf{b}} = (\mathbf{b} + \mathbf{c})/2$			h even, k odd or h odd, k even $\Rightarrow n = h + k, m = h - k$ h, k odd $\Rightarrow n = (h + k)/2, m = (h - k)/2$			
($k0h$)	\mathbf{b}	$n\hat{\mathbf{a}} - m\hat{\mathbf{b}}$	$p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$	$I2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ $p2_1/m11 [(a' + b')/4]$ $pm11$	L14
($k0\bar{h}$)	\mathbf{b}	$n\hat{\mathbf{a}} + m\hat{\mathbf{b}}$	$-p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$				L15
($h0k$)	\mathbf{b}	$m\hat{\mathbf{a}} - n\hat{\mathbf{b}}$	$q\hat{\mathbf{a}} + p\hat{\mathbf{b}}$				L11
($h0\bar{k}$)	\mathbf{b}	$m\hat{\mathbf{a}} + n\hat{\mathbf{b}}$	$-q\hat{\mathbf{a}} + p\hat{\mathbf{b}}$				
			n odd m even				
			p even q odd				
			or				
			n even m odd				
			p odd q even				
			p odd q odd				
			n odd m odd				
							$B2/m11$
				$C2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c2/m11$ $cm11$	L18 L13
	$\hat{\mathbf{a}} = (\mathbf{c} - \mathbf{a})/2$ $\hat{\mathbf{b}} = (\mathbf{c} + \mathbf{a})/2$			h even, k odd or h odd, k even $\Rightarrow n = h + k, m = h - k$ h, k odd $\Rightarrow n = (h + k)/2, m = (h - k)/2$			

Continued

$$\mathcal{G} = F_n^4 \bar{3}_m^2$$

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}			
(hhl) $(\bar{h}hl)$	$(\mathbf{a} - \mathbf{b})/2$	$n\hat{\mathbf{a}} - m\mathbf{c}$	$p\hat{\mathbf{a}} + q\mathbf{c}$	$I2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ L14
	$(\mathbf{a} - \mathbf{b})/2$	$n\hat{\mathbf{a}} + m\mathbf{c}$	$-p\hat{\mathbf{a}} + q\mathbf{c}$			$p2_1/m11 [(a' + b')/4]$ L15
						$pm11$ L11
			n odd m even p even q odd or n even m odd p odd q even p odd q odd	$B2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ L14 $p2_1/m11 (a'/4)$ L15 $pm11$ L11
			n odd m odd	$C2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c2/m11$ L18 $cm11$ L13
$\hat{\mathbf{a}} = (\mathbf{a} + \mathbf{b})/2$ h odd $\Rightarrow m = h, n = 2l$; h even $\Rightarrow m = h/2, n = l$						
$(\bar{h}\bar{h}l)$ $(\bar{h}hl)$	$(\mathbf{a} + \mathbf{b})/2$	$n\hat{\mathbf{a}} - m\mathbf{c}$	$p\hat{\mathbf{a}} + q\mathbf{c}$	$I2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ L14
	$(\mathbf{a} + \mathbf{b})/2$	$n\hat{\mathbf{a}} + m\mathbf{c}$	$-p\hat{\mathbf{a}} + q\mathbf{c}$			$p2_1/m11 [(a' + b')/4]$ L15
						$pm11$ L11
			n odd m even p even q odd or n even m odd p odd q even p odd q odd	$B2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ L14 $p2_1/m11 (a'/4)$ L15 $pm11$ L11
			n odd m odd	$C2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c2/m11$ L18 $cm11$ L13
$\hat{\mathbf{a}} = (\mathbf{b} - \mathbf{a})/2$ h odd $\Rightarrow m = h, n = 2l$; h even $\Rightarrow m = h/2, n = l$						
(lhh) $(l\bar{h}\bar{h})$	$(\mathbf{b} - \mathbf{c})/2$	$n\hat{\mathbf{a}} - m\mathbf{a}$	$p\hat{\mathbf{a}} + q\mathbf{a}$	$I2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ L14
	$(\mathbf{b} - \mathbf{c})/2$	$n\hat{\mathbf{a}} + m\mathbf{a}$	$-p\hat{\mathbf{a}} + q\mathbf{a}$			$p2_1/m11 [(a' + b')/4]$ L15
						$pm11$ L11
			n odd m even p even q odd or n even m odd p odd q even p odd q odd	$B2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ L14 $p2_1/m11 (a'/4)$ L15 $pm11$ L11
			n odd m odd	$C2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c2/m11$ L18 $cm11$ L13
$\hat{\mathbf{a}} = (\mathbf{b} + \mathbf{c})/2$ h odd $\Rightarrow m = h, n = 2l$; h even $\Rightarrow m = h/2, n = l$						

$$\mathcal{G} = F_n^4 \bar{3}_m^2$$

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}				
$(l\bar{h}\bar{h})$ $(l\bar{h}h)$	$(\mathbf{b} + \mathbf{c})/2$ $(\mathbf{b} + \mathbf{c})/2$	$n\hat{\mathbf{a}} - m\mathbf{a}$ $n\hat{\mathbf{a}} + m\mathbf{a}$	$p\hat{\mathbf{a}} + q\mathbf{a}$ $-p\hat{\mathbf{a}} + q\mathbf{a}$	$I2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ L14 $p2_1/m11 [(\mathbf{a}' + \mathbf{b}')/4]$ L15 $pm11$ L11	
		n odd m even p even q odd or n even m odd p odd q even p odd q odd	$B2/m11$			$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ L14 $p2_1/m11 (\mathbf{a}'/4)$ L15 $pm11$ L11
		n odd m odd					$C2/m11$
$\hat{\mathbf{a}} = (\mathbf{c} - \mathbf{b})/2$ h odd $\Rightarrow m = h, n = 2l$; h even $\Rightarrow m = h/2, n = l$							
(hlh) $(\bar{h}lh)$	$(\mathbf{c} - \mathbf{a})/2$ $(\mathbf{c} - \mathbf{a})/2$	$n\hat{\mathbf{a}} - m\mathbf{b}$ $n\hat{\mathbf{a}} + m\mathbf{b}$	$p\hat{\mathbf{a}} + q\mathbf{b}$ $-p\hat{\mathbf{a}} + q\mathbf{b}$	$I2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ L14 $p2_1/m11 [(\mathbf{a}' + \mathbf{b}')/4]$ L15 $pm11$ L11	
		n odd m even p even q odd or n even m odd p odd q even p odd q odd	$B2/m11$			$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ L14 $p2_1/m11 (\mathbf{a}'/4)$ L15 $pm11$ L11
		n odd m odd					$C2/m11$
$\hat{\mathbf{a}} = (\mathbf{c} + \mathbf{a})/2$ h odd $\Rightarrow m = h, n = 2l$; h even $\Rightarrow m = h/2, n = l$							
$(\bar{h}lh)$ $(h\bar{h}l)$	$(\mathbf{c} + \mathbf{a})/2$ $(\mathbf{c} + \mathbf{a})/2$	$n\hat{\mathbf{a}} - m\mathbf{b}$ $n\hat{\mathbf{a}} + m\mathbf{b}$	$p\hat{\mathbf{a}} + q\mathbf{b}$ $-p\hat{\mathbf{a}} + q\mathbf{b}$	$I2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ L14 $p2_1/m11 [(\mathbf{a}' + \mathbf{b}')/4]$ L15 $pm11$ L11	
		n odd m even p even q odd or n even m odd p odd q even p odd q odd	$B2/m11$			$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ L14 $p2_1/m11 (\mathbf{a}'/4)$ L15 $pm11$ L11
		n odd m odd					$C2/m11$
$\hat{\mathbf{a}} = (\mathbf{a} - \mathbf{c})/2$ h odd $\Rightarrow m = h, n = 2l$; h even $\Rightarrow m = h/2, n = l$							

$$\mathcal{G} = F_n^4 \bar{3}_c^2$$

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}				
($hk0$)	\mathbf{c}	$n\hat{\mathbf{a}} - m\hat{\mathbf{b}}$	$p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$	$I2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ $p2_1/m11 [(a' + b')/4]$ $pm11$	L14
($\bar{h}k0$)	\mathbf{c}	$n\hat{\mathbf{a}} + m\hat{\mathbf{b}}$	$-p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$				L15
($kh0$)	\mathbf{c}	$m\hat{\mathbf{a}} + n\hat{\mathbf{b}}$	$q\hat{\mathbf{a}} + p\hat{\mathbf{b}}$				L11
($\bar{k}h0$)	\mathbf{c}	$m\hat{\mathbf{a}} - n\hat{\mathbf{b}}$	$-q\hat{\mathbf{a}} + p\hat{\mathbf{b}}$				
		n odd	m even				
		p even	q odd				
		or					
		n even	m odd				
		p odd	q even				
		p odd	q odd				
		n odd	m odd				
							$B2/m11$
				$C2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c2/m11$ $cm11$	L18 L13
	$\hat{\mathbf{a}} = (\mathbf{a} - \mathbf{b})/2$ $\hat{\mathbf{b}} = (\mathbf{a} + \mathbf{b})/2$			h even, k odd or h odd, k even $\Rightarrow n = h + k, m = h - k$ h, k odd $\Rightarrow n = (h + k)/2, m = (h - k)/2$			
($0hk$)	\mathbf{a}	$n\hat{\mathbf{a}} - m\hat{\mathbf{b}}$	$p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$	$I2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ $p2_1/m11 [(a' + b')/4]$ $pm11$	L14
($0\bar{h}k$)	\mathbf{a}	$n\hat{\mathbf{a}} + m\hat{\mathbf{b}}$	$-p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$				L15
($0kh$)	\mathbf{a}	$m\hat{\mathbf{a}} - n\hat{\mathbf{b}}$	$q\hat{\mathbf{a}} + p\hat{\mathbf{b}}$				L11
($0\bar{k}h$)	\mathbf{a}	$m\hat{\mathbf{a}} + n\hat{\mathbf{b}}$	$-q\hat{\mathbf{a}} + p\hat{\mathbf{b}}$				
		n odd	m even				
		p even	q odd				
		or					
		n even	m odd				
		p odd	q even				
		p odd	q odd				
		n odd	m odd				
							$B2/m11$
				$C2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c2/m11$ $cm11$	L18 L13
	$\hat{\mathbf{a}} = (\mathbf{b} - \mathbf{c})/2$ $\hat{\mathbf{b}} = (\mathbf{b} + \mathbf{c})/2$			h even, k odd or h odd, k even $\Rightarrow n = h + k, m = h - k$ h, k odd $\Rightarrow n = (h + k)/2, m = (h - k)/2$			
($k0h$)	\mathbf{b}	$n\hat{\mathbf{a}} - m\hat{\mathbf{b}}$	$p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$	$I2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ $p2_1/m11 [(a' + b')/4]$ $pm11$	L14
($k0\bar{h}$)	\mathbf{b}	$n\hat{\mathbf{a}} + m\hat{\mathbf{b}}$	$-p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$				L15
($h0k$)	\mathbf{b}	$m\hat{\mathbf{a}} - n\hat{\mathbf{b}}$	$q\hat{\mathbf{a}} + p\hat{\mathbf{b}}$				L11
($h0\bar{k}$)	\mathbf{b}	$m\hat{\mathbf{a}} + n\hat{\mathbf{b}}$	$-q\hat{\mathbf{a}} + p\hat{\mathbf{b}}$				
		n odd	m even				
		p even	q odd				
		or					
		n even	m odd				
		p odd	q even				
		p odd	q odd				
		n odd	m odd				
							$B2/m11$
				$C2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c2/m11$ $cm11$	L18 L13
	$\hat{\mathbf{a}} = (\mathbf{c} - \mathbf{a})/2$ $\hat{\mathbf{b}} = (\mathbf{c} + \mathbf{a})/2$			h even, k odd or h odd, k even $\Rightarrow n = h + k, m = h - k$ h, k odd $\Rightarrow n = (h + k)/2, m = (h - k)/2$			

Continued

$$\mathcal{G} = F_n^4 \bar{3}_c^2$$

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}				
<i>(hhl)</i> <i>($\bar{h}hl$)</i>	$(\mathbf{a} - \mathbf{b})/2$	$n\hat{\mathbf{a}} - m\mathbf{c}$	$p\hat{\mathbf{a}} + q\mathbf{c}$	<i>I2/b11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p2/b11</i>	L16
	$(\mathbf{a} - \mathbf{b})/2$	$n\hat{\mathbf{a}} + m\mathbf{c}$	$-p\hat{\mathbf{a}} + q\mathbf{c}$				
		<i>n odd</i>	<i>m even</i>			<i>pb11</i>	L12
		<i>p even</i>	<i>q odd</i>				
		<i>n even</i>	<i>m odd</i>	<i>I2/c11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p2₁/b11</i>	L17
		<i>p odd</i>	<i>q even</i>			<i>p2/b11</i> $[(\mathbf{a}' + \mathbf{b}')/4]$	L16
						<i>pb11</i> $(\mathbf{a}'/4)$	L12
		<i>n even</i>	<i>m odd</i>	<i>B2/n11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p2₁/b11</i>	L17
		<i>p odd</i>	<i>q odd</i>			<i>p2/b11</i> $(\mathbf{a}'/4)$	L16
						<i>pb11</i> $(\mathbf{a}'/4)$	L12
		<i>n odd</i>	<i>m odd</i>	<i>C2/n11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}\bar{1}$	L02
		<i>p even</i>	<i>q odd</i>			<i>c211</i> $(\mathbf{b}'/4)$	L10
						$\hat{p}1$	L01
		<i>n odd</i>	<i>m odd</i>	<i>C2/c11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}\bar{1}$	L02
		<i>p odd</i>	<i>q even</i>			<i>c211</i>	L10
						$\hat{p}1$	L01
		<i>n odd</i>	<i>m even</i>	<i>B2/b11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p2/b11</i>	L16
		<i>p odd</i>	<i>q odd</i>			<i>p2₁/b11</i> $(\mathbf{a}'/4)$	L17
						<i>pb11</i>	L12
$\hat{\mathbf{a}} = (\mathbf{a} + \mathbf{b})/2$ $h \text{ odd} \Rightarrow m = h, n = 2l; h \text{ even} \Rightarrow m = h/2, n = l$							
<i>($\bar{h}\bar{h}l$)</i> <i>($\bar{h}hl$)</i>	$(\mathbf{a} + \mathbf{b})/2$	$n\hat{\mathbf{a}} - m\mathbf{c}$	$p\hat{\mathbf{a}} + q\mathbf{c}$	<i>I2/b11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p2/b11</i>	L16
	$(\mathbf{a} + \mathbf{b})/2$	$n\hat{\mathbf{a}} + m\mathbf{c}$	$-p\hat{\mathbf{a}} + q\mathbf{c}$				
		<i>n odd</i>	<i>m even</i>			<i>pb11</i>	L12
		<i>p even</i>	<i>q odd</i>				
		<i>n even</i>	<i>m odd</i>	<i>I2/c11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p2₁/b11</i>	L17
		<i>p odd</i>	<i>q even</i>			<i>p2/b11</i> $[(\mathbf{a}' + \mathbf{b}')/4]$	L16
						<i>pb11</i> $(\mathbf{a}'/4)$	L12
		<i>n even</i>	<i>m odd</i>	<i>B2/n11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p2₁/b11</i>	L17
		<i>p odd</i>	<i>q odd</i>			<i>p2/b11</i> $(\mathbf{a}'/4)$	L16
						<i>pb11</i> $(\mathbf{a}'/4)$	L12
		<i>n odd</i>	<i>m odd</i>	<i>C2/n11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}\bar{1}$	L02
		<i>p even</i>	<i>q odd</i>			<i>c211</i> $(\mathbf{b}'/4)$	L10
						$\hat{p}1$	L01
		<i>n odd</i>	<i>m odd</i>	<i>C2/c11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}\bar{1}$	L02
		<i>p odd</i>	<i>q even</i>			<i>c211</i>	L10
						$\hat{p}1$	L01
		<i>n odd</i>	<i>m even</i>	<i>B2/b11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p2/b11</i>	L16
		<i>p odd</i>	<i>q odd</i>			<i>p2₁/b11</i> $(\mathbf{a}'/4)$	L17
						<i>pb11</i>	L12
$\hat{\mathbf{a}} = (\mathbf{b} - \mathbf{a})/2$ $h \text{ odd} \Rightarrow m = h, n = 2l; h \text{ even} \Rightarrow m = h/2, n = l$							

