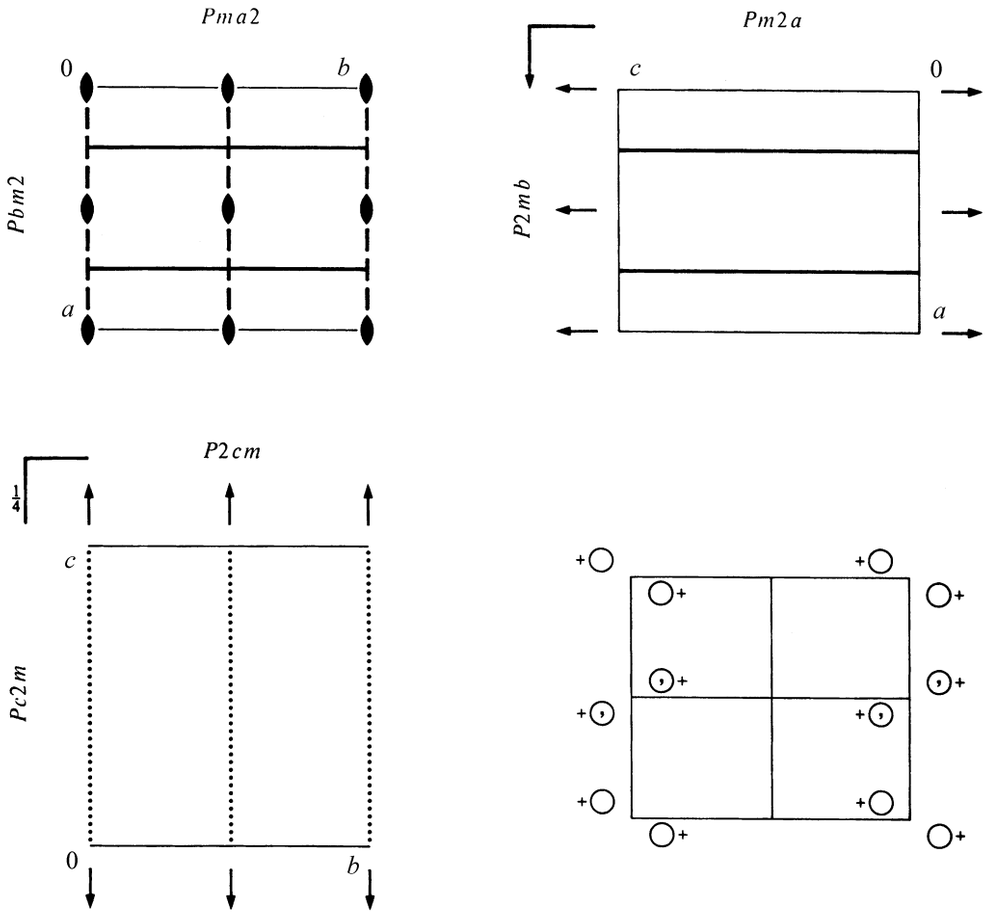
Orthorhombic $mm2$ C_{2v}^4 $Pma2$

Patterson symmetry $Pmmm$ $Pma2$ No. 28



Origin on $1a2$

Asymmetric unit $0 \le x \le \frac{1}{4}$; $0 \le y \le 1$; $0 \le z \le 1$

Symmetry operations

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

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

Positions

Multiplicity, Wyckoff letter, Site symmetry	Coordinates				Reflection conditions
					General:
4 d 1	(1) x,y,z	(2) $\bar{x},\bar{y},z$	(3) $x+\frac{1}{2},\bar{y},z$	(4) $\bar{x}+\frac{1}{2},y,z$	$h0l$: $h=2n$ $h00$: $h=2n$
					Special: as above, plus
2 c m . .	$\frac{1}{4},y,z$	$\frac{3}{4},\bar{y},z$			no extra conditions
2 b . . 2	$0,\frac{1}{2},z$	$\frac{1}{2},\frac{1}{2},z$			hkl: $h=2n$
2 a . . 2	$0,0,z$	$\frac{1}{2},0,z$			hkl: $h=2n$

Symmetry of special projections

Along [001] $p2mg$
$\mathbf{a}' = \mathbf{a}$ $\mathbf{b}' = \mathbf{b}$
Origin at $0,0,z$

Along [100] $p1m1$
$\mathbf{a}' = \mathbf{b}$ $\mathbf{b}' = \mathbf{c}$
Origin at $x,0,0$

Along [010] $p11m$
$\mathbf{a}' = \mathbf{c}$ $\mathbf{b}' = \frac{1}{2}\mathbf{a}$
Origin at $0,y,0$

