

$p11a$

m

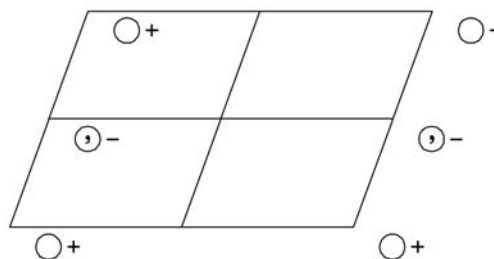
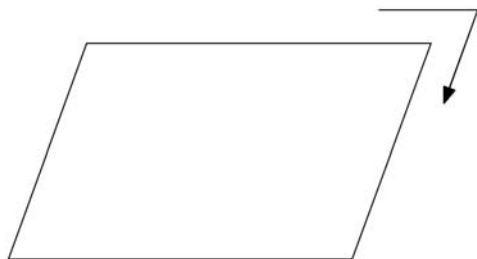
Monoclinic/Oblique

No. 5

$p11a$

Patterson symmetry $p112/m$

CELL CHOICE 1



Origin on glide plane a

Asymmetric unit $0 \leq x \leq 1; 0 \leq y \leq 1; 0 \leq z$

Symmetry operations

- (1) 1 (2) $a \ x, y, 0$
 $(1|0, 0, 0)$ $(m_z|\frac{1}{2}, 0, 0)$

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

Positions

Multiplicity, Wyckoff letter, Site symmetry	Coordinates	Reflection conditions
2 <i>a</i> 1	(1) x, y, z (2) $x + \frac{1}{2}, y, \bar{z}$	General: $hk: h = 2n$ $h0: h = 2n$

Symmetry of special projections

Along [001] $p 1$ $\mathbf{a}' = \frac{1}{2}\mathbf{a}$ $\mathbf{b}' = \mathbf{b}$ Origin at 0, 0, z	Along [100] $\not{p} 1 1 m$ $\mathbf{a}' = \mathbf{b}_p$ Origin at $x, 0, 0$	Along [010] $\not{p} 1 1 g$ $\mathbf{a}' = \mathbf{a}_p$ Origin at 0, $y, 0$
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Maximal non-isotypic subgroups

I [2] $p 1 (1)$ 1
IIa none
IIb none

Maximal isotypic subgroups of lowest index

IIc [2] $p 1 1 a (\mathbf{b}' = 2\mathbf{b}$ or $\mathbf{a}' = \mathbf{a} + 2\mathbf{b}, \mathbf{b}' = 2\mathbf{b})$ (5)

Minimal non-isotypic supergroups

I [2] $p 1 1 2/a$ (7); [2] $pm 2_1 b$ (28); [2] $pb 2 b$ (30); [2] $pm 2 a$ (31); [2] $pm 2_1 n$ (32); [2] $pb 2_1 a$ (33); [2] $pb 2 n$ (34); [2] $cm 2 e$ (36)
II [2] $p 1 1 m (\mathbf{a}' = \frac{1}{2}\mathbf{a})$ (4)

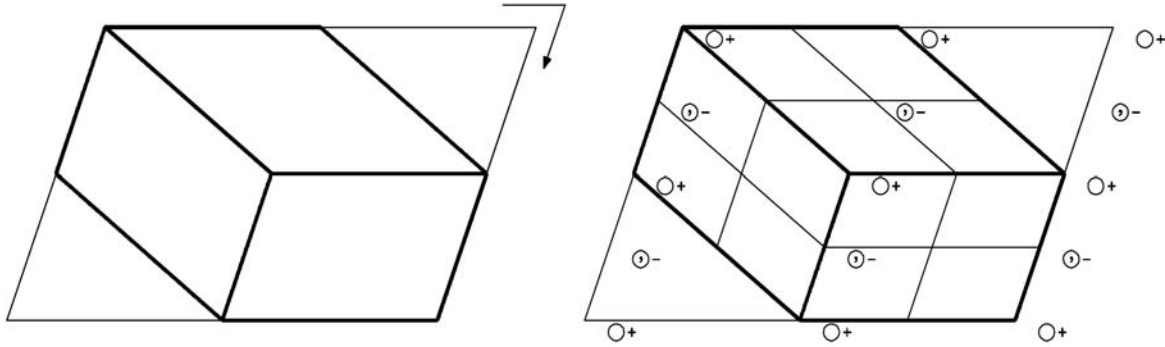
$p11a$

m

Monoclinic/Oblique

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DIFFERENT CELL CHOICES



$p11a$

CELL CHOICE 1

Origin on glide plane a

Asymmetric unit $0 \leq x \leq 1; 0 \leq y \leq 1; 0 \leq z$

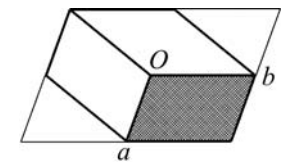
Generators selected (1); $t(1,0,0)$; $t(0,1,0)$; (2)

Positions

Multiplicity,
Wyckoff letter,
Site symmetry

Coordinates

2	a	1	(1) x, y, z	(2) $x + \frac{1}{2}, y, \bar{z}$
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Reflection conditions

General:

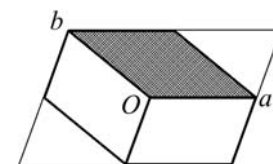
$hk: h = 2n$
 $h0: h = 2n$

p11n

CELL CHOICE 2

Origin on glide plane *n***Asymmetric unit** $0 \leq x \leq 1; 0 \leq y \leq 1; 0 \leq z$ **Generators selected** (1); $t(1,0,0)$; $t(0,1,0)$; (2)**Positions**Multiplicity,
Wyckoff letter,
Site symmetry

Coordinates

2 *a* 1 (1) x, y, z (2) $x + \frac{1}{2}, y + \frac{1}{2}, \bar{z}$ 

Reflection conditions

General:

$hk: h + k = 2n$

$h0: h = 2n$

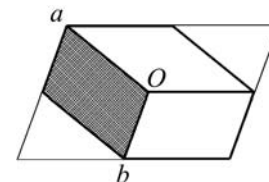
$0k: k = 2n$

p11b

CELL CHOICE 3

Origin on glide plane *b***Asymmetric unit** $0 \leq x \leq 1; 0 \leq y \leq 1; 0 \leq z$ **Generators selected** (1); $t(1,0,0)$; $t(0,1,0)$; (2)**Positions**Multiplicity,
Wyckoff letter,
Site symmetry

Coordinates

2 *a* 1 (1) x, y, z (2) $x, y + \frac{1}{2}, \bar{z}$ 

Reflection conditions

General:

$hk: k = 2n$

$0k: k = 2n$