Mo_4P_3 Structure: A4B3_oP56_62_8c_6c-001

This structure originally had the label `A4B3_oP56_62_8c_6c`. Calls to that address will be redirected here.

https://aflow.org/p/S9HM

https://aflow.org/p/A4B3_oP56_62_8c_6c-001
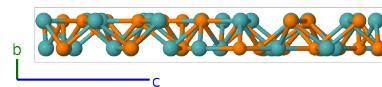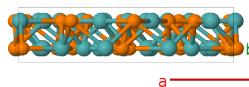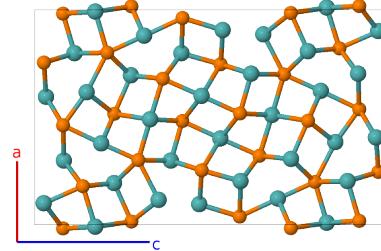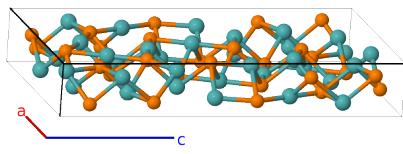
Prototype	Mo_4P_3
AFLOW prototype label	A4B3_oP56_62_8c_6c-001
ICSD	43237
Pearson symbol	oP56
Space group number	62
Space group symbol	$Pnma$
AFLOW prototype command	`aflow --proto=A4B3_oP56_62_8c_6c-001`

$$\text{--params=}a, b/a, c/a, x_1, z_1, x_2, z_2, x_3, z_3, x_4, z_4, x_5, z_5, x_6, z_6, x_7, z_7, x_8, z_8, x_9, z_9, x_{10},$$
$$z_{10}, x_{11}, z_{11}, x_{12}, z_{12}, x_{13}, z_{13}, x_{14}, z_{14}$$

Simple Orthorhombic primitive vectors

$$\mathbf{a_1} = a\,\hat{\mathbf{x}}$$
$$\mathbf{a_2} = b\,\hat{\mathbf{y}}$$
$$\mathbf{a_3} = c\,\hat{\mathbf{z}}$$