$$\mathcal{G} = F_n^4 \bar{3}_c^2$$

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit sd	Sectional layer group $\mathcal{L}(sd)$		
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}					
(lhh) $(\bar{l}h\bar{h})$	$(\mathbf{b} - \mathbf{c})/2$	$n\hat{\mathbf{a}} - m\mathbf{a}$	$p\hat{\mathbf{a}} + q\mathbf{a}$	$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$	L16	
		n odd m even					L17	
	$(\mathbf{b} - \mathbf{c})/2$	$n\hat{\mathbf{a}} + m\mathbf{a}$	$-p\hat{\mathbf{a}} + q\mathbf{a}$	$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$	$p2_1/b11$	L17
		p even q odd					$p2/b11$ $[(\mathbf{a}' + \mathbf{b}')/4]$	L16
		n even m odd		$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$	$p2/b11$ $(\mathbf{a}'/4)$	L17
		p odd q even					$pb11$ $(\mathbf{a}'/4)$	L16
		n even m odd		$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}\bar{1}$	$pb11$ $(\mathbf{a}'/4)$	L12
		p odd q odd					$\hat{p}\bar{1}$	L02
		n odd m odd		$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}\bar{1}$	$c211$ $(\mathbf{b}'/4)$	L10
		p even q odd					$\hat{p}1$	L01
		n odd m odd		$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}\bar{1}$	$c211$	L10
		p odd q even					$\hat{p}1$	L01
		n odd m even		$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$	$p2/b11$	L16
		p odd q odd					$p2_1/b11$ $(\mathbf{a}'/4)$	L17
						$pb11$	L12	
		$\hat{\mathbf{a}} = (\mathbf{b} + \mathbf{c})/2$		h odd $\Rightarrow m = h, n = 2l; h$ even $\Rightarrow m = h/2, n = l$				
$(l\bar{h}\bar{h})$ $(\bar{l}h\bar{h})$	$(\mathbf{b} + \mathbf{c})/2$	$n\hat{\mathbf{a}} - m\mathbf{a}$	$p\hat{\mathbf{a}} + q\mathbf{a}$	$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$	L16	
		n odd m even					L17	
	$(\mathbf{b} + \mathbf{c})/2$	$n\hat{\mathbf{a}} + m\mathbf{a}$	$-p\hat{\mathbf{a}} + q\mathbf{a}$	$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$	$p2_1/b11$	L17
		p even q odd					$p2/b11$ $[(\mathbf{a}' + \mathbf{b}')/4]$	L16
		n even m odd		$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$	$p2/b11$ $(\mathbf{a}'/4)$	L17
		p odd q even					$pb11$ $(\mathbf{a}'/4)$	L16
		n even m odd		$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}\bar{1}$	$pb11$ $(\mathbf{a}'/4)$	L12
		p odd q odd					$\hat{p}\bar{1}$	L02
		n odd m odd		$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}\bar{1}$	$c211$ $(\mathbf{b}'/4)$	L10
		p even q odd					$\hat{p}1$	L01
		n odd m odd		$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}\bar{1}$	$c211$	L10
		p odd q even					$\hat{p}1$	L01
		n odd m even		$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$	$p2/b11$	L16
		p odd q odd					$p2_1/b11$ $(\mathbf{a}'/4)$	L17
						$pb11$	L12	
		$\hat{\mathbf{a}} = (\mathbf{c} - \mathbf{b})/2$		h odd $\Rightarrow m = h, n = 2l; h$ even $\Rightarrow m = h/2, n = l$				

$$\mathcal{G} = F_n^4 \bar{3}_c^2$$

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit sd	Sectional layer group $\mathcal{L}(sd)$	
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}				
(hlh) $(\bar{h}l\bar{h})$	$(\mathbf{c} - \mathbf{a})/2$	$n\hat{\mathbf{a}} - m\mathbf{b}$	$p\hat{\mathbf{a}} + q\mathbf{b}$	$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ $p2_1/b11 [(a' + b')/4]$ $pb11$	L16
	$(\mathbf{c} - \mathbf{a})/2$	$n\hat{\mathbf{a}} + m\mathbf{b}$	$-p\hat{\mathbf{a}} + q\mathbf{b}$				n odd m even p even q odd
				$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ $p2/b11 [(a' + b')/4]$ $pb11 (a'/4)$	L17 L16 L12
				$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ $p2/b11 (a'/4)$ $pb11 (a'/4)$	L17 L16 L12
				$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}\bar{1}$ $c211 (b'/4)$ $\hat{p}1$	L02 L10 L01
				$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}\bar{1}$ $c211$ $\hat{p}1$	L02 L10 L01
				$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ $p2_1/b11 (a'/4)$ $pb11$	L16 L17 L12
$\hat{\mathbf{a}} = (\mathbf{c} + \mathbf{a})/2$ h odd $\Rightarrow m = h, n = 2l; h$ even $\Rightarrow m = h/2, n = l$							
$(\bar{h}lh)$ $(hl\bar{h})$	$(\mathbf{c} + \mathbf{a})/2$	$n\hat{\mathbf{a}} - m\mathbf{b}$	$p\hat{\mathbf{a}} + q\mathbf{b}$	$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ $p2_1/b11 [(a' + b')/4]$ $pb11$	L16
	$(\mathbf{c} + \mathbf{a})/2$	$n\hat{\mathbf{a}} + m\mathbf{b}$	$-p\hat{\mathbf{a}} + q\mathbf{b}$				n odd m even p even q odd
				$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ $p2/b11 [(a' + b')/4]$ $pb11 (a'/4)$	L17 L16 L12
				$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ $p2/b11 (a'/4)$ $pb11 (a'/4)$	L17 L16 L12
				$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}\bar{1}$ $c211 (b'/4)$ $\hat{p}1$	L02 L10 L01
				$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}\bar{1}$ $c211$ $\hat{p}1$	L02 L10 L01
				$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ $p2_1/b11 (a'/4)$ $pb11$	L16 L17 L12
$\hat{\mathbf{a}} = (\mathbf{a} - \mathbf{c})/2$ h odd $\Rightarrow m = h, n = 2l; h$ even $\Rightarrow m = h/2, n = l$							

$$\mathcal{G} = F\frac{4}{d}\bar{3}\frac{2}{m} \text{ origin } 1$$

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$			
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}						
(<i>hk0</i>)	\mathbf{c}	$\widehat{n\mathbf{a}} - \widehat{m\mathbf{b}}$	$\widehat{p\mathbf{a}} + \widehat{q\mathbf{b}}$	$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ $p2/b11 [(a' + b')/4]$ $pb11 (a'/4)$			
($\bar{1}k0$)	\mathbf{c}	$\widehat{n\mathbf{a}} + \widehat{m\mathbf{b}}$	$-\widehat{p\mathbf{a}} + \widehat{q\mathbf{b}}$				L17		
(<i>kh0</i>)	\mathbf{c}	$\widehat{m\mathbf{a}} + \widehat{n\mathbf{b}}$	$\widehat{q\mathbf{a}} + \widehat{p\mathbf{b}}$				L16		
($\bar{k}h0$)	\mathbf{c}	$\widehat{m\mathbf{a}} - \widehat{n\mathbf{b}}$	$-\widehat{q\mathbf{a}} + \widehat{p\mathbf{b}}$				L12		
$(\mathbf{a} + \mathbf{b} + \mathbf{c})/8$		n odd	m even				$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ $p2_1/b11 [(a' + b')/4]$ $pb11$
		p even	q odd				L16		
		n even	m odd				$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ $p2_1/b11 (a'/4)$ $pb11$
		p odd	q even				L16		
		n even	m odd				$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p\bar{1}}$ $c211$ $\widehat{p1}$
		p odd	q odd				L17		
		n odd	m odd				$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p\bar{1}}$ $c211 (b'/4)$ $\widehat{p1}$
		p odd	q even				L10		
		n odd	m even	$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ $p2/b11 (a'/4)$ $pb11 (a'/4)$			
		p odd	q odd	L12					
		$\widehat{\mathbf{a}} = (\mathbf{a} - \mathbf{b})/2$	h even, k odd or h odd, k even $\Rightarrow n = h + k, m = h - k$						
	$\widehat{\mathbf{b}} = (\mathbf{a} + \mathbf{b})/2$	h, k odd $\Rightarrow n = (h + k)/2, m = (h - k)/2$							
(<i>0hk</i>)	\mathbf{a}	$\widehat{n\mathbf{a}} - \widehat{m\mathbf{b}}$	$\widehat{p\mathbf{a}} + \widehat{q\mathbf{b}}$	$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ $p2/b11 [(a' + b')/4]$ $pb11 (a'/4)$			
($0\bar{h}k$)	\mathbf{a}	$\widehat{n\mathbf{a}} + \widehat{m\mathbf{b}}$	$-\widehat{p\mathbf{a}} + \widehat{q\mathbf{b}}$				L17		
(<i>0kh</i>)	\mathbf{a}	$\widehat{m\mathbf{a}} - \widehat{n\mathbf{b}}$	$\widehat{q\mathbf{a}} + \widehat{p\mathbf{b}}$				L16		
($0\bar{k}h$)	\mathbf{a}	$\widehat{m\mathbf{a}} + \widehat{n\mathbf{b}}$	$-\widehat{q\mathbf{a}} + \widehat{p\mathbf{b}}$				L12		
$(\mathbf{a} + \mathbf{b} + \mathbf{c})/8$		n odd	m even				$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ $p2_1/b11 [(a' + b')/4]$ $pb11$
		p even	q odd				L16		
		n even	m odd				$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ $p2_1/b11 (a'/4)$ $pb11$
		p odd	q even				L16		
		n even	m odd				$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p\bar{1}}$ $c211$ $\widehat{p1}$
		p odd	q odd				L17		
		n odd	m odd				$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p\bar{1}}$ $c211 (b'/4)$ $\widehat{p1}$
		p odd	q even				L10		
		n odd	m even	$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ $p2/b11 (a'/4)$ $pb11 (a'/4)$			
		p odd	q odd	L12					
		$\widehat{\mathbf{a}} = (\mathbf{b} - \mathbf{c})/2$	h even, k odd or h odd, k even $\Rightarrow n = h + k, m = h - k$						
	$\widehat{\mathbf{b}} = (\mathbf{b} + \mathbf{c})/2$	h, k odd $\Rightarrow n = (h + k)/2, m = (h - k)/2$							

Continued

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}			
$(k0h)$	\mathbf{b}	$n\hat{\mathbf{a}} - m\hat{\mathbf{b}}$	$p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$			
$(k0\bar{h})$	\mathbf{b}	$n\hat{\mathbf{a}} + m\hat{\mathbf{b}}$	$-p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$			
$(h0k)$	\mathbf{b}	$m\hat{\mathbf{a}} - n\hat{\mathbf{b}}$	$q\hat{\mathbf{a}} + p\hat{\mathbf{b}}$			
$(h0\bar{k})$	\mathbf{b}	$m\hat{\mathbf{a}} + n\hat{\mathbf{b}}$	$-q\hat{\mathbf{a}} + p\hat{\mathbf{b}}$			
$(\mathbf{a} + \mathbf{b} + \mathbf{c})/8$			n odd m even	$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2_1/b11$ L17
			p even q odd		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ L16
					$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$ L12
			n even m odd	$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2/b11$ L16
			p odd q even		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2_1/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ L17
					$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11$ L12
			n even m odd	$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2/b11$ L16
			p odd q odd		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2_1/b11 (\mathbf{a}'/4)$ L17
					$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11$ L12
			n odd m odd	$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$\hat{p}\bar{1}$ L02
			p even q odd		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$c211$ L10
					$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$ L01
		n odd m odd	$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$\hat{p}\bar{1}$ L02	
		p odd q even		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$c211 (\mathbf{b}'/4)$ L10	
				$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$ L01	
		n odd m even	$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2_1/b11$ L17	
		p odd q odd		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2/b11 (\mathbf{a}'/4)$ L16	
				$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$ L12	
	$\hat{\mathbf{a}} = (\mathbf{c} - \mathbf{a})/2$			h even, k odd or h odd, k even $\Rightarrow n = h + k, m = h - k$		
	$\hat{\mathbf{b}} = (\mathbf{c} + \mathbf{a})/2$			h, k odd $\Rightarrow n = (h + k)/2, m = (h - k)/2$		

