

Trigonal

6. SCANNING TABLES

 Laue class $D_{3d} - \bar{3}m$

 Geometric class $C_{3i} - \bar{3}$

 No. 147 $P\bar{3}$

$$\mathcal{G} = P\bar{3}$$

 C_{3i}^1

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				
(0001)	a	b	c	$P\bar{3}$	$[sd, (s + \frac{1}{3})d, (s + \frac{2}{3})d]$	$p\bar{3}$	L66

 No. 148 $R\bar{3}$

$$\mathcal{G} = R\bar{3}$$

 C_{3i}^2

Orientation orbit		Conventional basis of the scanning group			Scanning group \mathcal{H}	Linear orbit <i>sd</i>	Sectional layer group $\mathcal{L}(sd)$	
HEXAG. AXES (<i>hkl</i>)	RHOMB. AXES (<i>hkl</i>)	a'	b'	d				
(0001)	(111)	a	b	c	$R\bar{3}$	$[0d, \frac{1}{2}d, \frac{1}{3}d, \parallel \frac{5}{6}d, \frac{2}{3}d, \frac{1}{6}d]$	$p\bar{3}$	L66
							$p\bar{3} [(2a + b)/3]$	L66
							$p\bar{3} [(a + 2b)/3]$	L66
						$[\pm sd, (\pm s + \frac{1}{3})d, (\pm s + \frac{2}{3})d]$	$p3$	L65

 Laue class $D_{3d} - \bar{3}m$

 Geometric class $D_3 - 32$

 No. 149 $P312$

$$\mathcal{G} = P312$$

 D_3^1

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				
(0001)	a	b	c	$P312$	$0d, \frac{1}{2}d$ $[sd, -sd]$	$p312$ $p3$	L67 L65
(01 $\bar{1}$ 0)	c	a	a + 2b	$A112$	$[sd, (s + \frac{1}{2})d]$	$p112$	L03
($\bar{1}$ 010)	c	b	$-(2a + b)$				
(1 $\bar{1}$ 00)	c	$-(a + b)$	$(a - b)$				
($\bar{1}$ 2 $\bar{1}$ 0)	c	2a + b	b	$A121$	$[0d, \frac{1}{2}d]$	$p121$	L08
($\bar{1}$ 120)	c	$(b - a)$	$-(a + b)$		$[\frac{1}{4}d, \frac{3}{4}d]$	$p12_11$	L09
(2 $\bar{1}$ 10)	c	$-(a + 2b)$	a		$[\pm sd, (\pm s + \frac{1}{2})d]$	$p1$	L01