

SG No. 183 C_{6v}^1 $P6mm$ [hexagonal]

* plus set: + [0, 0, 0]

Table 1: Wyckoff site: 1a, site symmetry: 6mm

No.	position	mapping
1	[0, 0, z]	[1,2,3,4,5,6,7,8,9,10,11,12]

Table 2: Wyckoff site: 2b, site symmetry: 3m.

No.	position	mapping
1	[\frac{1}{3}, \frac{2}{3}, z]	[1,2,3,7,8,9]
2	[\frac{2}{3}, \frac{1}{3}, z]	[4,5,6,10,11,12]

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

No.	position	mapping
1	[\frac{1}{2}, 0, z]	[1,4,8,11]
2	[0, \frac{1}{2}, z]	[2,5,7,10]
3	[\frac{1}{2}, \frac{1}{2}, z]	[3,6,9,12]

Table 4: Wyckoff site: 6d, site symmetry: ...m

No.	position	mapping
1	[x, 0, z]	[1,11]
2	[0, x, z]	[2,10]
3	[-x, -x, z]	[3,12]
4	[-x, 0, z]	[4,8]
5	[0, -x, z]	[5,7]
6	[x, x, z]	[6,9]

Table 5: Wyckoff site: 6e, site symmetry: .m.

No.	position	mapping
1	[x, -x, z]	[1,7]
2	[x, 2x, z]	[2,9]
3	[-2x, -x, z]	[3,8]
4	[-x, x, z]	[4,10]
5	[-x, -2x, z]	[5,12]

continued ...

Table 5

No.	position	mapping
6	[$2x, x, z$]	[6,11]

Table 6: Wyckoff site: 12f, site symmetry: 1

No.	position	mapping
1	[x, y, z]	[1]
2	[$-y, x - y, z$]	[2]
3	[$-x + y, -x, z$]	[3]
4	[$-x, -y, z$]	[4]
5	[$y, -x + y, z$]	[5]
6	[$x - y, x, z$]	[6]
7	[$-y, -x, z$]	[7]
8	[$-x + y, y, z$]	[8]
9	[$x, x - y, z$]	[9]
10	[y, x, z]	[10]
11	[$x - y, -y, z$]	[11]
12	[$-x, -x + y, z$]	[12]