Continued

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit \mathbf{sd}	Sectional layer group $\mathcal{L}(\mathbf{sd})$
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}			
(hhl) $(\bar{h}hl)$ $(\mathbf{a} + \mathbf{b} + \mathbf{c})/8$	$(\mathbf{a} - \mathbf{b})/2$	$n\hat{\mathbf{a}} - m\mathbf{c}$	$p\hat{\mathbf{a}} + q\mathbf{c}$	$I2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ L14 $p2_1/m11 [(\mathbf{a}' + \mathbf{b}')/4]$ L15 $pm11$ L11
	$(\mathbf{a} - \mathbf{b})/2$	$n\hat{\mathbf{a}} + m\mathbf{c}$	$-p\hat{\mathbf{a}} + q\mathbf{c}$			
			or n odd m even p even q odd or n even m odd p odd q even p odd q odd			
			n odd m odd	$B2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ L14 $p2_1/m11 (\mathbf{a}'/4)$ L15 $pm11$ L11
			n odd m odd	$C2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c2/m11$ L18 $cm11$ L13
$\hat{\mathbf{a}} = (\mathbf{a} + \mathbf{b})/2$ h odd $\Rightarrow m = h, n = 2l$; h even $\Rightarrow m = h/2, n = l$						
$(h\bar{h}l)$ $(\bar{h}hl)$ $(\mathbf{a} + 3\mathbf{b} + 3\mathbf{c})/8$ or $(3\mathbf{a} + \mathbf{b} + 3\mathbf{c})/8$	$(\mathbf{a} + \mathbf{b})/2$	$n\hat{\mathbf{a}} - m\mathbf{c}$	$p\hat{\mathbf{a}} + q\mathbf{c}$	$I2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ L14 $p2_1/m11 [(\mathbf{a}' + \mathbf{b}')/4]$ L15 $pm11$ L11
	$(\mathbf{a} + \mathbf{b})/2$	$n\hat{\mathbf{a}} + m\mathbf{c}$	$-p\hat{\mathbf{a}} + q\mathbf{c}$			
			or n odd m even p even q odd or n even m odd p odd q even p odd q odd			
			n odd m odd	$B2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ L14 $p2_1/m11 (\mathbf{a}'/4)$ L15 $pm11$ L11
			n odd m odd	$C2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c2/m11$ L18 $cm11$ L13
$\hat{\mathbf{a}} = (\mathbf{b} - \mathbf{a})/2$ h odd $\Rightarrow m = h, n = 2l$; h even $\Rightarrow m = h/2, n = l$						
(lhh) $(l\bar{h}h)$ $(\mathbf{a} + \mathbf{b} + \mathbf{c})/8$	$(\mathbf{b} - \mathbf{c})/2$	$n\hat{\mathbf{a}} - m\mathbf{a}$	$p\hat{\mathbf{a}} + q\mathbf{a}$	$I2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ L14 $p2_1/m11 [(\mathbf{a}' + \mathbf{b}')/4]$ L15 $pm11$ L11
	$(\mathbf{b} - \mathbf{c})/2$	$n\hat{\mathbf{a}} + m\mathbf{a}$	$-p\hat{\mathbf{a}} + q\mathbf{a}$			
			or n odd m even p even q odd or n even m odd p odd q even p odd q odd			
			n odd m odd	$B2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ L14 $p2_1/m11 (\mathbf{a}'/4)$ L15 $pm11$ L11
			n odd m odd	$C2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c2/m11$ L18 $cm11$ L13
$\hat{\mathbf{a}} = (\mathbf{b} + \mathbf{c})/2$ h odd $\Rightarrow m = h, n = 2l$; h even $\Rightarrow m = h/2, n = l$						

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}			
$(l\bar{h}\bar{h})$ $(l\bar{h}h)$	$(\mathbf{b} + \mathbf{c})/2$ $(\mathbf{b} + \mathbf{c})/2$	$n\hat{\mathbf{a}} - m\mathbf{a}$ $n\hat{\mathbf{a}} + m\mathbf{a}$	$p\hat{\mathbf{a}} + q\mathbf{a}$ $-p\hat{\mathbf{a}} + q\mathbf{a}$			
$(3\mathbf{a} + \mathbf{b} + 3\mathbf{c})/8$ or $(3\mathbf{a} + 3\mathbf{b} + \mathbf{c})/8$			n odd m even p even q odd or n even m odd p odd q even p odd q odd	$I2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ L14 $p2_1/m11 [(\mathbf{a}' + \mathbf{b}')/4]$ L15 $pm11$ L11
			n odd m odd	$B2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ L14 $p2_1/m11 (\mathbf{a}'/4)$ L15 $pm11$ L11
			n odd m odd	$C2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c2/m11$ L18 $cm11$ L13
$\hat{\mathbf{a}} = (\mathbf{c} - \mathbf{b})/2$ h odd $\Rightarrow m = h, n = 2l$; h even $\Rightarrow m = h/2, n = l$						
(hlh) $(\bar{h}l\bar{h})$	$(\mathbf{c} - \mathbf{a})/2$ $(\mathbf{c} - \mathbf{a})/2$	$n\hat{\mathbf{a}} - m\mathbf{b}$ $n\hat{\mathbf{a}} + m\mathbf{b}$	$p\hat{\mathbf{a}} + q\mathbf{b}$ $-p\hat{\mathbf{a}} + q\mathbf{b}$			
$(\mathbf{a} + \mathbf{b} + \mathbf{c})/8$			n odd m even p even q odd or n even m odd p odd q even p odd q odd	$I2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ L14 $p2_1/m11 [(\mathbf{a}' + \mathbf{b}')/4]$ L15 $pm11$ L11
			n odd m odd	$B2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ L14 $p2_1/m11 (\mathbf{a}'/4)$ L15 $pm11$ L11
			n odd m odd	$C2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c2/m11$ L18 $cm11$ L13
$\hat{\mathbf{a}} = (\mathbf{c} + \mathbf{a})/2$ h odd $\Rightarrow m = h, n = 2l$; h even $\Rightarrow m = h/2, n = l$						
$(\bar{h}lh)$ $(h\bar{l}h)$	$(\mathbf{c} + \mathbf{a})/2$ $(\mathbf{c} + \mathbf{a})/2$	$n\hat{\mathbf{a}} - m\mathbf{b}$ $n\hat{\mathbf{a}} + m\mathbf{b}$	$p\hat{\mathbf{a}} + q\mathbf{b}$ $-p\hat{\mathbf{a}} + q\mathbf{b}$			
$(3\mathbf{a} + 3\mathbf{b} + \mathbf{c})/8$ or $(\mathbf{a} + 3\mathbf{b} + 3\mathbf{c})/8$			n odd m even p even q odd or n even m odd p odd q even p odd q odd	$I2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ L14 $p2_1/m11 [(\mathbf{a}' + \mathbf{b}')/4]$ L15 $pm11$ L11
			n odd m odd	$B2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ L14 $p2_1/m11 (\mathbf{a}'/4)$ L15 $pm11$ L11
			n odd m odd	$C2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c2/m11$ L18 $cm11$ L13
$\hat{\mathbf{a}} = (\mathbf{a} - \mathbf{c})/2$ h odd $\Rightarrow m = h, n = 2l$; h even $\Rightarrow m = h/2, n = l$						

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}				
(<i>hk0</i>)	\mathbf{c}	$n\hat{\mathbf{a}} - m\hat{\mathbf{b}}$	$p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$	$I2/c11$ $I2/b11$ $B2/b11$ $C2/c11$ $C2/n11$ $B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ $p2/b11 [(a' + b')/4]$ $pb11 (a'/4)$	
($\bar{1}k0$)	\mathbf{c}	$n\hat{\mathbf{a}} + m\hat{\mathbf{b}}$	$-p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$				L17
(<i>kh0</i>)	\mathbf{c}	$m\hat{\mathbf{a}} + n\hat{\mathbf{b}}$	$q\hat{\mathbf{a}} + p\hat{\mathbf{b}}$				L16
($\bar{k}h0$)	\mathbf{c}	$m\hat{\mathbf{a}} - n\hat{\mathbf{b}}$	$-q\hat{\mathbf{a}} + p\hat{\mathbf{b}}$				L12
		n odd	m even				L16
		p even	q odd				L17
		n even	m odd				L12
		p odd	q even				L16
		n even	m odd				L17
		p odd	q odd				L12
		n odd	m odd				L02
		p even	q odd				L10
		n odd	m odd	L01			
		p odd	q even	L02			
		n odd	m even	L10			
		p odd	q odd	L17			
		p odd	q odd	L16			
		p odd	q odd	L12			
	$\hat{\mathbf{a}} = (\mathbf{a} - \mathbf{b})/2$ $\hat{\mathbf{b}} = (\mathbf{a} + \mathbf{b})/2$			h even, k odd or h odd, k even $\Rightarrow n = h + k, m = h - k$ h, k odd $\Rightarrow n = (h + k)/2, m = (h - k)/2$			
(<i>0hk</i>)	\mathbf{a}	$n\hat{\mathbf{a}} - m\hat{\mathbf{b}}$	$p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$	$I2/c11$ $I2/b11$ $B2/b11$ $C2/c11$ $C2/n11$ $B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ $p2/b11 [(a' + b')/4]$ $pb11 (a'/4)$	
($0\bar{h}k$)	\mathbf{a}	$n\hat{\mathbf{a}} + m\hat{\mathbf{b}}$	$-p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$				L17
(<i>0kh</i>)	\mathbf{a}	$m\hat{\mathbf{a}} - n\hat{\mathbf{b}}$	$q\hat{\mathbf{a}} + p\hat{\mathbf{b}}$				L16
($0\bar{k}h$)	\mathbf{a}	$m\hat{\mathbf{a}} + n\hat{\mathbf{b}}$	$-q\hat{\mathbf{a}} + p\hat{\mathbf{b}}$				L12
		n odd	m even				L16
		p even	q odd				L17
		n even	m odd				L12
		p odd	q even				L16
		n even	m odd				L17
		p odd	q odd				L12
		n odd	m odd				L02
		p even	q odd				L10
		n odd	m odd	L01			
		n odd	m odd	L02			
		p odd	q even	L10			
		n odd	m even	L17			
		p odd	q odd	L16			
		p odd	q odd	L12			
	$\hat{\mathbf{a}} = (\mathbf{b} - \mathbf{c})/2$ $\hat{\mathbf{b}} = (\mathbf{b} + \mathbf{c})/2$			h even, k odd or h odd, k even $\Rightarrow n = h + k, m = h - k$ h, k odd $\Rightarrow n = (h + k)/2, m = (h - k)/2$			

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}			
$(k0h)$	\mathbf{b}	$n\hat{\mathbf{a}} - m\hat{\mathbf{b}}$	$p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$	$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ L17
$(k0\bar{h})$	\mathbf{b}	$n\hat{\mathbf{a}} + m\hat{\mathbf{b}}$	$-p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$			$p2/b11 [(a' + b')/4]$ L16
$(h0k)$	\mathbf{b}	$m\hat{\mathbf{a}} - n\hat{\mathbf{b}}$	$q\hat{\mathbf{a}} + p\hat{\mathbf{b}}$	$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11 (a'/4)$ L12
$(h0\bar{k})$	\mathbf{b}	$m\hat{\mathbf{a}} + n\hat{\mathbf{b}}$	$-q\hat{\mathbf{a}} + p\hat{\mathbf{b}}$			$p2/b11$ L16
		n odd	m even	$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11 [(a' + b')/4]$ L17
		p even	q odd			$pb11$ L12
		n even	m odd	$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ L16
		p odd	q even			$p2_1/b11 (a'/4)$ L17
		n even	m odd	$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11$ L12
		p odd	q odd			$c211$ L10
		n odd	m odd	$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}\bar{1}$ L02
		p even	q odd			$\hat{p}1$ L01
		n odd	m odd	$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}\bar{1}$ L02
		p odd	q even			$c211 (\mathbf{b}'/4)$ L10
		n odd	m even	$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$ L01
		p odd	q odd			$p2_1/b11$ L17
						$p2/b11 (a'/4)$ L16
						$pb11 (a'/4)$ L12
	$\hat{\mathbf{a}} = (\mathbf{c} - \mathbf{a})/2$			h even, k odd or h odd, k even $\Rightarrow n = h + k, m = h - k$		
	$\hat{\mathbf{b}} = (\mathbf{c} + \mathbf{a})/2$			h, k odd $\Rightarrow n = (h + k)/2, m = (h - k)/2$		

Continued

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}			
(hhl) $(\bar{h}hl)$	$(\mathbf{a} - \mathbf{b})/2$	$n\hat{\mathbf{a}} - m\mathbf{c}$	$p\hat{\mathbf{a}} + q\mathbf{c}$	$I2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ L14 $p2_1/m11 [(\mathbf{a}' + \mathbf{b}')/4]$ L15 $pm11$ L11
	$(\mathbf{a} - \mathbf{b})/2$	$n\hat{\mathbf{a}} + m\mathbf{c}$	$-p\hat{\mathbf{a}} + q\mathbf{c}$			
			n odd m even p even q odd or n even m odd p odd q even p odd q odd			
			n odd m odd	$B2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ L14 $p2_1/m11 (\mathbf{a}'/4)$ L15 $pm11$ L11
			n odd m odd	$C2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c2/m11$ L18 $cm11$ L13
$\hat{\mathbf{a}} = (\mathbf{a} + \mathbf{b})/2$ h odd $\Rightarrow m = h, n = 2l$; h even $\Rightarrow m = h/2, n = l$						
$(\bar{h}\bar{h}l)$ $(\bar{h}hl)$ $(\mathbf{a} + \mathbf{c})/4$ or $(\mathbf{b} + \mathbf{c})/4$	$(\mathbf{a} + \mathbf{b})/2$	$n\hat{\mathbf{a}} - m\mathbf{c}$	$p\hat{\mathbf{a}} + q\mathbf{c}$	$I2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ L14 $p2_1/m11 [(\mathbf{a}' + \mathbf{b}')/4]$ L15 $pm11$ L11
	$(\mathbf{a} + \mathbf{b})/2$	$n\hat{\mathbf{a}} + m\mathbf{c}$	$-p\hat{\mathbf{a}} + q\mathbf{c}$			
			n odd m even p even q odd or n even m odd p odd q even p odd q odd			
			n odd m odd	$B2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ L14 $p2_1/m11 (\mathbf{a}'/4)$ L15 $pm11$ L11
			n odd m odd	$C2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c2/m11$ L18 $cm11$ L13
$\hat{\mathbf{a}} = (\mathbf{b} - \mathbf{a})/2$ h odd $\Rightarrow m = h, n = 2l$; h even $\Rightarrow m = h/2, n = l$						
(lhh) $(l\bar{h}\bar{h})$	$(\mathbf{b} - \mathbf{c})/2$	$n\hat{\mathbf{a}} - m\mathbf{a}$	$p\hat{\mathbf{a}} + q\mathbf{a}$	$I2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ L14 $p2_1/m11 [(\mathbf{a}' + \mathbf{b}')/4]$ L15 $pm11$ L11
	$(\mathbf{b} - \mathbf{c})/2$	$n\hat{\mathbf{a}} + m\mathbf{a}$	$-p\hat{\mathbf{a}} + q\mathbf{a}$			
			n odd m even p even q odd or n even m odd p odd q even p odd q odd			
			n odd m odd	$B2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ L14 $p2_1/m11 (\mathbf{a}'/4)$ L15 $pm11$ L11
			n odd m odd	$C2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c2/m11$ L18 $cm11$ L13
$\hat{\mathbf{a}} = (\mathbf{b} + \mathbf{c})/2$ h odd $\Rightarrow m = h, n = 2l$; h even $\Rightarrow m = h/2, n = l$						