Basis vectors

		Lattice coordinates		Cartesian coordinates	Wyckoff position	Atom type
$\mathbf{B_1}$	$=$	$x_1\,\mathbf{a}_1 + \frac{1}{4}\,\mathbf{a}_2 + z_1\,\mathbf{a}_3$	$=$	$ax_1\,\hat{\mathbf{x}} + \frac{1}{4}b\,\hat{\mathbf{y}} + cz_1\,\hat{\mathbf{z}}$	(4c)	Mo I
$\mathbf{B_2}$	$=$	$-\left(x_1 - \frac{1}{2}\right)\mathbf{a}_1 + \frac{3}{4}\,\mathbf{a}_2 + \left(z_1 + \frac{1}{2}\right)\mathbf{a}_3$	$=$	$-a\left(x_1 - \frac{1}{2}\right)\hat{\mathbf{x}} + \frac{3}{4}b\,\hat{\mathbf{y}} + c\left(z_1 + \frac{1}{2}\right)\hat{\mathbf{z}}$	(4c)	Mo I
$\mathbf{B_3}$	$=$	$-x_1\,\mathbf{a}_1 + \frac{3}{4}\,\mathbf{a}_2 - z_1\,\mathbf{a}_3$	$=$	$-ax_1\,\hat{\mathbf{x}} + \frac{3}{4}b\,\hat{\mathbf{y}} - cz_1\,\hat{\mathbf{z}}$	(4c)	Mo I
$\mathbf{B_4}$	$=$	$\left(x_1 + \frac{1}{2}\right)\mathbf{a}_1 + \frac{1}{4}\,\mathbf{a}_2 - \left(z_1 - \frac{1}{2}\right)\mathbf{a}_3$	$=$	$a\left(x_1 + \frac{1}{2}\right)\hat{\mathbf{x}} + \frac{1}{4}b\,\hat{\mathbf{y}} - c\left(z_1 - \frac{1}{2}\right)\hat{\mathbf{z}}$	(4c)	Mo I
$\mathbf{B_5}$	$=$	$x_2\,\mathbf{a}_1 + \frac{1}{4}\,\mathbf{a}_2 + z_2\,\mathbf{a}_3$	$=$	$ax_2\,\hat{\mathbf{x}} + \frac{1}{4}b\,\hat{\mathbf{y}} + cz_2\,\hat{\mathbf{z}}$	(4c)	Mo II
$\mathbf{B_6}$	$=$	$-\left(x_2 - \frac{1}{2}\right)\mathbf{a}_1 + \frac{3}{4}\,\mathbf{a}_2 + \left(z_2 + \frac{1}{2}\right)\mathbf{a}_3$	$=$	$-a\left(x_2 - \frac{1}{2}\right)\hat{\mathbf{x}} + \frac{3}{4}b\,\hat{\mathbf{y}} + c\left(z_2 + \frac{1}{2}\right)\hat{\mathbf{z}}$	(4c)	Mo II
$\mathbf{B_7}$	$=$	$-x_2\,\mathbf{a}_1 + \frac{3}{4}\,\mathbf{a}_2 - z_2\,\mathbf{a}_3$	$=$	$-ax_2\,\hat{\mathbf{x}} + \frac{3}{4}b\,\hat{\mathbf{y}} - cz_2\,\hat{\mathbf{z}}$	(4c)	Mo II
$\mathbf{B_8}$	$=$	$\left(x_2 + \frac{1}{2}\right)\mathbf{a}_1 + \frac{1}{4}\,\mathbf{a}_2 - \left(z_2 - \frac{1}{2}\right)\mathbf{a}_3$	$=$	$a\left(x_2 + \frac{1}{2}\right)\hat{\mathbf{x}} + \frac{1}{4}b\,\hat{\mathbf{y}} - c\left(z_2 - \frac{1}{2}\right)\hat{\mathbf{z}}$	(4c)	Mo II
$\mathbf{B_9}$	$=$	$x_3\,\mathbf{a}_1 + \frac{1}{4}\,\mathbf{a}_2 + z_3\,\mathbf{a}_3$	$=$	$ax_3\,\hat{\mathbf{x}} + \frac{1}{4}b\,\hat{\mathbf{y}} + cz_3\,\hat{\mathbf{z}}$	(4c)	Mo III
$\mathbf{B_{10}}$	$=$	$-\left(x_3 - \frac{1}{2}\right)\mathbf{a}_1 + \frac{3}{4}\,\mathbf{a}_2 + \left(z_3 + \frac{1}{2}\right)\mathbf{a}_3$	$=$	$-a\left(x_3 - \frac{1}{2}\right)\hat{\mathbf{x}} + \frac{3}{4}b\,\hat{\mathbf{y}} + c\left(z_3 + \frac{1}{2}\right)\hat{\mathbf{z}}$	(4c)	Mo III
$\mathbf{B_{11}}$	$=$	$-x_3\,\mathbf{a}_1 + \frac{3}{4}\,\mathbf{a}_2 - z_3\,\mathbf{a}_3$	$=$	$-ax_3\,\hat{\mathbf{x}} + \frac{3}{4}b\,\hat{\mathbf{y}} - cz_3\,\hat{\mathbf{z}}$	(4c)	Mo III
