

MSG No. 105.214 $P4'_2mc'$ [Type III, tetragonal]

Table 1: Wyckoff site: 2a, site symmetry: 2mm.

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

Table 2: Wyckoff site: 2b, site symmetry: 2mm.

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

Table 3: Wyckoff site: 2c, site symmetry: 2mm.

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

Table 4: Wyckoff site: 4d, site symmetry: .m.

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

Table 5: Wyckoff site: 4e, site symmetry: .m.

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

Table 6: Wyckoff site: **8f**, site symmetry: **1**

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