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}			
$(l\bar{h}\bar{h})$ $(l\bar{h}h)$	$(\mathbf{b} + \mathbf{c})/2$	$n\hat{\mathbf{a}} - m\mathbf{a}$	$p\hat{\mathbf{a}} + q\mathbf{a}$	$I2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ L14
$(\mathbf{b} + \mathbf{a})/4$ or $(\mathbf{c} + \mathbf{a})/4$	$(\mathbf{b} + \mathbf{c})/2$	$n\hat{\mathbf{a}} + m\mathbf{a}$	$-p\hat{\mathbf{a}} + q\mathbf{a}$			$p2_1/m11 [(\mathbf{a}' + \mathbf{b}')/4]$ L15
						$pm11$ L11
			n odd m even p even q odd or n even m odd p odd q even p odd q odd	$B2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ L14 $p2_1/m11 (\mathbf{a}'/4)$ L15 $pm11$ L11
			n odd m odd	$C2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c2/m11$ L18 $cm11$ L13
$\hat{\mathbf{a}} = (\mathbf{c} - \mathbf{b})/2$ h odd $\Rightarrow m = h, n = 2l$; h even $\Rightarrow m = h/2, n = l$						
(hlh) $(\bar{h}lh)$	$(\mathbf{c} - \mathbf{a})/2$	$n\hat{\mathbf{a}} - m\mathbf{b}$	$p\hat{\mathbf{a}} + q\mathbf{b}$	$I2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ L14
	$(\mathbf{c} - \mathbf{a})/2$	$n\hat{\mathbf{a}} + m\mathbf{b}$	$-p\hat{\mathbf{a}} + q\mathbf{b}$			$p2_1/m11 [(\mathbf{a}' + \mathbf{b}')/4]$ L15
						$pm11$ L11
			n odd m even p even q odd or n even m odd p odd q even p odd q odd	$B2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ L14 $p2_1/m11 (\mathbf{a}'/4)$ L15 $pm11$ L11
			n odd m odd	$C2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c2/m11$ L18 $cm11$ L13
$\hat{\mathbf{a}} = (\mathbf{c} + \mathbf{a})/2$ h odd $\Rightarrow m = h, n = 2l$; h even $\Rightarrow m = h/2, n = l$						
$(\bar{h}lh)$ $(h\bar{h}l)$	$(\mathbf{c} + \mathbf{a})/2$	$n\hat{\mathbf{a}} - m\mathbf{b}$	$p\hat{\mathbf{a}} + q\mathbf{b}$	$I2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ L14
$(\mathbf{c} + \mathbf{b})/4$ or $(\mathbf{a} + \mathbf{b})/4$	$(\mathbf{c} + \mathbf{a})/2$	$n\hat{\mathbf{a}} + m\mathbf{b}$	$-p\hat{\mathbf{a}} + q\mathbf{b}$			$p2_1/m11 [(\mathbf{a}' + \mathbf{b}')/4]$ L15
						$pm11$ L11
			n odd m even p even q odd or n even m odd p odd q even p odd q odd	$B2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ L14 $p2_1/m11 (\mathbf{a}'/4)$ L15 $pm11$ L11
			n odd m odd	$C2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c2/m11$ L18 $cm11$ L13
$\hat{\mathbf{a}} = (\mathbf{a} - \mathbf{c})/2$ h odd $\Rightarrow m = h, n = 2l$; h even $\Rightarrow m = h/2, n = l$						

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$							
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}										
(<i>hk0</i>)	\mathbf{c}	$\widehat{n\mathbf{a}} - \widehat{m\mathbf{b}}$	$\widehat{p\mathbf{a}} + \widehat{q\mathbf{b}}$	<i>I</i> 2/ <i>c</i> 11	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p</i> 2 ₁ / <i>b</i> 11 <i>p</i> 2/ <i>b</i> 11 [($\mathbf{a}' + \mathbf{b}'$)/4] <i>pb</i> 11 ($\mathbf{a}'/4$)							
($\bar{1}k0$)	\mathbf{c}	$\widehat{n\mathbf{a}} + \widehat{m\mathbf{b}}$	$-\widehat{p\mathbf{a}} + \widehat{q\mathbf{b}}$				L17						
(<i>kh0</i>)	\mathbf{c}	$\widehat{m\mathbf{a}} + \widehat{n\mathbf{b}}$	$\widehat{q\mathbf{a}} + \widehat{p\mathbf{b}}$				L16						
($\bar{k}h0$)	\mathbf{c}	$\widehat{m\mathbf{a}} - \widehat{n\mathbf{b}}$	$-\widehat{q\mathbf{a}} + \widehat{p\mathbf{b}}$				L12						
3($\mathbf{a} + \mathbf{b} + \mathbf{c}$)/8			<i>n</i> odd <i>m</i> even				<i>I</i> 2/ <i>b</i> 11	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p</i> 2/ <i>b</i> 11 <i>p</i> 2 ₁ / <i>b</i> 11 [($\mathbf{a}' + \mathbf{b}'$)/4] <i>pb</i> 11				
			<i>p</i> even <i>q</i> odd							L16			
			<i>n</i> even <i>m</i> odd							L17			
			<i>p</i> odd <i>q</i> even							L12			
			<i>n</i> even <i>m</i> odd							<i>B</i> 2/ <i>b</i> 11	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p</i> 2/ <i>b</i> 11 <i>p</i> 2 ₁ / <i>b</i> 11 ($\mathbf{a}'/4$) <i>pb</i> 11	
			<i>p</i> odd <i>q</i> odd										L16
			<i>n</i> odd <i>m</i> odd										L17
			<i>p</i> even <i>q</i> odd										L12
			<i>n</i> odd <i>m</i> odd	<i>C</i> 2/ <i>c</i> 11	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p\bar{1}}$ <i>c</i> 211 $\widehat{p1}$							
			<i>p</i> even <i>q</i> odd										L02
			<i>n</i> odd <i>m</i> odd										L10
			<i>p</i> odd <i>q</i> even										L01
		<i>n</i> odd <i>m</i> odd	<i>C</i> 2/ <i>n</i> 11				$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p\bar{1}}$ <i>c</i> 211 ($\mathbf{b}'/4$) $\widehat{p1}$					
		<i>p</i> odd <i>q</i> even							L02				
		<i>n</i> odd <i>m</i> even							L10				
		<i>p</i> odd <i>q</i> odd							L01				
		<i>n</i> odd <i>m</i> even							<i>B</i> 2/ <i>n</i> 11	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p</i> 2 ₁ / <i>b</i> 11 <i>p</i> 2/ <i>b</i> 11 ($\mathbf{a}'/4$) <i>pb</i> 11 ($\mathbf{a}'/4$)		
		<i>p</i> odd <i>q</i> odd										L17	
												L16	
												L12	
$\widehat{\mathbf{a}} = (\mathbf{a} - \mathbf{b})/2$				<i>h</i> even, <i>k</i> odd or <i>h</i> odd, <i>k</i> even $\Rightarrow n = h + k, m = h - k$									
$\widehat{\mathbf{b}} = (\mathbf{a} + \mathbf{b})/2$				<i>h, k</i> odd $\Rightarrow n = (h + k)/2, m = (h - k)/2$									
(<i>0hk</i>)	\mathbf{a}	$\widehat{n\mathbf{a}} - \widehat{m\mathbf{b}}$		$\widehat{p\mathbf{a}} + \widehat{q\mathbf{b}}$	<i>I</i> 2/ <i>c</i> 11	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$						<i>p</i> 2 ₁ / <i>b</i> 11 <i>p</i> 2/ <i>b</i> 11 [($\mathbf{a}' + \mathbf{b}'$)/4] <i>pb</i> 11 ($\mathbf{a}'/4$)	
($0\bar{h}k$)	\mathbf{a}	$\widehat{n\mathbf{a}} + \widehat{m\mathbf{b}}$		$-\widehat{p\mathbf{a}} + \widehat{q\mathbf{b}}$									L17
(<i>0kh</i>)	\mathbf{a}	$\widehat{m\mathbf{a}} - \widehat{n\mathbf{b}}$	$\widehat{q\mathbf{a}} + \widehat{p\mathbf{b}}$	L16									
($0\bar{k}h$)	\mathbf{a}	$\widehat{m\mathbf{a}} + \widehat{n\mathbf{b}}$	$-\widehat{q\mathbf{a}} + \widehat{p\mathbf{b}}$	L12									
3($\mathbf{a} + \mathbf{b} + \mathbf{c}$)/8			<i>n</i> odd <i>m</i> even	<i>I</i> 2/ <i>b</i> 11			$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p</i> 2/ <i>b</i> 11 <i>p</i> 2 ₁ / <i>b</i> 11 [($\mathbf{a}' + \mathbf{b}'$)/4] <i>pb</i> 11					
			<i>p</i> even <i>q</i> odd										L16
			<i>n</i> even <i>m</i> odd						L17				
			<i>p</i> odd <i>q</i> even						L12				
			<i>n</i> even <i>m</i> odd						<i>B</i> 2/ <i>b</i> 11	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p</i> 2/ <i>b</i> 11 <i>p</i> 2 ₁ / <i>b</i> 11 ($\mathbf{a}'/4$) <i>pb</i> 11		
			<i>p</i> odd <i>q</i> odd										L16
			<i>n</i> odd <i>m</i> odd										L17
			<i>p</i> even <i>q</i> odd										L12
			<i>n</i> odd <i>m</i> odd		<i>C</i> 2/ <i>c</i> 11	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$						$\widehat{p\bar{1}}$ <i>c</i> 211 $\widehat{p1}$	
			<i>p</i> even <i>q</i> odd										L02
			<i>n</i> odd <i>m</i> odd										L10
			<i>p</i> odd <i>q</i> even										L01
		<i>n</i> odd <i>m</i> odd	<i>C</i> 2/ <i>n</i> 11	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$			$\widehat{p\bar{1}}$ <i>c</i> 211 ($\mathbf{b}'/4$) $\widehat{p1}$						
		<i>p</i> odd <i>q</i> even						L02					
		<i>n</i> odd <i>m</i> even						L10					
		<i>p</i> odd <i>q</i> odd						L01					
		<i>n</i> odd <i>m</i> even						<i>B</i> 2/ <i>n</i> 11	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p</i> 2 ₁ / <i>b</i> 11 <i>p</i> 2/ <i>b</i> 11 ($\mathbf{a}'/4$) <i>pb</i> 11 ($\mathbf{a}'/4$)			
		<i>p</i> odd <i>q</i> odd									L17		
											L16		
											L12		
$\widehat{\mathbf{a}} = (\mathbf{b} - \mathbf{c})/2$					<i>h</i> even, <i>k</i> odd or <i>h</i> odd, <i>k</i> even $\Rightarrow n = h + k, m = h - k$								
$\widehat{\mathbf{b}} = (\mathbf{b} + \mathbf{c})/2$					<i>h, k</i> odd $\Rightarrow n = (h + k)/2, m = (h - k)/2$								

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}				
$(k0h)$ $(k0\bar{h})$ $(h0k)$ $(h0\bar{k})$ $3(\mathbf{a} + \mathbf{b} + \mathbf{c})/8$	\mathbf{b}	$n\hat{\mathbf{a}} - m\hat{\mathbf{b}}$	$p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$	$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ $p2/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ $pb11 (\mathbf{a}'/4)$	L17 L16 L12
	\mathbf{b}	$n\hat{\mathbf{a}} + m\hat{\mathbf{b}}$	$-p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$				
	\mathbf{b}	$m\hat{\mathbf{a}} - n\hat{\mathbf{b}}$	$q\hat{\mathbf{a}} + p\hat{\mathbf{b}}$	$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ $p2_1/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ $pb11$	L16 L17 L12
	\mathbf{b}	$m\hat{\mathbf{a}} + n\hat{\mathbf{b}}$	$-q\hat{\mathbf{a}} + p\hat{\mathbf{b}}$				
				$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ $p2_1/b11 (\mathbf{a}'/4)$ $pb11$	L16 L17 L12
				$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}\bar{1}$ $c211$ $\hat{p}1$	L02 L10 L01
				$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}\bar{1}$ $c211 (\mathbf{b}'/4)$ $\hat{p}1$	L02 L10 L01
			$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ $p2/b11 (\mathbf{a}'/4)$ $pb11 (\mathbf{a}'/4)$	L17 L16 L12	
							n odd m even p odd q odd
	$\hat{\mathbf{a}} = (\mathbf{c} - \mathbf{a})/2$ $\hat{\mathbf{b}} = (\mathbf{c} + \mathbf{a})/2$			h even, k odd or h odd, k even $\Rightarrow n = h + k, m = h - k$ h, k odd $\Rightarrow n = (h + k)/2, m = (h - k)/2$			

Continued

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$		
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}					
(hhl) $(\bar{h}hl)$ $3(\mathbf{a} + \mathbf{b} + \mathbf{c})/8$	$(\mathbf{a} - \mathbf{b})/2$	$n\hat{\mathbf{a}} - m\mathbf{c}$	$p\hat{\mathbf{a}} + q\mathbf{c}$	$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ $p2_1/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ $pb11$	L16	
	$(\mathbf{a} - \mathbf{b})/2$	$n\hat{\mathbf{a}} + m\mathbf{c}$	$-p\hat{\mathbf{a}} + q\mathbf{c}$				n odd m even p even q odd	L17
				$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ $p2/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ $pb11 (\mathbf{a}'/4)$	L17	
							n even m odd p odd q even	L16
				$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ $p2/b11 (\mathbf{a}'/4)$ $pb11 (\mathbf{a}'/4)$	L17	
							n even m odd p odd q odd	L16
				$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}\bar{1}$ $c211 (\mathbf{b}'/4)$ $\hat{p}1$	L02	
							n odd m odd p even q odd	L10
				$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}\bar{1}$ $c211$ $\hat{p}1$	L02	
							n odd m odd p odd q even	L10
				$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ $p2_1/b11 (\mathbf{a}'/4)$ $pb11$	L16	
							n odd m even p odd q odd	L17
	$\hat{\mathbf{a}} = (\mathbf{a} + \mathbf{b})/2$ h odd $\Rightarrow m = h, n = 2l$; h even $\Rightarrow m = h/2, n = l$							
	$(h\bar{h}l)$ $(\bar{h}hl)$ $(\mathbf{a} + 3\mathbf{b} + \mathbf{c})/8$ or $(3\mathbf{a} + \mathbf{b} + \mathbf{c})/8$	$(\mathbf{a} + \mathbf{b})/2$	$n\hat{\mathbf{a}} - m\mathbf{c}$	$p\hat{\mathbf{a}} + q\mathbf{c}$	$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ $p2_1/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ $pb11$	L16
$(\mathbf{a} + \mathbf{b})/2$		$n\hat{\mathbf{a}} + m\mathbf{c}$	$-p\hat{\mathbf{a}} + q\mathbf{c}$	n odd m even p even q odd				L17
				$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ $p2/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ $pb11 (\mathbf{a}'/4)$	L17	
							n even m odd p odd q even	L16
				$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ $p2/b11 (\mathbf{a}'/4)$ $pb11 (\mathbf{a}'/4)$	L17	
							n even m odd p odd q odd	L16
				$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}\bar{1}$ $c211 (\mathbf{b}'/4)$ $\hat{p}1$	L02	
							n odd m odd p even q odd	L10
				$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}\bar{1}$ $c211$ $\hat{p}1$	L02	
							n odd m odd p odd q even	L10
				$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ $p2_1/b11 (\mathbf{a}'/4)$ $pb11$	L16	
							n odd m even p odd q odd	L17
$\hat{\mathbf{a}} = (\mathbf{b} - \mathbf{a})/2$ h odd $\Rightarrow m = h, n = 2l$; h even $\Rightarrow m = h/2, n = l$								

