

$\mu cc2$

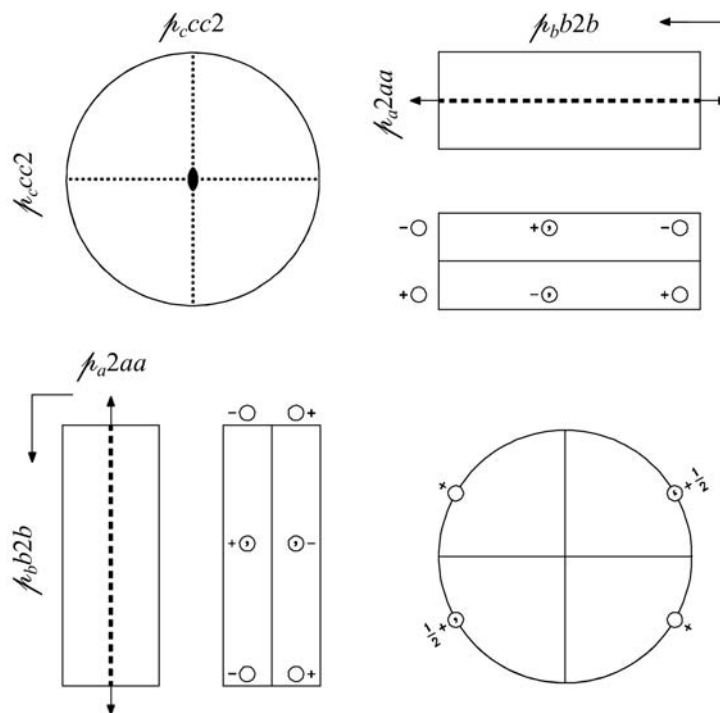
$mm2$

Orthorhombic

No. 16

$\mu cc2$

Patterson symmetry  $\mu mmm$



Origin on  $cc2$

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

Symmetry operations

- |           |                         |                           |                           |
|-----------|-------------------------|---------------------------|---------------------------|
| (1) 1     | (2) $2 \ 0,0,z$         | (3) $c \ x,0,z$           | (4) $c \ 0,y,z$           |
| (1 0,0,0) | (2 <sub>z</sub>  0,0,0) | (m <sub>y</sub>  0,0,1/2) | (m <sub>x</sub>  0,0,1/2) |

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

**Positions**

Multiplicity,  
Wyckoff letter,  
Site symmetry

Coordinates

Reflection conditions

4  $b$  1 (1)  $x, y, z$  (2)  $\bar{x}, \bar{y}, z$  (3)  $x, \bar{y}, z + \frac{1}{2}$  (4)  $\bar{x}, y, z + \frac{1}{2}$

General:

$l : l = 2n$

Special: no extra conditions

2  $a$  .. 2 0, 0,  $z$  0, 0,  $z + \frac{1}{2}$

**Symmetry of special projections**

Along [001]  $2mm$

Along [100]  $\mu 11m$

Along [010]  $\mu 11m$

Origin at 0, 0,  $z$

$\mathbf{a}' = \frac{1}{2}\mathbf{c}$

Origin at  $x, 0, 0$

$\mathbf{a}' = \frac{1}{2}\mathbf{c}$

Origin at 0,  $y, 0$

**Maximal non-isotypic non-enantiomorphic subgroups**

**I** [2]  $\mu 112$  (8) 1; 2

[2]  $\mu 1c1$  ( $\mu c11, 5$ ) 1; 3

[2]  $\mu c11$  (5) 1; 4

**IIa** none

**IIb** none

**Maximal isotypic subgroups and enantiomorphic subgroups of lowest index**

**IIc** [3]  $\mu cc2$  ( $\mathbf{c}' = 3\mathbf{c}$ ) (16)

**Minimal non-isotypic non-enantiomorphic supergroups**

**I** [2]  $\mu ccm$  (21); [2]  $\mu 4_2cm$  (35); [2]  $\mu 4cc$  (36); [2]  $\mu \bar{4}2c$  (38); [3]  $\mu 6cc$  (69)

**II** [2]  $\mu mm2$  ( $\mathbf{c}' = \frac{1}{2}\mathbf{c}$ ) (15)