

Laue class $C_{2h} - 2/m$

6. SCANNING TABLES

Monoclinic

 No. 11 $P2_1/m$
 $\mathcal{G} = P12_1/m1$ UNIQUE AXIS b
 C_{2h}^2
 $\mathcal{G} = P112_1/m$ UNIQUE AXIS c

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit sd	Sectional layer group $\mathcal{L}(sd)$	
	a'	b'	d				
UNIQUE AXIS b (010)	c	a	b	$P112_1/m$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$	L02
UNIQUE AXIS c (001)	a	b	c			$p11m$	L04
UNIQUE AXIS b ($n0m$)	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
UNIQUE AXIS c ($mn0$)	c	$na - mb$	$pa + qb$			$pm11$ ($a'/4$)	L11

 No. 12 $C2/m$
 $\mathcal{G} = C12/m1$ UNIQUE AXIS b
 C_{2h}^3

CELL CHOICE 1

 $\mathcal{G} = A112/m$ UNIQUE AXIS c

Orientation orbit (hkl)	Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit sd	Sectional layer group $\mathcal{L}(sd)$	
	a'	b'	d				
UNIQUE AXIS b (010)	c	a	b	$A112/m$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p112/m$	L06
UNIQUE AXIS c (001)	a	b	c			$p112/b$ ($b/4$)	L07
UNIQUE AXIS b ($n0m$)	b	$nc - ma$	$pc + qa$	$B2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$	L14
UNIQUE AXIS c ($mn0$)	c	$na - mb$	$pa + qb$			$p2_1/m11$ ($a'/4$)	L15
		n odd p even	q odd			$pm11$	L11
		n even p odd	m odd	$C2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c2/m11$	L18
		n odd p odd		$I2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$cm11$	L13
		n odd p odd				$p2/m11$	L14
						$p2_1/m11$ [$(a' + b')/4$]	L15
						$pm11$	L11

No. 12 C_2/m

C_{2h}^3

$$\mathcal{G} = A12/m1 \quad \text{UNIQUE AXIS } b$$

CELL CHOICE 2

$$\mathcal{G} = B112/m \quad \text{UNIQUE AXIS } c$$

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group a' b' d	Scanning group \mathcal{H}	Linear orbit sd	Sectional layer group $\mathcal{L}(\mathbf{sd})$				
UNIQUE AXIS <i>b</i> (010)	c a b	$B112/m$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p112/m$ $p112/a$ (a /4) $p112$	L06			
UNIQUE AXIS <i>c</i> (001)	a b c				L07			
					L03			
UNIQUE AXIS <i>b</i> (<i>n</i> 0 <i>m</i>)	b $nc - ma$ $pc + qa$	$C2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c2/m11$ $cm11$	L18			
UNIQUE AXIS <i>c</i> (<i>m</i> <i>n</i> 0)	c $na - mb$ $pa + qb$ <i>n</i> odd <i>m</i> even <i>q</i> odd <i>m</i> odd <i>q</i> odd				$I2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ $p2_1/m11$ [(a' + b')/4] $pm11$	L14
								L15
								L11
	<i>p</i> odd <i>q</i> even	$B2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ $p2_1/m11$ (a' /4) $pm11$	L14 L15 L11			

No. 12 C_2/m

C_{2h}^3

$$\mathcal{G} = I12/m1 \quad \text{UNIQUE AXIS } b$$

CELL CHOICE 3

$$\mathcal{G} = I112/m \quad \text{UNIQUE AXIS } c$$

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group a' b' d	Scanning group \mathcal{H}	Linear orbit sd	Sectional layer group $\mathcal{L}(\mathbf{sd})$				
UNIQUE AXIS <i>b</i> (010)	c a b	$I112/m$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p112/m$ $p112/n$ [(a + b)/4] $p112$	L06			
UNIQUE AXIS <i>c</i> (001)	a b c				L07			
					L03			
UNIQUE AXIS <i>b</i> (<i>n</i> 0 <i>m</i>)	b $nc - ma$ $pc + qa$	$I2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ $p2_1/m11$ [(a' + b')/4] $pm11$	L14			
UNIQUE AXIS <i>c</i> (<i>m</i> <i>n</i> 0)	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				$B2/m11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p2/m11$ $p2_1/m11$ (a' /4) $pm11$	L15
								L11
								L14
	<i>n</i> odd <i>m</i> odd	$C2/m11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$c2/m11$ $cm11$	L18 L13			