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit sd	Sectional layer group $\mathcal{L}(sd)$				
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}							
$3(\mathbf{a} + \mathbf{b} + \mathbf{c})/8$	(lhh)	$(\mathbf{b} - \mathbf{c})/2$	$n\hat{\mathbf{a}} - m\mathbf{a}$	$p\hat{\mathbf{a}} + q\mathbf{a}$	$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$	L16		
	$(\bar{l}h\bar{h})$	$(\mathbf{b} - \mathbf{c})/2$	$n\hat{\mathbf{a}} + m\mathbf{a}$	$-p\hat{\mathbf{a}} + q\mathbf{a}$			$p2_1/b11 [(\mathbf{a}' + \mathbf{b}')/4]$	L17		
				n odd m even			$pb11$	L12		
				p even q odd						
				n even m odd			$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2_1/b11$	L17
				p odd q even				$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2/b11 [(\mathbf{a}' + \mathbf{b}')/4]$	L16
								$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$	L12
				n even m odd			$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2_1/b11$	L17
				p odd q odd				$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2/b11 (\mathbf{a}'/4)$	L16
								$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$	L12
				n odd m odd			$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$\hat{p}\bar{1}$	L02
				p even q odd				$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$c211 (\mathbf{b}'/4)$	L10
								$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$	L01
				n odd m odd			$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$\hat{p}\bar{1}$	L02
			p odd q even		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$c211$	L10			
					$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$	L01			
			n odd m even	$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2/b11$	L16			
			p odd q odd		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2_1/b11 (\mathbf{a}'/4)$	L17			
					$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11$	L12			
$\hat{\mathbf{a}} = (\mathbf{b} + \mathbf{c})/2$ h odd $\Rightarrow m = h, n = 2l; h$ even $\Rightarrow m = h/2, n = l$										
$(\mathbf{a} + \mathbf{b} + 3\mathbf{c})/8$ or $(\mathbf{a} + 3\mathbf{b} + \mathbf{c})/8$	$(l\bar{h}\bar{h})$	$(\mathbf{b} + \mathbf{c})/2$	$n\hat{\mathbf{a}} - m\mathbf{a}$	$p\hat{\mathbf{a}} + q\mathbf{a}$	$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$	L16		
	$(\bar{l}h\bar{h})$	$(\mathbf{b} + \mathbf{c})/2$	$n\hat{\mathbf{a}} + m\mathbf{a}$	$-p\hat{\mathbf{a}} + q\mathbf{a}$			$p2_1/b11 [(\mathbf{a}' + \mathbf{b}')/4]$	L17		
				n odd m even			$pb11$	L12		
				p even q odd						
				n even m odd			$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2_1/b11$	L17
				p odd q even				$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2/b11 [(\mathbf{a}' + \mathbf{b}')/4]$	L16
								$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$	L12
				n even m odd			$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2_1/b11$	L17
				p odd q odd				$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2/b11 (\mathbf{a}'/4)$	L16
								$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11 (\mathbf{a}'/4)$	L12
				n odd m odd			$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$\hat{p}\bar{1}$	L02
				p even q odd				$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$c211 (\mathbf{b}'/4)$	L10
								$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$	L01
				n odd m odd			$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$\hat{p}\bar{1}$	L02
			p odd q even		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$c211$	L10			
					$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$	L01			
			n odd m even	$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2/b11$	L16			
			p odd q odd		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2_1/b11 (\mathbf{a}'/4)$	L17			
					$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11$	L12			
$\hat{\mathbf{a}} = (\mathbf{c} - \mathbf{b})/2$ h odd $\Rightarrow m = h, n = 2l; h$ even $\Rightarrow m = h/2, n = l$										

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit sd	Sectional layer group $\mathcal{L}(sd)$	
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}				
(hlh) $(\bar{h}l\bar{h})$ $3(\mathbf{a} + \mathbf{b} + \mathbf{c})/8$	$(\mathbf{c} - \mathbf{a})/2$	$n\hat{\mathbf{a}} - m\mathbf{b}$	$p\hat{\mathbf{a}} + q\mathbf{b}$	$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ L16 $p2_1/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ L17 $pb11$ L12	
	$(\mathbf{c} - \mathbf{a})/2$	$n\hat{\mathbf{a}} + m\mathbf{b}$	$-p\hat{\mathbf{a}} + q\mathbf{b}$				n odd m even p even q odd
			n even m odd p odd q even	$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ L17 $p2/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ L16 $pb11 (\mathbf{a}'/4)$ L12	
			n even m odd p odd q odd	$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ L17 $p2/b11 (\mathbf{a}'/4)$ L16 $pb11 (\mathbf{a}'/4)$ L12	
			n odd m odd p even q odd	$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}\bar{1}$ L02 $c211 (\mathbf{b}'/4)$ L10 $\hat{p}1$ L01	
			n odd m odd p odd q even	$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}\bar{1}$ L02 $c211$ L10 $\hat{p}1$ L01	
			n odd m even p odd q odd	$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ L16 $p2_1/b11 (\mathbf{a}'/4)$ L17 $pb11$ L12	
	$\hat{\mathbf{a}} = (\mathbf{c} + \mathbf{a})/2$			h odd $\Rightarrow m = h, n = 2l; h$ even $\Rightarrow m = h/2, n = l$			
	$(\bar{h}lh)$ $(hl\bar{h})$ $(3\mathbf{a} + \mathbf{b} + \mathbf{c})/8$ or $(\mathbf{a} + \mathbf{b} + 3\mathbf{c})/8$	$(\mathbf{c} + \mathbf{a})/2$	$n\hat{\mathbf{a}} - m\mathbf{b}$	$p\hat{\mathbf{a}} + q\mathbf{b}$	$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ L16 $p2_1/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ L17 $pb11$ L12
		$(\mathbf{c} + \mathbf{a})/2$	$n\hat{\mathbf{a}} + m\mathbf{b}$	$-p\hat{\mathbf{a}} + q\mathbf{b}$			
				n even m odd p odd q even	$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ L17 $p2/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ L16 $pb11 (\mathbf{a}'/4)$ L12
				n even m odd p odd q odd	$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ L17 $p2/b11 (\mathbf{a}'/4)$ L16 $pb11 (\mathbf{a}'/4)$ L12
			n odd m odd p even q odd	$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}\bar{1}$ L02 $c211 (\mathbf{b}'/4)$ L10 $\hat{p}1$ L01	
			n odd m odd p odd q even	$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}\bar{1}$ L02 $c211$ L10 $\hat{p}1$ L01	
			n odd m even p odd q odd	$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ L16 $p2_1/b11 (\mathbf{a}'/4)$ L17 $pb11$ L12	
$\hat{\mathbf{a}} = (\mathbf{a} - \mathbf{c})/2$			h odd $\Rightarrow m = h, n = 2l; h$ even $\Rightarrow m = h/2, n = l$				

Continued

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$			
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}						
(<i>hk0</i>)	\mathbf{c}	$\widehat{n\mathbf{a}} - \widehat{m\mathbf{b}}$	$\widehat{p\mathbf{a}} + \widehat{q\mathbf{b}}$	$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ $p2/b11 [(a' + b')/4]$ $pb11 (a'/4)$			
($\bar{1}k0$)	\mathbf{c}	$\widehat{n\mathbf{a}} + \widehat{m\mathbf{b}}$	$-\widehat{p\mathbf{a}} + \widehat{q\mathbf{b}}$				L17		
(<i>kh0</i>)	\mathbf{c}	$\widehat{m\mathbf{a}} + \widehat{n\mathbf{b}}$	$\widehat{q\mathbf{a}} + \widehat{p\mathbf{b}}$				L16		
($\bar{1}\bar{k}h0$)	\mathbf{c}	$\widehat{m\mathbf{a}} - \widehat{n\mathbf{b}}$	$-\widehat{q\mathbf{a}} + \widehat{p\mathbf{b}}$				L12		
		n odd	m even				$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ $p2_1/b11 [(a' + b')/4]$ $pb11$
		p even	q odd				L16		
		n even	m odd				$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ $p2_1/b11 (a'/4)$ $pb11$
		p odd	q even				L17		
		n even	m odd				$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p\bar{1}}$ $c211$ $\widehat{p1}$
		p odd	q odd				L12		
		n odd	m odd				$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p\bar{1}}$ $c211 (b'/4)$ $\widehat{p1}$
		p odd	q even				L10		
		n odd	m even	$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ $p2/b11 (a'/4)$ $pb11 (a'/4)$			
		p odd	q odd	L17					
				L16					
				L12					
$\widehat{\mathbf{a}} = (\mathbf{a} - \mathbf{b})/2$				h even, k odd or h odd, k even $\Rightarrow n = h + k, m = h - k$					
$\widehat{\mathbf{b}} = (\mathbf{a} + \mathbf{b})/2$				h, k odd $\Rightarrow n = (h + k)/2, m = (h - k)/2$					
(<i>0hk</i>)	\mathbf{a}	$\widehat{n\mathbf{a}} - \widehat{m\mathbf{b}}$	$\widehat{p\mathbf{a}} + \widehat{q\mathbf{b}}$	$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ $p2/b11 [(a' + b')/4]$ $pb11 (a'/4)$			
($0\bar{1}k$)	\mathbf{a}	$\widehat{n\mathbf{a}} + \widehat{m\mathbf{b}}$	$-\widehat{p\mathbf{a}} + \widehat{q\mathbf{b}}$				L17		
(<i>0kh</i>)	\mathbf{a}	$\widehat{m\mathbf{a}} - \widehat{n\mathbf{b}}$	$\widehat{q\mathbf{a}} + \widehat{p\mathbf{b}}$				L16		
($0\bar{1}\bar{k}h$)	\mathbf{a}	$\widehat{m\mathbf{a}} + \widehat{n\mathbf{b}}$	$-\widehat{q\mathbf{a}} + \widehat{p\mathbf{b}}$				L12		
		n odd	m even				$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ $p2_1/b11 [(a' + b')/4]$ $pb11$
		p even	q odd				L16		
		n even	m odd				$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ $p2_1/b11 (a'/4)$ $pb11$
		p odd	q even				L17		
		n even	m odd				$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p\bar{1}}$ $c211$ $\widehat{p1}$
		p odd	q odd				L12		
		n odd	m odd				$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p\bar{1}}$ $c211 (b'/4)$ $\widehat{p1}$
		p even	q odd				L10		
		n odd	m even	$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ $p2/b11 (a'/4)$ $pb11 (a'/4)$			
		p odd	q odd	L17					
				L16					
				L12					
$\widehat{\mathbf{a}} = (\mathbf{b} - \mathbf{c})/2$				h even, k odd or h odd, k even $\Rightarrow n = h + k, m = h - k$					
$\widehat{\mathbf{b}} = (\mathbf{b} + \mathbf{c})/2$				h, k odd $\Rightarrow n = (h + k)/2, m = (h - k)/2$					

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}			
$(k0h)$	\mathbf{b}	$n\hat{\mathbf{a}} - m\hat{\mathbf{b}}$	$p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$	$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ L17
$(k0\bar{h})$	\mathbf{b}	$n\hat{\mathbf{a}} + m\hat{\mathbf{b}}$	$-p\hat{\mathbf{a}} + q\hat{\mathbf{b}}$			$p2/b11 [(a' + b')/4]$ L16
$(h0k)$	\mathbf{b}	$m\hat{\mathbf{a}} - n\hat{\mathbf{b}}$	$q\hat{\mathbf{a}} + p\hat{\mathbf{b}}$	$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11 (a'/4)$ L12
$(h0\bar{k})$	\mathbf{b}	$m\hat{\mathbf{a}} + n\hat{\mathbf{b}}$	$-q\hat{\mathbf{a}} + p\hat{\mathbf{b}}$			$p2/b11$ L16
		n odd	m even	$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11 [(a' + b')/4]$ L17
		p even	q odd			$pb11$ L12
		n even	m odd	$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ L16
		p odd	q even			$p2_1/b11 (a'/4)$ L17
		n even	m odd	$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11$ L12
		p odd	q odd			$\hat{p}\bar{1}$ L02
		n odd	m odd	$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$c211$ L10
		p even	q odd			$\hat{p}1$ L01
		n odd	m odd	$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}\bar{1}$ L02
		p odd	q even			$c211 (b'/4)$ L10
		n odd	m even	$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$ L01
		p odd	q odd			$p2_1/b11$ L17
		n odd	m even	$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11 (a'/4)$ L16
		p odd	q odd			$pb11 (a'/4)$ L12
	$\hat{\mathbf{a}} = (\mathbf{c} - \mathbf{a})/2$			h even, k odd or h odd, k even $\Rightarrow n = h + k, m = h - k$		
	$\hat{\mathbf{b}} = (\mathbf{c} + \mathbf{a})/2$			h, k odd $\Rightarrow n = (h + k)/2, m = (h - k)/2$		

