MSG No. 101.179 $P4_2cm$ [Type I, tetragonal]

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

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

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

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

Table 3: Wyckoff site: `4c`, site symmetry: `2..`

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

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

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

Table 5: Wyckoff site: `8e`, site symmetry: `1`

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

continued ...

Table 5

No.	position	mapping
7	$[-y, -x, z]$	`[7]`
8	$[y, x, z]$	`[8]`