

$\bar{p}112_1/m$

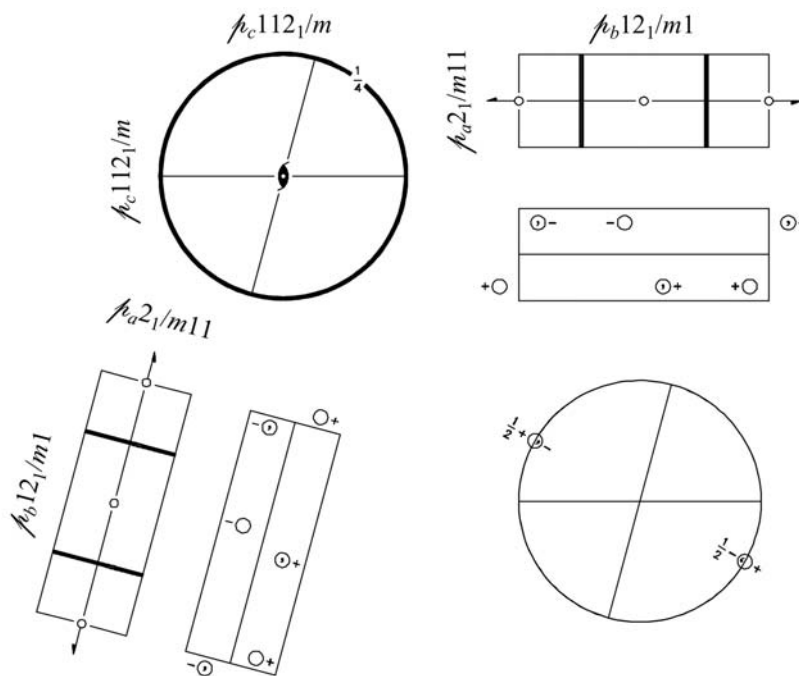
$2/m$

Monoclinic/Rectangular

No. 12

$\bar{p}112_1/m$

Patterson symmetry $\bar{p}112/m$



Origin at $\bar{1}$ on 2_1

Asymmetric unit $0 \leq z \leq \frac{1}{4}$

Symmetry operations

- (1) 1 (2) $2(\frac{1}{2})$ 0,0,z (3) $\bar{1}$ 0,0,0 (4) m x,y, $\frac{1}{4}$

Generators selected (1); $t(0,0,1)$; (2); (3)

Positions

Multiplicity, Wyckoff letter, Site symmetry		Coordinates				Reflection conditions
4	$c \quad 1$	(1) x, y, z	(2) $\bar{x}, \bar{y}, z + \frac{1}{2}$	(3) $\bar{x}, \bar{y}, \bar{z}$	(4) $x, y, \bar{z} + \frac{1}{2}$	General: $l : l = 2n$ Special: no extra conditions
2	$b \quad m$	$x, y, \frac{1}{4}$	$\bar{x}, \bar{y}, \frac{3}{4}$			
2	$a \quad \bar{1}$	$0, 0, 0$	$0, 0, \frac{1}{2}$			

Symmetry of special projections

Along [001] 211

Along [100] $\not\mu 2mg$

Along [010] $\not\mu 2mg$

Origin at $0, 0, z$

$\mathbf{a}' = \mathbf{c}$

$\mathbf{a}' = \mathbf{c}$

Origin at $x, 0, 0$

Origin at $0, y, 0$

Maximal non-isotypic non-enantiomorphic subgroups

I	$[2] \not\mu 11m$ (10)	1; 4
	$[2] \not\mu 112_1$ (9)	1; 2
	$[2] \not\mu \bar{1}$ (2)	1; 3

IIa none

IIb none

Maximal isotypic subgroups and enantiomorphic subgroups of lowest index

IIc $[3] \not\mu 112_1/m$ ($\mathbf{c}' = 3\mathbf{c}$) (12)

Minimal non-isotypic non-enantiomorphic supergroups

I $[2] \not\mu mcm$ (22); $[3] \not\mu 6_3/m$ (61)

II $[2] \not\mu 112/m$ ($\mathbf{c}' = \frac{1}{2}\mathbf{c}$) (11)