Continued

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}				
(<i>hhl</i>)	$(\mathbf{a} - \mathbf{b})/2$	$n\hat{\mathbf{a}} - m\mathbf{c}$	$p\hat{\mathbf{a}} + q\mathbf{c}$				
($\bar{h}hl$)	$(\mathbf{a} - \mathbf{b})/2$	$n\hat{\mathbf{a}} + m\mathbf{c}$	$-p\hat{\mathbf{a}} + q\mathbf{c}$				
		<i>n</i> odd	<i>m</i> even	<i>I2/b11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p2/b11</i> <i>p2₁/b11</i> $[(\mathbf{a}' + \mathbf{b}')/4]$ <i>pb11</i>	L16 L17 L12
		<i>n</i> even	<i>m</i> odd	<i>I2/c11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p2₁/b11</i> <i>p2/b11</i> $[(\mathbf{a}' + \mathbf{b}')/4]$ <i>pb11</i> ($\mathbf{a}'/4$)	L17 L16 L12
		<i>n</i> even	<i>m</i> odd	<i>B2/n11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p2₁/b11</i> <i>p2/b11</i> ($\mathbf{a}'/4$) <i>pb11</i> ($\mathbf{a}'/4$)	L17 L16 L12
		<i>n</i> odd	<i>m</i> odd	<i>C2/n11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}\bar{1}$ <i>c211</i> ($\mathbf{b}'/4$) $\hat{p}1$	L02 L10 L01
		<i>n</i> odd	<i>m</i> odd	<i>C2/c11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}\bar{1}$ <i>c211</i> $\hat{p}1$	L02 L10 L01
		<i>n</i> odd	<i>m</i> even	<i>B2/b11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p2/b11</i> <i>p2₁/b11</i> ($\mathbf{a}'/4$) <i>pb11</i>	L16 L17 L12
$\hat{\mathbf{a}} = (\mathbf{a} + \mathbf{b})/2$ h odd $\Rightarrow m = h, n = 2l$; h even $\Rightarrow m = h/2, n = l$							
($\bar{h}\bar{h}l$)	$(\mathbf{a} + \mathbf{b})/2$	$n\hat{\mathbf{a}} - m\mathbf{c}$	$p\hat{\mathbf{a}} + q\mathbf{c}$				
($\bar{h}hl$)	$(\mathbf{a} + \mathbf{b})/2$	$n\hat{\mathbf{a}} + m\mathbf{c}$	$-p\hat{\mathbf{a}} + q\mathbf{c}$				
($\mathbf{a} + \mathbf{c})/4$ or ($\mathbf{b} + \mathbf{c})/4$)		<i>n</i> odd	<i>m</i> even	<i>I2/b11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p2/b11</i> <i>p2₁/b11</i> $[(\mathbf{a}' + \mathbf{b}')/4]$ <i>pb11</i>	L16 L17 L12
		<i>n</i> even	<i>m</i> odd	<i>I2/c11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p2₁/b11</i> <i>p2/b11</i> $[(\mathbf{a}' + \mathbf{b}')/4]$ <i>pb11</i> ($\mathbf{a}'/4$)	L17 L16 L12
		<i>n</i> even	<i>m</i> odd	<i>B2/n11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p2₁/b11</i> <i>p2/b11</i> ($\mathbf{a}'/4$) <i>pb11</i> ($\mathbf{a}'/4$)	L17 L16 L12
		<i>n</i> odd	<i>m</i> odd	<i>C2/n11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}\bar{1}$ <i>c211</i> ($\mathbf{b}'/4$) $\hat{p}1$	L02 L10 L01
		<i>n</i> odd	<i>m</i> odd	<i>C2/c11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}\bar{1}$ <i>c211</i> $\hat{p}1$	L02 L10 L01
		<i>n</i> odd	<i>m</i> even	<i>B2/b11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p2/b11</i> <i>p2₁/b11</i> ($\mathbf{a}'/4$) <i>pb11</i>	L16 L17 L12
$\hat{\mathbf{a}} = (\mathbf{b} - \mathbf{a})/2$ h odd $\Rightarrow m = h, n = 2l$; h even $\Rightarrow m = h/2, n = l$							

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit sd	Sectional layer group $\mathcal{L}(sd)$	
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}				
(lhh) $(\bar{l}h\bar{h})$	$(\mathbf{b} - \mathbf{c})/2$	$n\hat{\mathbf{a}} - m\mathbf{a}$	$p\hat{\mathbf{a}} + q\mathbf{a}$	$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$	L16
	$(\mathbf{b} - \mathbf{c})/2$	$n\hat{\mathbf{a}} + m\mathbf{a}$	$-p\hat{\mathbf{a}} + q\mathbf{a}$			$p2_1/b11 [(\mathbf{a}' + \mathbf{b}')/4]$	L17
		n odd	m even			$pb11$	L12
		p even	q odd				
		n even	m odd	$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$	L17
		p odd	q even			$p2/b11 [(\mathbf{a}' + \mathbf{b}')/4]$	L16
		n even	m odd			$pb11 (\mathbf{a}'/4)$	L12
		p odd	q odd	$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$	L17
		n even	m odd			$p2/b11 (\mathbf{a}'/4)$	L16
		p odd	q odd			$pb11 (\mathbf{a}'/4)$	L12
		n odd	m odd	$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}\bar{1}$	L02
		p even	q odd			$c211 (\mathbf{b}'/4)$	L10
		n odd	m odd			$\hat{p}1$	L01
		p odd	q even	$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}\bar{1}$	L02
		n odd	m odd			$c211$	L10
		p odd	q even			$\hat{p}1$	L01
		n odd	m even	$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$	L16
		p odd	q odd			$p2_1/b11 (\mathbf{a}'/4)$	L17
						$pb11$	L12
		$\hat{\mathbf{a}} = (\mathbf{b} + \mathbf{c})/2$			h odd $\Rightarrow m = h, n = 2l; h$ even $\Rightarrow m = h/2, n = l$		
$(l\bar{h}\bar{h})$ $(\bar{l}h\bar{h})$	$(\mathbf{b} + \mathbf{c})/2$	$n\hat{\mathbf{a}} - m\mathbf{a}$	$p\hat{\mathbf{a}} + q\mathbf{a}$	$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$	L16
	$(\mathbf{b} + \mathbf{c})/2$	$n\hat{\mathbf{a}} + m\mathbf{a}$	$-p\hat{\mathbf{a}} + q\mathbf{a}$			$p2_1/b11 [(\mathbf{a}' + \mathbf{b}')/4]$	L17
		n odd	m even			$pb11$	L12
		p even	q odd				
		n even	m odd	$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$	L17
		p odd	q even			$p2/b11 [(\mathbf{a}' + \mathbf{b}')/4]$	L16
		n even	m odd			$pb11 (\mathbf{a}'/4)$	L12
		p odd	q odd	$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$	L17
		n even	m odd			$p2/b11 (\mathbf{a}'/4)$	L16
		p odd	q odd			$pb11 (\mathbf{a}'/4)$	L12
		n odd	m odd	$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}\bar{1}$	L02
		p even	q odd			$c211 (\mathbf{b}'/4)$	L10
		n odd	m odd			$\hat{p}1$	L01
		p odd	q even	$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}\bar{1}$	L02
		n odd	m odd			$c211$	L10
		p odd	q even			$\hat{p}1$	L01
		n odd	m even	$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$	L16
		p odd	q odd			$p2_1/b11 (\mathbf{a}'/4)$	L17
						$pb11$	L12
		$\hat{\mathbf{a}} = (\mathbf{c} - \mathbf{b})/2$			h odd $\Rightarrow m = h, n = 2l; h$ even $\Rightarrow m = h/2, n = l$		

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit sd	Sectional layer group $\mathcal{L}(sd)$				
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}							
(hlh) $(\bar{h}l\bar{h})$	$(\mathbf{c} - \mathbf{a})/2$	$n\hat{\mathbf{a}} - m\mathbf{b}$	$p\hat{\mathbf{a}} + q\mathbf{b}$	$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$	L16			
	$(\mathbf{c} - \mathbf{a})/2$	$n\hat{\mathbf{a}} + m\mathbf{b}$	$-p\hat{\mathbf{a}} + q\mathbf{b}$				$p2_1/b11 [(a' + b')/4]$	L17		
		n odd	m even				$pb11$	L12		
		p even	q odd							
		n even	m odd				$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2_1/b11$	L17
		p odd	q even					$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2/b11 [(a' + b')/4]$	L16
								$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11 (a'/4)$	L12
		n even	m odd				$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2_1/b11$	L17
		p odd	q odd					$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2/b11 (a'/4)$	L16
								$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11 (a'/4)$	L12
		n odd	m odd				$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$\hat{p}\bar{1}$	L02
		p even	q odd					$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$c211 (b'/4)$	L10
				$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$	L01				
	n odd	m odd	$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$\hat{p}\bar{1}$	L02				
	p odd	q even		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$c211$	L10				
				$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$	L01				
	n odd	m even	$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2/b11$	L16				
	p odd	q odd		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2_1/b11 (a'/4)$	L17				
				$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11$	L12				
$\hat{\mathbf{a}} = (\mathbf{c} + \mathbf{a})/2$ h odd $\Rightarrow m = h, n = 2l; h$ even $\Rightarrow m = h/2, n = l$										
$(\bar{h}lh)$ $(h\bar{l}h)$ $(\mathbf{c} + \mathbf{b})/4$ or $(\mathbf{a} + \mathbf{b})/4$	$(\mathbf{c} + \mathbf{a})/2$	$n\hat{\mathbf{a}} - m\mathbf{b}$	$p\hat{\mathbf{a}} + q\mathbf{b}$	$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$	L16			
	$(\mathbf{c} + \mathbf{a})/2$	$n\hat{\mathbf{a}} + m\mathbf{b}$	$-p\hat{\mathbf{a}} + q\mathbf{b}$				$p2_1/b11 [(a' + b')/4]$	L17		
		n odd	m even				$pb11$	L12		
		p even	q odd							
		n even	m odd				$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2_1/b11$	L17
		p odd	q even					$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2/b11 [(a' + b')/4]$	L16
								$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11 (a'/4)$	L12
		n even	m odd				$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2_1/b11$	L17
		p odd	q odd					$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2/b11 (a'/4)$	L16
								$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11 (a'/4)$	L12
		n odd	m odd				$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$\hat{p}\bar{1}$	L02
		p even	q odd					$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$c211 (b'/4)$	L10
				$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$	L01				
	n odd	m odd	$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$\hat{p}\bar{1}$	L02				
	p odd	q even		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$c211$	L10				
				$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$	L01				
	n odd	m even	$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p2/b11$	L16				
	p odd	q odd		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p2_1/b11 (a'/4)$	L17				
				$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$pb11$	L12				
$\hat{\mathbf{a}} = (\mathbf{a} - \mathbf{c})/2$ h odd $\Rightarrow m = h, n = 2l; h$ even $\Rightarrow m = h/2, n = l$										