$\mathbf{B_{12}}$	$=$	$\left(x_3 + \frac{1}{2}\right)\mathbf{a}_1 + \frac{1}{4}\,\mathbf{a}_2 - \left(z_3 - \frac{1}{2}\right)\mathbf{a}_3$	$=$	$a\left(x_3 + \frac{1}{2}\right)\hat{\mathbf{x}} + \frac{1}{4}b\,\hat{\mathbf{y}} - c\left(z_3 - \frac{1}{2}\right)\hat{\mathbf{z}}$	(4c)	Mo III
$\mathbf{B_{13}}$	$=$	$x_4\,\mathbf{a}_1 + \frac{1}{4}\,\mathbf{a}_2 + z_4\,\mathbf{a}_3$	$=$	$ax_4\,\hat{\mathbf{x}} + \frac{1}{4}b\,\hat{\mathbf{y}} + cz_4\,\hat{\mathbf{z}}$	(4c)	Mo IV
$\mathbf{B_{14}}$	$=$	$-\left(x_4 - \frac{1}{2}\right)\mathbf{a}_1 + \frac{3}{4}\,\mathbf{a}_2 + \left(z_4 + \frac{1}{2}\right)\mathbf{a}_3$	$=$	$-a\left(x_4 - \frac{1}{2}\right)\hat{\mathbf{x}} + \frac{3}{4}b\,\hat{\mathbf{y}} + c\left(z_4 + \frac{1}{2}\right)\hat{\mathbf{z}}$	(4c)	Mo IV
$\mathbf{B_{15}}$	$=$	$-x_4\,\mathbf{a}_1 + \frac{3}{4}\,\mathbf{a}_2 - z_4\,\mathbf{a}_3$	$=$	$-ax_4\,\hat{\mathbf{x}} + \frac{3}{4}b\,\hat{\mathbf{y}} - cz_4\,\hat{\mathbf{z}}$	(4c)	Mo IV
$\mathbf{B_{16}}$	$=$	$\left(x_4 + \frac{1}{2}\right)\mathbf{a}_1 + \frac{1}{4}\,\mathbf{a}_2 - \left(z_4 - \frac{1}{2}\right)\mathbf{a}_3$	$=$	$a\left(x_4 + \frac{1}{2}\right)\hat{\mathbf{x}} + \frac{1}{4}b\,\hat{\mathbf{y}} - c\left(z_4 - \frac{1}{2}\right)\hat{\mathbf{z}}$	(4c)	Mo IV
$\mathbf{B_{17}}$	$=$	$x_5\,\mathbf{a}_1 + \frac{1}{4}\,\mathbf{a}_2 + z_5\,\mathbf{a}_3$	$=$	$ax_5\,\hat{\mathbf{x}} + \frac{1}{4}b\,\hat{\mathbf{y}} + cz_5\,\hat{\mathbf{z}}$	(4c)	Mo V
$\mathbf{B_{18}}$	$=$	$-\left(x_5 - \frac{1}{2}\right)\mathbf{a}_1 + \frac{3}{4}\,\mathbf{a}_2 + \left(z_5 + \frac{1}{2}\right)\mathbf{a}_3$	$=$	$-a\left(x_5 - \frac{1}{2}\right)\hat{\mathbf{x}} + \frac{3}{4}b\,\hat{\mathbf{y}} + c\left(z_5 + \frac{1}{2}\right)\hat{\mathbf{z}}$	(4c)	Mo V
$\mathbf{B_{19}}$	$=$	$-x_5\,\mathbf{a}_1 + \frac{3}{4}\,\mathbf{a}_2 - z_5\,\mathbf{a}_3$	$=$	$-ax_5\,\hat{\mathbf{x}} + \frac{3}{4}b\,\hat{\mathbf{y}} - cz_5\,\hat{\mathbf{z}}$	(4c)	Mo V
$\mathbf{B_{20}}$	$=$	$\left(x_5 + \frac{1}{2}\right)\mathbf{a}_1 + \frac{1}{4}\,\mathbf{a}_2 - \left(z_5 - \frac{1}{2}\right)\mathbf{a}_3$	$=$	$a\left(x_5 + \frac{1}{2}\right)\hat{\mathbf{x}} + \frac{1}{4}b\,\hat{\mathbf{y}} - c\left(z_5 - \frac{1}{2}\right)\hat{\mathbf{z}}$	(4c)	Mo V
$\mathbf{B_{21}}$	$=$	$x_6\,\mathbf{a}_1 + \frac{1}{4}\,\mathbf{a}_2 + z_6\,\mathbf{a}_3$	$=$	$ax_6\,\hat{\mathbf{x}} + \frac{1}{4}b\,\hat{\mathbf{y}} + cz_6\,\hat{\mathbf{z}}$	(4c)	Mo VI
