MSG No. 183.186 $P6mm1'$ [Type II, hexagonal]

Table 1: Wyckoff site: 1a, site symmetry: 6mm1'

No.	position	mapping
1	$[0, 0, z]$	[1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24]

Table 2: Wyckoff site: 2b, site symmetry: 3m.1'

No.	position	mapping
1	$\left[\frac{1}{3}, \frac{2}{3}, z\right]$	[1,3,5,7,8,9,13,15,17,19,20,21]
2	$\left[\frac{2}{3}, \frac{1}{3}, z\right]$	[2,4,6,10,11,12,14,16,18,22,23,24]

Table 3: Wyckoff site: 3c, site symmetry: 2mm1'

No.	position	mapping
1	$\left[\frac{1}{2}, 0, z\right]$	[1,4,7,11,13,16,19,23]
2	$\left[\frac{1}{2}, \frac{1}{2}, z\right]$	[2,5,9,10,14,17,21,22]
3	$\left[0, \frac{1}{2}, z\right]$	[3,6,8,12,15,18,20,24]

Table 4: Wyckoff site: 6d, site symmetry: ..m1'

No.	position	mapping
1	$[x, 0, z]$	[1,11,13,23]
2	$[x, x, z]$	[2,9,14,21]
3	$[0, x, z]$	[3,12,15,24]
4	$[-x, 0, z]$	[4,7,16,19]
5	$[-x, -x, z]$	[5,10,17,22]
6	$[0, -x, z]$	[6,8,18,20]

Table 5: Wyckoff site: 6e, site symmetry: .m.1'

No.	position	mapping
1	$[x, -x, z]$	[1,8,13,20]
2	$[2x, x, z]$	[2,11,14,23]
3	$[x, 2x, z]$	[3,9,15,21]
4	$[-x, x, z]$	[4,12,16,24]
5	$[-2x, -x, z]$	[5,7,17,19]
6	$[-x, -2x, z]$	[6,10,18,22]

Table 6: Wyckoff site: 12f, site symmetry: 11'

No.	position	mapping
1	$[x,\, y,\, z]$	[1,13]
2	$[x-y,\, x,\, z]$	[2,14]
3	$[-y,\, x-y,\, z]$	[3,15]
4	$[-x,\, -y,\, z]$	[4,16]
5	$[-x+y,\, -x,\, z]$	[5,17]
6	$[y,\, -x+y,\, z]$	[6,18]
7	$[-x+y,\, y,\, z]$	[7,19]
8	$[-y,\, -x,\, z]$	[8,20]
9	$[x,\, x-y,\, z]$	[9,21]
10	$[-x,\, -x+y,\, z]$	[10,22]
11	$[x-y,\, -y,\, z]$	[11,23]
12	$[y,\, x,\, z]$	[12,24]