$$\mathcal{G} = I_m^4 \bar{3}_m^2$$

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$				
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}							
(<i>mn0</i>)	\mathbf{c}	$n\mathbf{a} - m\mathbf{b}$	$p\mathbf{a} + q\mathbf{b}$	<i>I</i> 2/ <i>m</i> 11	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p</i> 2/ <i>m</i> 11	L14			
($\bar{m}n0$)	\mathbf{c}	$n\mathbf{a} + m\mathbf{b}$	$-p\mathbf{a} + q\mathbf{b}$				<i>p</i> 2 ₁ / <i>m</i> 11 [($\mathbf{a}' + \mathbf{b}'$)/4]	L15		
(<i>nm0</i>)	\mathbf{c}	$m\mathbf{a} - n\mathbf{b}$	$q\mathbf{a} + p\mathbf{b}$					<i>p</i> m11	L11	
($\bar{n}m0$)	\mathbf{c}	$m\mathbf{a} + n\mathbf{b}$	$-q\mathbf{a} + p\mathbf{b}$							
(0 <i>mn</i>)	\mathbf{a}	$n\mathbf{b} - m\mathbf{c}$	$p\mathbf{b} + q\mathbf{c}$							
(0 $\bar{m}n$)	\mathbf{a}	$n\mathbf{b} + m\mathbf{c}$	$-p\mathbf{b} + q\mathbf{c}$							
(0 <i>nm</i>)	\mathbf{a}	$m\mathbf{b} - n\mathbf{c}$	$q\mathbf{b} + p\mathbf{c}$							
(0 $\bar{n}m$)	\mathbf{a}	$m\mathbf{b} + n\mathbf{c}$	$-q\mathbf{b} + p\mathbf{c}$							
(<i>n0m</i>)	\mathbf{b}	$n\mathbf{c} - m\mathbf{a}$	$p\mathbf{c} + q\mathbf{a}$							
(<i>n0m</i>)	\mathbf{b}	$n\mathbf{c} + m\mathbf{a}$	$-p\mathbf{c} + q\mathbf{a}$							
(<i>m0n</i>)	\mathbf{b}	$m\mathbf{c} - n\mathbf{a}$	$q\mathbf{c} + p\mathbf{a}$							
(<i>m0n</i>)	\mathbf{b}	$m\mathbf{c} + n\mathbf{a}$	$-q\mathbf{c} + p\mathbf{a}$							
		<i>n</i> odd <i>m</i> even								
		<i>p</i> even <i>q</i> odd								
		or								
		<i>n</i> even <i>m</i> odd								
		<i>p</i> odd <i>q</i> even								
		<i>p</i> odd <i>q</i> odd								
		<i>n</i> odd <i>m</i> odd								
			<i>B</i> 2/ <i>m</i> 11	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p</i> 2/ <i>m</i> 11	L14				
					<i>p</i> 2 ₁ / <i>m</i> 11 ($\mathbf{a}'/4$)	L15				
					<i>p</i> m11	L11				
			<i>C</i> 2/ <i>m</i> 11	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	<i>c</i> 2/ <i>m</i> 11	L18				
					<i>cm</i> 11	L13				
(<i>hhl</i>)	$\mathbf{a} - \mathbf{b}$	$n\hat{\mathbf{a}} - m\mathbf{c}$	$p\hat{\mathbf{a}} + q\mathbf{c}$	<i>C</i> 2/ <i>m</i> 11	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	<i>c</i> 2/ <i>m</i> 11	L18			
($\bar{h}hl$)	$\mathbf{a} - \mathbf{b}$	$n\hat{\mathbf{a}} + m\mathbf{c}$	$-p\hat{\mathbf{a}} + q\mathbf{c}$				<i>I</i> 2/ <i>m</i> 11	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p</i> 2/ <i>m</i> 11	L14
		<i>n</i> odd <i>m</i> even								<i>p</i> 2 ₁ / <i>m</i> 11 [($\mathbf{a}' + \mathbf{b}'$)/4]
		<i>q</i> odd		<i>p</i> m11	L11					
		<i>m</i> odd			<i>p</i> 2/ <i>m</i> 11	<i>p</i> 2 ₁ / <i>m</i> 11 ($\mathbf{a}'/4$)	L14			
		<i>p</i> odd <i>q</i> even						<i>p</i> 2 ₁ / <i>m</i> 11 [($\mathbf{a}' + \mathbf{b}'$)/4]	<i>p</i> m11	L15
				<i>p</i> m11						
					<i>p</i> 2/ <i>m</i> 11	<i>p</i> 2 ₁ / <i>m</i> 11 ($\mathbf{a}'/4$)	L14			
								<i>p</i> 2 ₁ / <i>m</i> 11 [($\mathbf{a}' + \mathbf{b}'$)/4]	<i>p</i> m11	L15
				<i>p</i> m11						
					<i>p</i> 2/ <i>m</i> 11	<i>p</i> 2 ₁ / <i>m</i> 11 ($\mathbf{a}'/4$)	L14			
								<i>p</i> 2 ₁ / <i>m</i> 11 [($\mathbf{a}' + \mathbf{b}'$)/4]	<i>p</i> m11	L15
				<i>p</i> m11						
					<i>p</i> 2/ <i>m</i> 11	<i>p</i> 2 ₁ / <i>m</i> 11 ($\mathbf{a}'/4$)	L14			
								<i>p</i> 2 ₁ / <i>m</i> 11 [($\mathbf{a}' + \mathbf{b}'$)/4]	<i>p</i> m11	L15
				<i>p</i> m11						
					<i>p</i> 2/ <i>m</i> 11	<i>p</i> 2 ₁ / <i>m</i> 11 ($\mathbf{a}'/4$)	L14			
								<i>p</i> 2 ₁ / <i>m</i> 11 [($\mathbf{a}' + \mathbf{b}'$)/4]	<i>p</i> m11	L15
				<i>p</i> m11						
					<i>p</i> 2/ <i>m</i> 11	<i>p</i> 2 ₁ / <i>m</i> 11 ($\mathbf{a}'/4$)	L14			
								<i>p</i> 2 ₁ / <i>m</i> 11 [($\mathbf{a}' + \mathbf{b}'$)/4]	<i>p</i> m11	L15
				<i>p</i> m11						
					<i>p</i> 2/ <i>m</i> 11	<i>p</i> 2 ₁ / <i>m</i> 11 ($\mathbf{a}'/4$)	L14			
								<i>p</i> 2 ₁ / <i>m</i> 11 [($\mathbf{a}' + \mathbf{b}'$)/4]	<i>p</i> m11	L15
				<i>p</i> m11						
					<i>p</i> 2/ <i>m</i> 11	<i>p</i> 2 ₁ / <i>m</i> 11 ($\mathbf{a}'/4$)	L14			
								<i>p</i> 2 ₁ / <i>m</i> 11 [($\mathbf{a}' + \mathbf{b}'$)/4]	<i>p</i> m11	L15
				<i>p</i> m11						
					<i>p</i> 2/ <i>m</i> 11	<i>p</i> 2 ₁ / <i>m</i> 11 ($\mathbf{a}'/4$)	L14			
								<i>p</i> 2 ₁ / <i>m</i> 11 [($\mathbf{a}' + \mathbf{b}'$)/4]	<i>p</i> m11	L15
				<i>p</i> m11						
					<i>p</i> 2/ <i>m</i> 11	<i>p</i> 2 ₁ / <i>m</i> 11 ($\mathbf{a}'/4$)	L14			
								<i>p</i> 2 ₁ / <i>m</i> 11 [($\mathbf{a}' + \mathbf{b}'$)/4]	<i>p</i> m11	L15
				<i>p</i> m11						
					<i>p</i> 2/ <i>m</i> 11	<i>p</i> 2 ₁ / <i>m</i> 11 ($\mathbf{a}'/4$)	L14			
								<i>p</i> 2 ₁ / <i>m</i> 11 [($\mathbf{a}' + \mathbf{b}'$)/4]	<i>p</i> m11	L15
				<i>p</i> m11						
					<i>p</i> 2/ <i>m</i> 11	<i>p</i> 2 ₁ / <i>m</i> 11 ($\mathbf{a}'/4$)	L14			
								<i>p</i> 2 ₁ / <i>m</i> 11 [($\mathbf{a}' + \mathbf{b}'$)/4]	<i>p</i> m11	L15
				<i>p</i> m11						
					<i>p</i> 2/ <i>m</i> 11	<i>p</i> 2 ₁ / <i>m</i> 11 ($\mathbf{a}'/4$)	L14			
								<i>p</i> 2 ₁ / <i>m</i> 11 [($\mathbf{a}' + \mathbf{b}'$)/4]	<i>p</i> m11	L15
				<i>p</i> m11						
					<i>p</i> 2/ <i>m</i> 11	<i>p</i> 2 ₁ / <i>m</i> 11 ($\mathbf{a}'/4$)	L14			
								<i>p</i> 2 ₁ / <i>m</i> 11 [($\mathbf{a}' + \mathbf{b}'$)/4]	<i>p</i> m11	L15
				<i>p</i> m11						
					<i>p</i> 2/ <i>m</i> 11	<i>p</i> 2 ₁ / <i>m</i> 11 ($\mathbf{a}'/4$)	L14			
								<i>p</i> 2 ₁ / <i>m</i> 11 [($\mathbf{a}' + \mathbf{b}'$)/4]	<i>p</i> m11	L15
				<i>p</i> m11						
					<i>p</i> 2/ <i>m</i> 11	<i>p</i> 2 ₁ / <i>m</i> 11 ($\mathbf{a}'/4$)	L14			
								<i>p</i> 2 ₁ / <i>m</i> 11 [($\mathbf{a}' + \mathbf{b}'$)/4]	<i>p</i> m11	L15
				<i>p</i> m11						
					<i>p</i> 2/ <i>m</i> 11	<i>p</i> 2 ₁ / <i>m</i> 11 ($\mathbf{a}'/4$)	L14			
								<i>p</i> 2 ₁ / <i>m</i> 11 [($\mathbf{a}' + \mathbf{b}'$)/4]	<i>p</i> m11	L15
				<i>p</i> m11						
					<i>p</i> 2/ <i>m</i> 11	<i>p</i> 2 ₁ / <i>m</i> 11 ($\mathbf{a}'/4$)	L14			
								<i>p</i> 2 ₁ / <i>m</i> 11 [($\mathbf{a}' + \mathbf{b}'$)/4]	<i>p</i> m11	L15
				<i>p</i> m11						
					<i>p</i> 2/ <i>m</i> 11	<i>p</i> 2 ₁ / <i>m</i> 11 ($\mathbf{a}'/4$)	L14			
								<i>p</i> 2 ₁ / <i>m</i> 11 [($\mathbf{a}' + \mathbf{b}'$)/4]	<i>p</i> m11	L15
				<i>p</i> m11						
					<i>p</i> 2/ <i>m</i> 11	<i>p</i> 2 ₁ / <i>m</i> 11 ($\mathbf{a}'/4$)	L14			
								<i>p</i> 2 ₁ / <i>m</i> 11 [($\mathbf{a}' + \mathbf{b}'$)/4]	<i>p</i> m11	L15
				<i>p</i> m11						
					<i>p</i> 2/ <i>m</i> 11	<i>p</i> 2 ₁ / <i>m</i> 11 ($\mathbf{a}'/4$)	L14			
								<i>p</i> 2 ₁ / <i>m</i> 11 [($\mathbf{a}' + \mathbf{b}'$)/4]	<i>p</i> m11	L15
				<i>p</i> m11						
					<i>p</i> 2/ <i>m</i> 11	<i>p</i> 2 ₁ / <i>m</i> 11 ($\mathbf{a}'/4$)	L14			
								<i>p</i> 2 ₁ / <i>m</i> 11 [($\mathbf{a}' + \mathbf{b}'$)/4]	<i>p</i> m11	L15
				<i>p</i> m11						
					<i>p</i> 2/ <i>m</i> 11	<i>p</i> 2 ₁ / <i>m</i> 11 ($\mathbf{a}'/4$)	L14			
								<i>p</i> 2 ₁ / <i>m</i> 11 [($\mathbf{a}' + \mathbf{b}'$)/4]	<i>p</i> m11	L15
				<i>p</i> m11						
					<i>p</i> 2/ <i>m</i> 11	<i>p</i> 2 ₁ / <i>m</i> 11 ($\mathbf{a}'/4$)	L14			
								<i>p</i> 2 ₁ / <i>m</i> 11 [($\mathbf{a}' + \mathbf{b}'$)/4]	<i>p</i> m11	L15
				<i>p</i> m11						
					<i>p</i> 2/ <i>m</i> 11	<i>p</i> 2 ₁ / <i>m</i> 11 ($\mathbf{a}'/4$)	L14			
								<i>p</i> 2 ₁ / <i>m</i> 11 [($\mathbf{a}' + \mathbf{b}'$)/4]	<i>p</i> m11	L15
				<i>p</i> m11						
					<i>p</i> 2/ <i>m</i> 11	<i>p</i> 2 ₁ / <i>m</i> 11 ($\mathbf{a}'/4$)	L14			
								<i>p</i> 2 ₁ / <i>m</i> 11 [($\mathbf{a}' + \mathbf{b}'$)/4]	<i>p</i> m11	L15
				<i>p</i> m11						
					<i>p</i> 2/ <i>m</i> 11	<i>p</i> 2 ₁ / <i>m</i> 11 ($\mathbf{a}'/4$)	L14			
								<i>p</i> 2 ₁ / <i>m</i> 11 [($\mathbf{a}' + \mathbf{b}'$)/4]	<i>p</i> m11	L15
				<i>p</i> m11						
					<i>p</i> 2/ <i>m</i> 11	<i>p</i> 2 ₁ / <i>m</i> 11 ($\mathbf{a}'/4$)	L14			
								<i>p</i> 2 ₁ / <i>m</i> 11 [($\mathbf{a}' + \mathbf{b}'$)/4]	<i>p</i> m11	L15
				<i>p</i> m11						
					<i>p</i> 2/ <i>m</i> 11	<i>p</i> 2 ₁ / <i>m</i> 11 ($\mathbf{a}'/4$)	L14			
								<i>p</i> 2 ₁ / <i>m</i> 11 [($\mathbf{a}' + \mathbf{b}'$)/4]	<i>p</i> m11	L15
				<i>p</i> m11						
					<i>p</i> 2/ <i>m</i> 11	<i>p</i> 2 ₁ / <i>m</i> 11 ($\mathbf{a}'/4$)	L14			
								<i>p</i> 2 ₁ / <i>m</i> 11 [($\mathbf{a}' + \mathbf{b}'$)/4]	<i>p</i> m11	L15
				<i>p</i> m11						
					<i>p</i> 2/ <i>m</i> 11	<i>p</i> 2 ₁ / <i>m</i> 11 ($\mathbf{a}'/4$)	L14			
								<i>p</i> 2 ₁ / <i>m</i> 11 [($\mathbf{a}' + \mathbf{b}'$)/4]	<i>p</i> m11	L15
				<i>p</i> m11						
					<i>p</i> 2/ <i>m</i> 11	<i>p</i> 2 ₁ / <i>m</i> 11 ($\mathbf{a}'/4$)	L14			
								<i>p</i> 2 ₁ / <i>m</i> 11 [($\mathbf{a}' + \mathbf{b}'$)/4]	<i>p</i> m11	L15
				<i>p</i> m11						
					<i>p</i> 2/ <i>m</i> 11	<i>p</i> 2 ₁ / <i>m</i> 11 ($\mathbf{a}'/4$)	L14			
								<i>p</i> 2 ₁ / <i>m</i> 11 [($\mathbf{a}' + \mathbf{b}'$)/4]	<i>p</i> m11	L15
				<i>p</i> m11						
					<i>p</i> 2/ <i>m</i> 11	<i>p</i> 2 ₁ / <i>m</i> 11 ($\mathbf{a}'/4$)	L14			
								<i>p</i> 2 ₁ / <i>m</i> 11 [($\mathbf{a}' + \mathbf{b}'$)/4]	<i>p</i> m11	L15
				<i>p</i> m11						
					<i>p</i> 2/ <i>m</i> 11	<i>p</i> 2 ₁ / <i>m</i> 11 ($\mathbf{a}'/4$)	L14			
								<i>p</i> 2 ₁ / <i>m</i> 11 [($\mathbf{a}' + \mathbf{b}'$)/4]	<i>p</i> m11	L15
				<i>p</i> m11						
					<i>p</i> 2/					

$$\mathcal{G} = I_m^4 \bar{3}_m^2$$

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit <i>sd</i>	Sectional layer group $\mathcal{L}(sd)$	
	a'	b'	d				
<i>(lhh)</i> <i>(\bar{l}hh)</i>	b - c	$n\hat{a} - ma$	$p\hat{a} + qa$	<i>C2/m11</i>	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [<i>sd</i> , - <i>sd</i>]	<i>c2/m11</i> <i>cm11</i>	L18 L13
	b - c	$n\hat{a} + ma$	$-p\hat{a} + qa$				
			<i>n</i> odd <i>m</i> even	<i>I2/m11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	<i>p2/m11</i> <i>p2₁/m11</i> [(a' + b')/4]	L14 L15 L11
			<i>m</i> odd <i>q</i> odd				
			<i>p</i> odd <i>m</i> odd <i>q</i> even	<i>B2/m11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	<i>p2/m11</i> <i>p2₁/m11</i> (a' /4)	L14 L15 L11
$\hat{\mathbf{a}} = (\mathbf{b} + \mathbf{c} + \mathbf{a})/2$ <i>l</i> odd $\Rightarrow n = 2l, m = 2h + l$; <i>l</i> even $\Rightarrow n = l, m = h + l/2$							
<i>(lh\bar{h})</i> <i>(\bar{l}h\bar{h})</i>	b + c	$n\hat{a} - ma$	$p\hat{a} + qa$	<i>C2/m11</i>	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [<i>sd</i> , - <i>sd</i>]	<i>c2/m11</i> <i>cm11</i>	L18 L13
	b + c	$n\hat{a} + ma$	$-p\hat{a} + qa$				
			<i>n</i> odd <i>m</i> even	<i>I2/m11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	<i>p2/m11</i> <i>p2₁/m11</i> [(a' + b')/4]	L14 L15 L11
			<i>q</i> odd <i>m</i> odd				
			<i>p</i> odd <i>m</i> odd <i>q</i> even	<i>B2/m11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	<i>p2/m11</i> <i>p2₁/m11</i> (a' /4)	L14 L15 L11
$\hat{\mathbf{a}} = (\mathbf{c} - \mathbf{b} + \mathbf{a})/2$ <i>l</i> odd $\Rightarrow n = 2l, m = 2h + l$; <i>l</i> even $\Rightarrow n = l, m = h + l/2$							
<i>(hlh)</i> <i>(\bar{h}lh)</i>	c - a	$n\hat{a} - mb$	$p\hat{a} + qb$	<i>C2/m11</i>	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [<i>sd</i> , - <i>sd</i>]	<i>c2/m11</i> <i>cm11</i>	L18 L13
	c - a	$n\hat{a} + mb$	$-p\hat{a} + qb$				
			<i>n</i> odd <i>m</i> even	<i>I2/m11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	<i>p2/m11</i> <i>p2₁/m11</i> [(a' + b')/4]	L14 L15 L11
			<i>q</i> odd <i>m</i> odd				
			<i>p</i> odd <i>m</i> odd <i>q</i> even	<i>B2/m11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	<i>p2/m11</i> <i>p2₁/m11</i> (a' /4)	L14 L15 L11
$\hat{\mathbf{a}} = (\mathbf{c} + \mathbf{a} + \mathbf{b})/2$ <i>l</i> odd $\Rightarrow n = 2l, m = 2h + l$; <i>l</i> even $\Rightarrow n = l, m = h + l/2$							
<i>(\bar{h}lh)</i> <i>(hlh)</i>	c + a	$n\hat{a} - mb$	$p\hat{a} + qb$	<i>C2/m11</i>	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ [<i>sd</i> , - <i>sd</i>]	<i>c2/m11</i> <i>cm11</i>	L18 L13
	c + a	$n\hat{a} + mb$	$-p\hat{a} + qb$				
			<i>n</i> odd <i>m</i> even	<i>I2/m11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	<i>p2/m11</i> <i>p2₁/m11</i> [(a' + b')/4]	L14 L15 L11
			<i>q</i> odd <i>m</i> odd				
			<i>p</i> odd <i>m</i> odd <i>q</i> even	<i>B2/m11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ [$\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}$]	<i>p2/m11</i> <i>p2₁/m11</i> (a' /4)	L14 L15 L11
$\hat{\mathbf{a}} = (\mathbf{a} - \mathbf{c} + \mathbf{b})/2$ <i>l</i> odd $\Rightarrow n = 2l, m = 2h + l$; <i>l</i> even $\Rightarrow n = l, m = h + l/2$							