$\mathbf{B_{22}}$	$=$	$-\left(x_6 - \frac{1}{2}\right)\mathbf{a}_1 + \frac{3}{4}\,\mathbf{a}_2 + \left(z_6 + \frac{1}{2}\right)\mathbf{a}_3$	$=$	$-a\left(x_6 - \frac{1}{2}\right)\hat{\mathbf{x}} + \frac{3}{4}b\,\hat{\mathbf{y}} + c\left(z_6 + \frac{1}{2}\right)\hat{\mathbf{z}}$	(4c)	Mo VI
$\mathbf{B_{23}}$	$=$	$-x_6\,\mathbf{a}_1 + \frac{3}{4}\,\mathbf{a}_2 - z_6\,\mathbf{a}_3$	$=$	$-ax_6\,\hat{\mathbf{x}} + \frac{3}{4}b\,\hat{\mathbf{y}} - cz_6\,\hat{\mathbf{z}}$	(4c)	Mo VI
$\mathbf{B_{24}}$	$=$	$\left(x_6 + \frac{1}{2}\right)\mathbf{a}_1 + \frac{1}{4}\,\mathbf{a}_2 - \left(z_6 - \frac{1}{2}\right)\mathbf{a}_3$	$=$	$a\left(x_6 + \frac{1}{2}\right)\hat{\mathbf{x}} + \frac{1}{4}b\,\hat{\mathbf{y}} - c\left(z_6 - \frac{1}{2}\right)\hat{\mathbf{z}}$	(4c)	Mo VI
$\mathbf{B_{25}}$	$=$	$x_7\,\mathbf{a}_1 + \frac{1}{4}\,\mathbf{a}_2 + z_7\,\mathbf{a}_3$	$=$	$ax_7\,\hat{\mathbf{x}} + \frac{1}{4}b\,\hat{\mathbf{y}} + cz_7\,\hat{\mathbf{z}}$	(4c)	Mo VII
$\mathbf{B_{26}}$	$=$	$-\left(x_7 - \frac{1}{2}\right)\mathbf{a}_1 + \frac{3}{4}\,\mathbf{a}_2 + \left(z_7 + \frac{1}{2}\right)\mathbf{a}_3$	$=$	$-a\left(x_7 - \frac{1}{2}\right)\hat{\mathbf{x}} + \frac{3}{4}b\,\hat{\mathbf{y}} + c\left(z_7 + \frac{1}{2}\right)\hat{\mathbf{z}}$	(4c)	Mo VII
$\mathbf{B_{27}}$	$=$	$-x_7\,\mathbf{a}_1 + \frac{3}{4}\,\mathbf{a}_2 - z_7\,\mathbf{a}_3$	$=$	$-ax_7\,\hat{\mathbf{x}} + \frac{3}{4}b\,\hat{\mathbf{y}} - cz_7\,\hat{\mathbf{z}}$	(4c)	Mo VII
$\mathbf{B_{28}}$	$=$	$\left(x_7 + \frac{1}{2}\right)\mathbf{a}_1 + \frac{1}{4}\,\mathbf{a}_2 - \left(z_7 - \frac{1}{2}\right)\mathbf{a}_3$	$=$	$a\left(x_7 + \frac{1}{2}\right)\hat{\mathbf{x}} + \frac{1}{4}b\,\hat{\mathbf{y}} - c\left(z_7 - \frac{1}{2}\right)\hat{\mathbf{z}}$	(4c)	Mo VII
$\mathbf{B_{29}}$	$=$	$x_8\,\mathbf{a}_1 + \frac{1}{4}\,\mathbf{a}_2 + z_8\,\mathbf{a}_3$	$=$	$ax_8\,\hat{\mathbf{x}} + \frac{1}{4}b\,\hat{\mathbf{y}} + cz_8\,\hat{\mathbf{z}}$	(4c)	Mo VIII
$\mathbf{B_{30}}$	$=$	$-\left(x_8 - \frac{1}{2}\right)\mathbf{a}_1 + \frac{3}{4}\,\mathbf{a}_2 + \left(z_8 + \frac{1}{2}\right)\mathbf{a}_3$	$=$	$-a\left(x_8 - \frac{1}{2}\right)\hat{\mathbf{x}} + \frac{3}{4}b\,\hat{\mathbf{y}} + c\left(z_8 + \frac{1}{2}\right)\hat{\mathbf{z}}$	(4c)	Mo VIII
$\mathbf{B_{31}}$	$=$	$-x_8\,\mathbf{a}_1 + \frac{3}{4}\,\mathbf{a}_2 - z_8\,\mathbf{a}_3$	$=$	$-ax_8\,\hat{\mathbf{x}} + \frac{3}{4}b\,\hat{\mathbf{y}} - cz_8\,\hat{\mathbf{z}}$	(4c)	Mo VIII
$\mathbf{B_{32}}$	$=$	$\left(x_8 + \frac{1}{2}\right)\mathbf{a}_1 + \frac{1}{4}\,\mathbf{a}_2 - \left(z_8 - \frac{1}{2}\right)\mathbf{a}_3$	$=$	$a\left(x_8 + \frac{1}{2}\right)\hat{\mathbf{x}} + \frac{1}{4}b\,\hat{\mathbf{y}} - c\left(z_8 - \frac{1}{2}\right)\hat{\mathbf{z}}$	(4c)	Mo VIII

