

SG No. 54 D_{2h}^8 $Pcca$ [orthorhombic]

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

Table 1: Wyckoff site: **4a**, site symmetry: -1

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

Table 2: Wyckoff site: **4b**, site symmetry: -1

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

Table 3: Wyckoff site: **4c**, site symmetry: $.2$.

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

Table 4: Wyckoff site: **4d**, site symmetry: $. . 2$

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

Table 5: Wyckoff site: **4e**, site symmetry: $. . 2$

No.	position	mapping
1	$[\frac{1}{4}, \frac{1}{2}, z]$	$[1, 2]$

continued ...

Table 5

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

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

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