

SG No. 73 D_{2h}^{27} $Ibca$ [orthorhombic]

* plus set: $+ [0, 0, 0], \quad + [\frac{1}{2}, \frac{1}{2}, \frac{1}{2}]$

Table 1: Wyckoff site: 8a, site symmetry: -1

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

Table 2: Wyckoff site: 8b, site symmetry: -1

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

Table 3: Wyckoff site: 8c, site symmetry: $2..$

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

Table 4: Wyckoff site: 8d, site symmetry: $.2.$

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

Table 5: Wyckoff site: 8e, site symmetry: $..2$

No.	position	mapping
1	$[0, \frac{1}{4}, z]$	$[1, 2]$

continued ...

Table 5

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

Table 6: Wyckoff site: 16f, site symmetry: 1

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