$$\mathbf{B_{33}} = x_9\,\mathbf{a}_1 + \tfrac{1}{4}\,\mathbf{a}_2 + z_9\,\mathbf{a}_3 = ax_9\,\hat{\mathbf{x}} + \tfrac{1}{4}b\,\hat{\mathbf{y}} + cz_9\,\hat{\mathbf{z}} \qquad (4c) \qquad \text{P I}$$

$$\mathbf{B_{34}} = -\left(x_9 - \tfrac{1}{2}\right)\mathbf{a}_1 + \tfrac{3}{4}\,\mathbf{a}_2 + \left(z_9 + \tfrac{1}{2}\right)\mathbf{a}_3 = -a\left(x_9 - \tfrac{1}{2}\right)\hat{\mathbf{x}} + \tfrac{3}{4}b\,\hat{\mathbf{y}} + c\left(z_9 + \tfrac{1}{2}\right)\hat{\mathbf{z}} \qquad (4c) \qquad \text{P I}$$

$$\mathbf{B_{35}} = -x_9\,\mathbf{a}_1 + \tfrac{3}{4}\,\mathbf{a}_2 - z_9\,\mathbf{a}_3 = -ax_9\,\hat{\mathbf{x}} + \tfrac{3}{4}b\,\hat{\mathbf{y}} - cz_9\,\hat{\mathbf{z}} \qquad (4c) \qquad \text{P I}$$

$$\mathbf{B_{36}} = \left(x_9 + \tfrac{1}{2}\right)\mathbf{a}_1 + \tfrac{1}{4}\,\mathbf{a}_2 - \left(z_9 - \tfrac{1}{2}\right)\mathbf{a}_3 = a\left(x_9 + \tfrac{1}{2}\right)\hat{\mathbf{x}} + \tfrac{1}{4}b\,\hat{\mathbf{y}} - c\left(z_9 - \tfrac{1}{2}\right)\hat{\mathbf{z}} \qquad (4c) \qquad \text{P I}$$

$$\mathbf{B_{37}} = x_{10}\,\mathbf{a}_1 + \tfrac{1}{4}\,\mathbf{a}_2 + z_{10}\,\mathbf{a}_3 = ax_{10}\,\hat{\mathbf{x}} + \tfrac{1}{4}b\,\hat{\mathbf{y}} + cz_{10}\,\hat{\mathbf{z}} \qquad (4c) \qquad \text{P II}$$

$$\mathbf{B_{38}} = -\left(x_{10} - \tfrac{1}{2}\right)\mathbf{a}_1 + \tfrac{3}{4}\,\mathbf{a}_2 + \left(z_{10} + \tfrac{1}{2}\right)\mathbf{a}_3 = -a\left(x_{10} - \tfrac{1}{2}\right)\hat{\mathbf{x}} + \tfrac{3}{4}b\,\hat{\mathbf{y}} + c\left(z_{10} + \tfrac{1}{2}\right)\hat{\mathbf{z}} \qquad (4c) \qquad \text{P II}$$

$$\mathbf{B_{39}} = -x_{10}\,\mathbf{a}_1 + \tfrac{3}{4}\,\mathbf{a}_2 - z_{10}\,\mathbf{a}_3 = -ax_{10}\,\hat{\mathbf{x}} + \tfrac{3}{4}b\,\hat{\mathbf{y}} - cz_{10}\,\hat{\mathbf{z}} \qquad (4c) \qquad \text{P II}$$

$$\mathbf{B_{40}} = \left(x_{10} + \tfrac{1}{2}\right)\mathbf{a}_1 + \tfrac{1}{4}\,\mathbf{a}_2 - \left(z_{10} - \tfrac{1}{2}\right)\mathbf{a}_3 = a\left(x_{10} + \tfrac{1}{2}\right)\hat{\mathbf{x}} + \tfrac{1}{4}b\,\hat{\mathbf{y}} - c\left(z_{10} - \tfrac{1}{2}\right)\hat{\mathbf{z}} \qquad (4c) \qquad \text{P II}$$