$$\mathcal{G} = I_a^4 \bar{3}_d^2$$

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}			
(<i>mn0</i>)	\mathbf{c}	$n\mathbf{a} - m\mathbf{b}$	$p\mathbf{a} + q\mathbf{b}$			
($\bar{m}n0$)	\mathbf{c}	$n\mathbf{a} + m\mathbf{b}$	$-p\mathbf{a} + q\mathbf{b}$			
(<i>nm0</i>)	\mathbf{c}	$m\mathbf{a} - n\mathbf{b}$	$q\mathbf{a} + p\mathbf{b}$			
($\bar{n}m0$)	\mathbf{c}	$m\mathbf{a} + n\mathbf{b}$	$-q\mathbf{a} + p\mathbf{b}$			
(<i>0mn</i>)	\mathbf{a}	$n\mathbf{b} - m\mathbf{c}$	$p\mathbf{b} + q\mathbf{c}$			
($0\bar{m}n$)	\mathbf{a}	$n\mathbf{b} + m\mathbf{c}$	$-p\mathbf{b} + q\mathbf{c}$			
(<i>0nm</i>)	\mathbf{a}	$m\mathbf{b} - n\mathbf{c}$	$q\mathbf{b} + p\mathbf{c}$			
($0\bar{n}m$)	\mathbf{a}	$m\mathbf{b} + n\mathbf{c}$	$-q\mathbf{b} + p\mathbf{c}$			
(<i>n0m</i>)	\mathbf{b}	$n\mathbf{c} - m\mathbf{a}$	$p\mathbf{c} + q\mathbf{a}$			
($n0\bar{m}$)	\mathbf{b}	$n\mathbf{c} + m\mathbf{a}$	$-p\mathbf{c} + q\mathbf{a}$			
(<i>m0n</i>)	\mathbf{b}	$m\mathbf{c} - n\mathbf{a}$	$q\mathbf{c} + p\mathbf{a}$			
($m0\bar{n}$)	\mathbf{b}	$m\mathbf{c} + n\mathbf{a}$	$-q\mathbf{c} + p\mathbf{a}$			
			<i>n</i> odd <i>m</i> even <i>p</i> even <i>q</i> odd	$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ L17 $p2/b11 [(a' + b')/4]$ L16 $pb11 (a'/4)$ L12
			<i>n</i> even <i>m</i> odd <i>p</i> odd <i>q</i> even	$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ L16 $p2_1/b11 [(a' + b')/4]$ L17 $pb11$ L12
			<i>n</i> even <i>m</i> odd <i>p</i> odd <i>q</i> odd	$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ L16 $p2_1/b11 (a'/4)$ L17 $pb11$ L12
			<i>n</i> odd <i>m</i> odd <i>p</i> even <i>q</i> odd	$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p1}$ L02 $c211$ L10 $\widehat{p1}$ L01
			<i>n</i> odd <i>m</i> odd <i>p</i> odd <i>q</i> even	$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\widehat{p1}$ L02 $c211 (b'/4)$ L10 $\widehat{p1}$ L01
			<i>n</i> odd <i>m</i> even <i>p</i> odd <i>q</i> odd	$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ L17 $p2/b11 (a'/4)$ L16 $pb11 (a'/4)$ L12

Continued

$$\mathcal{G} = I_a^4 \bar{3}_d^2$$

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$	
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}				
(<i>hhl</i>)	$\mathbf{a} - \mathbf{b}$	$n\hat{\mathbf{a}} - m\mathbf{c}$	$p\hat{\mathbf{a}} + q\mathbf{c}$			$\hat{p}\bar{1}$	L02
($\bar{h}hl$)	$\mathbf{a} - \mathbf{b}$	$n\hat{\mathbf{a}} + m\mathbf{c}$	$-p\hat{\mathbf{a}} + q\mathbf{c}$			$c211$	L10
			<i>n</i> odd <i>m</i> even	<i>C2/c11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$	L01
			<i>p</i> even <i>q</i> odd				
			<i>n</i> even <i>m</i> odd	<i>B2/b11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p2/b11</i>	L16
			<i>p</i> odd <i>q</i> even			<i>p2₁/b11</i> ($\mathbf{a}'/4$)	L17
						<i>pb11</i>	L12
			<i>n</i> even <i>m</i> odd	<i>I2/b11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p2/b11</i>	L16
			<i>p</i> odd <i>q</i> odd			<i>p2₁/b11</i> [$(\mathbf{a}' + \mathbf{b}')/4$]	L17
						<i>pb11</i>	L12
			<i>n</i> odd <i>m</i> odd	<i>I2/c11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p2₁/b11</i>	L17
			<i>p</i> even <i>q</i> odd			<i>p2/b11</i> [$(\mathbf{a}' + \mathbf{b}')/4$]	L16
						<i>pb11</i> ($\mathbf{a}'/4$)	L12
			<i>n</i> odd <i>m</i> odd	<i>B2/n11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p2₁/b11</i>	L17
			<i>p</i> odd <i>q</i> even			<i>p2/b11</i> ($\mathbf{a}'/4$)	L16
						<i>pb11</i> ($\mathbf{a}'/4$)	L12
			<i>n</i> odd <i>m</i> even	<i>C2/n11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}\bar{1}$	L02
			<i>p</i> odd <i>q</i> odd			$c211$ ($\mathbf{b}'/4$)	L10
						$\hat{p}1$	L01
$\hat{\mathbf{a}} = (\mathbf{a} + \mathbf{b} + \mathbf{c})/2$				<i>l</i> odd $\Rightarrow n = 2l, m = 2h + l; l$ even $\Rightarrow n = l, m = h + l/2$			
($\bar{h}\bar{h}l$)	$\mathbf{a} + \mathbf{b}$	$n\hat{\mathbf{a}} - m\mathbf{c}$	$p\hat{\mathbf{a}} + q\mathbf{c}$			$\hat{p}\bar{1}$	L02
($\bar{h}hl$)	$\mathbf{a} + \mathbf{b}$	$n\hat{\mathbf{a}} + m\mathbf{c}$	$-p\hat{\mathbf{a}} + q\mathbf{c}$			$c211$	L10
			<i>n</i> odd <i>m</i> even	<i>C2/c11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}1$	L01
			<i>p</i> even <i>q</i> odd				
			<i>n</i> even <i>m</i> odd	<i>B2/b11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p2/b11</i>	L16
			<i>p</i> odd <i>q</i> even			<i>p2₁/b11</i> ($\mathbf{a}'/4$)	L17
						<i>pb11</i>	L12
			<i>n</i> even <i>m</i> odd	<i>I2/b11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p2/b11</i>	L16
			<i>p</i> odd <i>q</i> odd			<i>p2₁/b11</i> [$(\mathbf{a}' + \mathbf{b}')/4$]	L17
						<i>pb11</i>	L12
			<i>n</i> odd <i>m</i> odd	<i>I2/c11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p2₁/b11</i>	L17
			<i>p</i> even <i>q</i> odd			<i>p2/b11</i> [$(\mathbf{a}' + \mathbf{b}')/4$]	L16
						<i>pb11</i> ($\mathbf{a}'/4$)	L12
			<i>n</i> odd <i>m</i> odd	<i>B2/n11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	<i>p2₁/b11</i>	L17
			<i>p</i> odd <i>q</i> even			<i>p2/b11</i> ($\mathbf{a}'/4$)	L16
						<i>pb11</i> ($\mathbf{a}'/4$)	L12
			<i>n</i> odd <i>m</i> even	<i>C2/n11</i>	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}\bar{1}$	L02
			<i>p</i> odd <i>q</i> odd			$c211$ ($\mathbf{b}'/4$)	L10
						$\hat{p}1$	L01
$\hat{\mathbf{a}} = (\mathbf{b} - \mathbf{a} + \mathbf{c})/2$				<i>l</i> odd $\Rightarrow n = 2l, m = 2h + l; l$ even $\Rightarrow n = l, m = h + l/2$			

$$\mathcal{G} = I_a^4 \bar{3}_d^2$$

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$		
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}					
(lhh) $(\bar{l}h\bar{h})$	$\mathbf{b} - \mathbf{c}$	$n\hat{\mathbf{a}} - m\mathbf{a}$	$p\hat{\mathbf{a}} + q\mathbf{a}$	$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}\bar{1}$ $c211$ $\hat{p}1$	L02	
	$\mathbf{b} - \mathbf{c}$	$n\hat{\mathbf{a}} + m\mathbf{a}$	$-p\hat{\mathbf{a}} + q\mathbf{a}$				L10	
		n odd	m even				L01	
		p even	q odd					
		n even	m odd		$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ $p2_1/b11 (\mathbf{a}'/4)$ $pb11$	L16
		p odd	q even				L17	
		n even	m odd		$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ $p2_1/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ $pb11$	L16
		p odd	q odd				L17	
		n even	m odd		$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ $p2/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ $pb11 (\mathbf{a}'/4)$	L17
		p even	q odd				L16	
		n odd	m odd		$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ $p2/b11 (\mathbf{a}'/4)$ $pb11 (\mathbf{a}'/4)$	L17
		p odd	q even				L16	
		n odd	m even		$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}\bar{1}$ $c211 (\mathbf{b}'/4)$ $\hat{p}1$	L02
		p odd	q odd				L10	
						L01		
$\hat{\mathbf{a}} = (\mathbf{b} + \mathbf{c} + \mathbf{a})/2$ l odd $\Rightarrow n = 2l, m = 2h + l; l$ even $\Rightarrow n = l, m = h + l/2$								
$(lh\bar{h})$ $(\bar{l}h\bar{h})$	$\mathbf{b} + \mathbf{c}$	$n\hat{\mathbf{a}} - m\mathbf{a}$	$p\hat{\mathbf{a}} + q\mathbf{a}$	$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}\bar{1}$ $c211$ $\hat{p}1$	L02	
	$\mathbf{b} + \mathbf{c}$	$n\hat{\mathbf{a}} + m\mathbf{a}$	$-p\hat{\mathbf{a}} + q\mathbf{a}$				L10	
		n odd	m even				L01	
		p even	q odd					
		n even	m odd		$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ $p2_1/b11 (\mathbf{a}'/4)$ $pb11$	L16
		p odd	q even				L17	
		n even	m odd		$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ $p2_1/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ $pb11$	L16
		p odd	q odd				L17	
		n odd	m odd		$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ $p2/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ $pb11 (\mathbf{a}'/4)$	L17
		p even	q odd				L16	
		n odd	m odd		$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ $p2/b11 (\mathbf{a}'/4)$ $pb11 (\mathbf{a}'/4)$	L17
		p odd	q even				L16	
		n odd	m even		$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}\bar{1}$ $c211 (\mathbf{b}'/4)$ $\hat{p}1$	L02
		p odd	q odd				L10	
						L01		
$\hat{\mathbf{a}} = (\mathbf{c} - \mathbf{b} + \mathbf{a})/2$ l odd $\Rightarrow n = 2l, m = 2h + l; l$ even $\Rightarrow n = l, m = h + l/2$								

$$\mathcal{G} = I_a^4 \bar{3}_d^2$$

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit $s\mathbf{d}$	Sectional layer group $\mathcal{L}(s\mathbf{d})$				
	\mathbf{a}'	\mathbf{b}'	\mathbf{d}							
(hlh) $(\bar{h}l\bar{h})$	$\mathbf{c} - \mathbf{a}$	$n\hat{\mathbf{a}} - m\mathbf{b}$	$p\hat{\mathbf{a}} + q\mathbf{b}$	$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}\bar{1}$ $c211$ $\hat{p}1$	L02			
	$\mathbf{c} - \mathbf{a}$	$n\hat{\mathbf{a}} + m\mathbf{b}$	$-p\hat{\mathbf{a}} + q\mathbf{b}$				L10			
		n odd	m even				L01			
		p even	q odd							
		n even	m odd				$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ $p2_1/b11 (\mathbf{a}'/4)$ $pb11$	L16 L17 L12
		p odd	q even							
		n even	m odd				$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ $p2_1/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ $pb11$	L16 L17 L12
		p odd	q odd							
		n odd	m odd				$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ $p2/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ $pb11 (\mathbf{a}'/4)$	L17 L16 L12
		p even	q odd							
	n odd	m odd	$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ $p2/b11 (\mathbf{a}'/4)$ $pb11 (\mathbf{a}'/4)$	L17 L16 L12				
	p odd	q even								
	n odd	m even	$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}\bar{1}$ $c211 (\mathbf{b}'/4)$ $\hat{p}1$	L02 L10 L01				
	p odd	q odd								
$\hat{\mathbf{a}} = (\mathbf{c} + \mathbf{a} + \mathbf{b})/2$ l odd $\Rightarrow n = 2l, m = 2h + l; l$ even $\Rightarrow n = l, m = h + l/2$										
$(\bar{h}lh)$ $(h\bar{l}h)$	$\mathbf{c} + \mathbf{a}$	$n\hat{\mathbf{a}} - m\mathbf{b}$	$p\hat{\mathbf{a}} + q\mathbf{b}$	$C2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}\bar{1}$ $c211$ $\hat{p}1$	L02			
	$\mathbf{c} + \mathbf{a}$	$n\hat{\mathbf{a}} + m\mathbf{b}$	$-p\hat{\mathbf{a}} + q\mathbf{b}$				L10			
		n odd	m even				L01			
		p even	q odd							
		n even	m odd				$B2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ $p2_1/b11 (\mathbf{a}'/4)$ $pb11$	L16 L17 L12
		p odd	q even							
		n even	m odd				$I2/b11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/b11$ $p2_1/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ $pb11$	L16 L17 L12
		p odd	q odd							
		n odd	m odd				$I2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ $p2/b11 [(\mathbf{a}' + \mathbf{b}')/4]$ $pb11 (\mathbf{a}'/4)$	L17 L16 L12
		p even	q odd							
	n odd	m odd	$B2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2_1/b11$ $p2/b11 (\mathbf{a}'/4)$ $pb11 (\mathbf{a}'/4)$	L17 L16 L12				
	p odd	q even								
	n odd	m even	$C2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$\hat{p}\bar{1}$ $c211 (\mathbf{b}'/4)$ $\hat{p}1$	L02 L10 L01				
	p odd	q odd								
$\hat{\mathbf{a}} = (\mathbf{a} - \mathbf{c} + \mathbf{b})/2$ l odd $\Rightarrow n = 2l, m = 2h + l; l$ even $\Rightarrow n = l, m = h + l/2$										