

MSG No. 48.261  $Pn'n'n'$  [ Type III, orthorhombic ]

Table 1: Wyckoff site: 2a, site symmetry: 222

No.	position	mapping
1	$[\frac{1}{4}, \frac{1}{4}, \frac{1}{4}]$	[1,2,3,4]
2	$[\frac{3}{4}, \frac{3}{4}, \frac{3}{4}]$	[5,6,7,8]

Table 2: Wyckoff site: 2b, site symmetry: 222

No.	position	mapping
1	$[\frac{3}{4}, \frac{1}{4}, \frac{1}{4}]$	[1,2,3,4]
2	$[\frac{1}{4}, \frac{3}{4}, \frac{3}{4}]$	[5,6,7,8]

Table 3: Wyckoff site: 2c, site symmetry: 222

No.	position	mapping
1	$[\frac{1}{4}, \frac{1}{4}, \frac{3}{4}]$	[1,2,3,4]
2	$[\frac{3}{4}, \frac{3}{4}, \frac{1}{4}]$	[5,6,7,8]

Table 4: Wyckoff site: 2d, site symmetry: 222

No.	position	mapping
1	$[\frac{1}{4}, \frac{3}{4}, \frac{1}{4}]$	[1,2,3,4]
2	$[\frac{3}{4}, \frac{1}{4}, \frac{3}{4}]$	[5,6,7,8]

Table 5: Wyckoff site: 4e, site symmetry: -1'

No.	position	mapping
1	$[\frac{1}{2}, \frac{1}{2}, \frac{1}{2}]$	[1,5]
2	$[\frac{1}{2}, 0, 0]$	[2,6]
3	$[0, \frac{1}{2}, 0]$	[3,7]
4	$[0, 0, \frac{1}{2}]$	[4,8]

Table 6: Wyckoff site: 4f, site symmetry: -1'

No.	position	mapping
1	[0, 0, 0]	[1,5]
2	[0, $\frac{1}{2}$ , $\frac{1}{2}$ ]	[2,6]
3	[ $\frac{1}{2}$ , 0, $\frac{1}{2}$ ]	[3,7]
4	[ $\frac{1}{2}$ , $\frac{1}{2}$ , 0]	[4,8]

Table 7: Wyckoff site: 4g, site symmetry: 2..

No.	position	mapping
1	[ $x$ , $\frac{1}{4}$ , $\frac{1}{4}$ ]	[1,2]
2	[ $\frac{1}{2} - x$ , $\frac{1}{4}$ , $\frac{1}{4}$ ]	[3,4]
3	[ $-x$ , $\frac{3}{4}$ , $\frac{3}{4}$ ]	[5,6]
4	[ $x + \frac{1}{2}$ , $\frac{3}{4}$ , $\frac{3}{4}$ ]	[7,8]

Table 8: Wyckoff site: 4h, site symmetry: 2..

No.	position	mapping
1	[ $x$ , $\frac{1}{4}$ , $\frac{3}{4}$ ]	[1,2]
2	[ $\frac{1}{2} - x$ , $\frac{1}{4}$ , $\frac{3}{4}$ ]	[3,4]
3	[ $-x$ , $\frac{3}{4}$ , $\frac{1}{4}$ ]	[5,6]
4	[ $x + \frac{1}{2}$ , $\frac{3}{4}$ , $\frac{1}{4}$ ]	[7,8]

Table 9: Wyckoff site: 4i, site symmetry: .2.

No.	position	mapping
1	[ $\frac{1}{4}$ , $y$ , $\frac{1}{4}$ ]	[1,3]
2	[ $\frac{1}{4}$ , $\frac{1}{2} - y$ , $\frac{1}{4}$ ]	[2,4]
3	[ $\frac{3}{4}$ , $-y$ , $\frac{3}{4}$ ]	[5,7]
4	[ $\frac{3}{4}$ , $y + \frac{1}{2}$ , $\frac{3}{4}$ ]	[6,8]

Table 10: Wyckoff site: 4j, site symmetry: .2.

No.	position	mapping
1	[ $\frac{3}{4}$ , $y$ , $\frac{1}{4}$ ]	[1,3]
2	[ $\frac{3}{4}$ , $\frac{1}{2} - y$ , $\frac{1}{4}$ ]	[2,4]
3	[ $\frac{1}{4}$ , $-y$ , $\frac{3}{4}$ ]	[5,7]
4	[ $\frac{1}{4}$ , $y + \frac{1}{2}$ , $\frac{3}{4}$ ]	[6,8]

Table 11: Wyckoff site: 4k, site symmetry: . . 2

No.	position	mapping
1	$[\frac{1}{4}, \frac{1}{4}, z]$	[1, 4]
2	$[\frac{1}{4}, \frac{1}{4}, \frac{1}{2} - z]$	[2, 3]
3	$[\frac{3}{4}, \frac{3}{4}, -z]$	[5, 8]
4	$[\frac{3}{4}, \frac{3}{4}, z + \frac{1}{2}]$	[6, 7]

Table 12: Wyckoff site: 4l, site symmetry: . . 2

No.	position	mapping
1	$[\frac{1}{4}, \frac{3}{4}, z]$	[1, 4]
2	$[\frac{1}{4}, \frac{3}{4}, \frac{1}{2} - z]$	[2, 3]
3	$[\frac{3}{4}, \frac{1}{4}, -z]$	[5, 8]
4	$[\frac{3}{4}, \frac{1}{4}, z + \frac{1}{2}]$	[6, 7]

Table 13: Wyckoff site: 8m, site symmetry: 1

No.	position	mapping
1	$[x, y, z]$	[1]
2	$[x, \frac{1}{2} - y, \frac{1}{2} - z]$	[2]
3	$[\frac{1}{2} - x, y, \frac{1}{2} - z]$	[3]
4	$[\frac{1}{2} - x, \frac{1}{2} - y, z]$	[4]
5	$[-x, -y, -z]$	[5]
6	$[-x, y + \frac{1}{2}, z + \frac{1}{2}]$	[6]
7	$[x + \frac{1}{2}, -y, z + \frac{1}{2}]$	[7]
8	$[x + \frac{1}{2}, y + \frac{1}{2}, -z]$	[8]