$$\mathbf{B_{41}} = x_{11}\,\mathbf{a}_1 + \tfrac{1}{4}\,\mathbf{a}_2 + z_{11}\,\mathbf{a}_3 = ax_{11}\,\hat{\mathbf{x}} + \tfrac{1}{4}b\,\hat{\mathbf{y}} + cz_{11}\,\hat{\mathbf{z}} \qquad (4c) \qquad \text{P III}$$

$$\mathbf{B_{42}} = -\left(x_{11} - \tfrac{1}{2}\right)\mathbf{a}_1 + \tfrac{3}{4}\,\mathbf{a}_2 + \left(z_{11} + \tfrac{1}{2}\right)\mathbf{a}_3 = -a\left(x_{11} - \tfrac{1}{2}\right)\hat{\mathbf{x}} + \tfrac{3}{4}b\,\hat{\mathbf{y}} + c\left(z_{11} + \tfrac{1}{2}\right)\hat{\mathbf{z}} \qquad (4c) \qquad \text{P III}$$

$$\mathbf{B_{43}} = -x_{11}\,\mathbf{a}_1 + \tfrac{3}{4}\,\mathbf{a}_2 - z_{11}\,\mathbf{a}_3 = -ax_{11}\,\hat{\mathbf{x}} + \tfrac{3}{4}b\,\hat{\mathbf{y}} - cz_{11}\,\hat{\mathbf{z}} \qquad (4c) \qquad \text{P III}$$

$$\mathbf{B_{44}} = \left(x_{11} + \tfrac{1}{2}\right)\mathbf{a}_1 + \tfrac{1}{4}\,\mathbf{a}_2 - \left(z_{11} - \tfrac{1}{2}\right)\mathbf{a}_3 = a\left(x_{11} + \tfrac{1}{2}\right)\hat{\mathbf{x}} + \tfrac{1}{4}b\,\hat{\mathbf{y}} - c\left(z_{11} - \tfrac{1}{2}\right)\hat{\mathbf{z}} \qquad (4c) \qquad \text{P III}$$

$$\mathbf{B_{45}} = x_{12}\,\mathbf{a}_1 + \tfrac{1}{4}\,\mathbf{a}_2 + z_{12}\,\mathbf{a}_3 = ax_{12}\,\hat{\mathbf{x}} + \tfrac{1}{4}b\,\hat{\mathbf{y}} + cz_{12}\,\hat{\mathbf{z}} \qquad (4c) \qquad \text{P IV}$$

$$\mathbf{B_{46}} = -\left(x_{12} - \tfrac{1}{2}\right)\mathbf{a}_1 + \tfrac{3}{4}\,\mathbf{a}_2 + \left(z_{12} + \tfrac{1}{2}\right)\mathbf{a}_3 = -a\left(x_{12} - \tfrac{1}{2}\right)\hat{\mathbf{x}} + \tfrac{3}{4}b\,\hat{\mathbf{y}} + c\left(z_{12} + \tfrac{1}{2}\right)\hat{\mathbf{z}} \qquad (4c) \qquad \text{P IV}$$

$$\mathbf{B_{47}} = -x_{12}\,\mathbf{a}_1 + \tfrac{3}{4}\,\mathbf{a}_2 - z_{12}\,\mathbf{a}_3 = -ax_{12}\,\hat{\mathbf{x}} + \tfrac{3}{4}b\,\hat{\mathbf{y}} - cz_{12}\,\hat{\mathbf{z}} \qquad (4c) \qquad \text{P IV}$$

$$\mathbf{B_{48}} = \left(x_{12} + \tfrac{1}{2}\right)\mathbf{a}_1 + \tfrac{1}{4}\,\mathbf{a}_2 - \left(z_{12} - \tfrac{1}{2}\right)\mathbf{a}_3 = a\left(x_{12} + \tfrac{1}{2}\right)\hat{\mathbf{x}} + \tfrac{1}{4}b\,\hat{\mathbf{y}} - c\left(z_{12} - \tfrac{1}{2}\right)\hat{\mathbf{z}} \qquad (4c) \qquad \text{P IV}$$

