MSG No. 42.220 $Fmm21'$ [Type II, orthorhombic]

Table 1: Wyckoff site: `4a`, site symmetry: `mm21'`

No.	position	mapping
1	$[0,\ 0,\ z]$	`[1,2,3,4,17,18,19,20]`
2	$\left[0,\ \frac{1}{2},\ z+\frac{1}{2}\right]$	`[5,6,7,8,21,22,23,24]`
3	$\left[\frac{1}{2},\ 0,\ z+\frac{1}{2}\right]$	`[9,10,11,12,25,26,27,28]`
4	$\left[\frac{1}{2},\ \frac{1}{2},\ z\right]$	`[13,14,15,16,29,30,31,32]`

Table 2: Wyckoff site: `8b`, site symmetry: `..21'`

No.	position	mapping
1	$\left[\frac{1}{4},\ \frac{1}{4},\ z\right]$	`[1,14,17,30]`
2	$\left[\frac{3}{4},\ \frac{3}{4},\ z\right]$	`[2,13,18,29]`
3	$\left[\frac{3}{4},\ \frac{1}{4},\ z\right]$	`[3,16,19,32]`
4	$\left[\frac{1}{4},\ \frac{3}{4},\ z\right]$	`[4,15,20,31]`
5	$\left[\frac{1}{4},\ \frac{3}{4},\ z+\frac{1}{2}\right]$	`[5,10,21,26]`
6	$\left[\frac{3}{4},\ \frac{1}{4},\ z+\frac{1}{2}\right]$	`[6,9,22,25]`
7	$\left[\frac{3}{4},\ \frac{3}{4},\ z+\frac{1}{2}\right]$	`[7,12,23,28]`
8	$\left[\frac{1}{4},\ \frac{1}{4},\ z+\frac{1}{2}\right]$	`[8,11,24,27]`

Table 3: Wyckoff site: `8c`, site symmetry: `m..1'`

No.	position	mapping
1	$[0,\ y,\ z]$	`[1,3,17,19]`
2	$[0,\ -y,\ z]$	`[2,4,18,20]`
3	$\left[0,\ y+\frac{1}{2},\ z+\frac{1}{2}\right]$	`[5,7,21,23]`
4	$\left[0,\ \frac{1}{2}-y,\ z+\frac{1}{2}\right]$	`[6,8,22,24]`
5	$\left[\frac{1}{2},\ y,\ z+\frac{1}{2}\right]$	`[9,11,25,27]`
6	$\left[\frac{1}{2},\ -y,\ z+\frac{1}{2}\right]$	`[10,12,26,28]`
7	$\left[\frac{1}{2},\ y+\frac{1}{2},\ z\right]$	`[13,15,29,31]`
8	$\left[\frac{1}{2},\ \frac{1}{2}-y,\ z\right]$	`[14,16,30,32]`

Table 4: Wyckoff site: `8d`, site symmetry: `.m.1'`

No.	position	mapping
1	$[x,\ 0,\ z]$	`[1,4,17,20]`
2	$[-x,\ 0,\ z]$	`[2,3,18,19]`
3	$\left[x,\ \frac{1}{2},\ z+\frac{1}{2}\right]$	`[5,8,21,24]`
4	$\left[-x,\ \frac{1}{2},\ z+\frac{1}{2}\right]$	`[6,7,22,23]`
5	$\left[x+\frac{1}{2},\ 0,\ z+\frac{1}{2}\right]$	`[9,12,25,28]`

continued ...

Table 4

No.	position	mapping
6	$\left[\frac{1}{2}-x,\ 0,\ z+\frac{1}{2}\right]$	[10,11,26,27]
7	$\left[x+\frac{1}{2},\ \frac{1}{2},\ z\right]$	[13,16,29,32]
8	$\left[\frac{1}{2}-x,\ \frac{1}{2},\ z\right]$	[14,15,30,31]

Table 5: Wyckoff site: 16e, site symmetry: 11'

No.	position	mapping
1	$[x,\ y,\ z]$	[1,17]
2	$[-x,\ -y,\ z]$	[2,18]
3	$[-x,\ y,\ z]$	[3,19]
4	$[x,\ -y,\ z]$	[4,20]
5	$\left[x,\ y+\frac{1}{2},\ z+\frac{1}{2}\right]$	[5,21]
6	$\left[-x,\ \frac{1}{2}-y,\ z+\frac{1}{2}\right]$	[6,22]
7	$\left[-x,\ y+\frac{1}{2},\ z+\frac{1}{2}\right]$	[7,23]
8	$\left[x,\ \frac{1}{2}-y,\ z+\frac{1}{2}\right]$	[8,24]
9	$\left[x+\frac{1}{2},\ y,\ z+\frac{1}{2}\right]$	[9,25]
10	$\left[\frac{1}{2}-x,\ -y,\ z+\frac{1}{2}\right]$	[10,26]
11	$\left[\frac{1}{2}-x,\ y,\ z+\frac{1}{2}\right]$	[11,27]
12	$\left[x+\frac{1}{2},\ -y,\ z+\frac{1}{2}\right]$	[12,28]
13	$\left[x+\frac{1}{2},\ y+\frac{1}{2},\ z\right]$	[13,29]
14	$\left[\frac{1}{2}-x,\ \frac{1}{2}-y,\ z\right]$	[14,30]
15	$\left[\frac{1}{2}-x,\ y+\frac{1}{2},\ z\right]$	[15,31]
16	$\left[x+\frac{1}{2},\ \frac{1}{2}-y,\ z\right]$	[16,32]