$$\mathbf{B_{49}} = x_{13}\,\mathbf{a}_1 + \tfrac{1}{4}\,\mathbf{a}_2 + z_{13}\,\mathbf{a}_3 = ax_{13}\,\hat{\mathbf{x}} + \tfrac{1}{4}b\,\hat{\mathbf{y}} + cz_{13}\,\hat{\mathbf{z}} \qquad (4c) \qquad \text{P V}$$

$$\mathbf{B_{50}} = -\left(x_{13} - \tfrac{1}{2}\right)\mathbf{a}_1 + \tfrac{3}{4}\,\mathbf{a}_2 + \left(z_{13} + \tfrac{1}{2}\right)\mathbf{a}_3 = -a\left(x_{13} - \tfrac{1}{2}\right)\hat{\mathbf{x}} + \tfrac{3}{4}b\,\hat{\mathbf{y}} + c\left(z_{13} + \tfrac{1}{2}\right)\hat{\mathbf{z}} \qquad (4c) \qquad \text{P V}$$

$$\mathbf{B_{51}} = -x_{13}\,\mathbf{a}_1 + \tfrac{3}{4}\,\mathbf{a}_2 - z_{13}\,\mathbf{a}_3 = -ax_{13}\,\hat{\mathbf{x}} + \tfrac{3}{4}b\,\hat{\mathbf{y}} - cz_{13}\,\hat{\mathbf{z}} \qquad (4c) \qquad \text{P V}$$

$$\mathbf{B_{52}} = \left(x_{13} + \tfrac{1}{2}\right)\mathbf{a}_1 + \tfrac{1}{4}\,\mathbf{a}_2 - \left(z_{13} - \tfrac{1}{2}\right)\mathbf{a}_3 = a\left(x_{13} + \tfrac{1}{2}\right)\hat{\mathbf{x}} + \tfrac{1}{4}b\,\hat{\mathbf{y}} - c\left(z_{13} - \tfrac{1}{2}\right)\hat{\mathbf{z}} \qquad (4c) \qquad \text{P V}$$

$$\mathbf{B_{53}} = x_{14}\,\mathbf{a}_1 + \tfrac{1}{4}\,\mathbf{a}_2 + z_{14}\,\mathbf{a}_3 = ax_{14}\,\hat{\mathbf{x}} + \tfrac{1}{4}b\,\hat{\mathbf{y}} + cz_{14}\,\hat{\mathbf{z}} \qquad (4c) \qquad \text{P VI}$$

$$\mathbf{B_{54}} = -\left(x_{14} - \tfrac{1}{2}\right)\mathbf{a}_1 + \tfrac{3}{4}\,\mathbf{a}_2 + \left(z_{14} + \tfrac{1}{2}\right)\mathbf{a}_3 = -a\left(x_{14} - \tfrac{1}{2}\right)\hat{\mathbf{x}} + \tfrac{3}{4}b\,\hat{\mathbf{y}} + c\left(z_{14} + \tfrac{1}{2}\right)\hat{\mathbf{z}} \qquad (4c) \qquad \text{P VI}$$

$$\mathbf{B_{55}} = -x_{14}\,\mathbf{a}_1 + \tfrac{3}{4}\,\mathbf{a}_2 - z_{14}\,\mathbf{a}_3 = -ax_{14}\,\hat{\mathbf{x}} + \tfrac{3}{4}b\,\hat{\mathbf{y}} - cz_{14}\,\hat{\mathbf{z}} \qquad (4c) \qquad \text{P VI}$$

$$\mathbf{B_{56}} = \left(x_{14} + \tfrac{1}{2}\right)\mathbf{a}_1 + \tfrac{1}{4}\,\mathbf{a}_2 - \left(z_{14} - \tfrac{1}{2}\right)\mathbf{a}_3 = a\left(x_{14} + \tfrac{1}{2}\right)\hat{\mathbf{x}} + \tfrac{1}{4}b\,\hat{\mathbf{y}} - c\left(z_{14} - \tfrac{1}{2}\right)\hat{\mathbf{z}} \qquad (4c) \qquad \text{P VI}$$

References

[1] S. Rundqvist, *The Crystal Structure of Mo_4P_3*, Acta Chem. Scand. **19**, 393–400 (1965), doi:10.3891/acta.chem.scand.19-0393.