SG No. 211 O^5 $I432$ [cubic]

Table 1: Wyckoff site: 2a, site symmetry: 432

No.	position	mapping
1	$[0, 0, 0]$	[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: 6b, site symmetry: 42.2

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

Table 3: Wyckoff site: 8c, site symmetry: .32

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

Table 4: Wyckoff site: 12d, site symmetry: 2.22

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

Table 5: Wyckoff site: 12e, site symmetry: 4..

No.	position	mapping
1	$[x, 0, 0]$	[1,4,17,20]
2	$[-x, 0, 0]$	[2,3,18,19]
3	$[0, x, 0]$	[5,8,13,16]

Table 5

No.	position	mapping
4	$[0, -x, 0]$	[6,7,14,15]
5	$[0, 0, x]$	[9,12,22,23]
6	$[0, 0, -x]$	[10,11,21,24]

Table 6: Wyckoff site: 16f, site symmetry: .3.

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

Table 7: Wyckoff site: 24g, site symmetry: 2..

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

Table 8: Wyckoff site: 24h, site symmetry: ..2

No.	position	mapping
1	$[0, y, y]$	[1,18]
2	$[0, -y, y]$	[2,20]
3	$[0, y, -y]$	[3,17]
4	$[0, -y, -y]$	[4,19]

continued ...

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Table 8

No.	position	mapping
5	$[y, 0, y]$	[5,15]
6	$[y, 0, -y]$	[6,13]
7	$[-y, 0, y]$	[7,16]
8	$[-y, 0, -y]$	[8,14]
9	$[y, y, 0]$	[9,21]
10	$[-y, y, 0]$	[10,23]
11	$[y, -y, 0]$	[11,22]
12	$[-y, -y, 0]$	[12,24]

Table 9: Wyckoff site: 24i, site symmetry: ..2

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

Table 10: Wyckoff site: 48j, site symmetry: 1

No.	position	mapping
1	$[x, y, z]$	[1]
2	$[-x, -y, z]$	[2]
3	$[-x, y, -z]$	[3]
4	$[x, -y, -z]$	[4]
5	$[z, x, y]$	[5]
6	$[z, -x, -y]$	[6]
7	$[-z, -x, y]$	[7]
8	$[-z, x, -y]$	[8]
9	$[y, z, x]$	[9]
10	$[-y, z, -x]$	[10]
11	$[y, -z, -x]$	[11]
12	$[-y, -z, x]$	[12]
13	$[y, x, -z]$	[13]
14	$[-y, -x, -z]$	[14]

continued ...

Table 10

No.	position	mapping
15	$[y,\,-x,\,z]$	[15]
16	$[-y,\,x,\,z]$	[16]
17	$[x,\,z,\,-y]$	[17]
18	$[-x,\,z,\,y]$	[18]
19	$[-x,\,-z,\,-y]$	[19]
20	$[x,\,-z,\,y]$	[20]
21	$[z,\,y,\,-x]$	[21]
22	$[z,\,-y,\,x]$	[22]
23	$[-z,\,y,\,x]$	[23]
24	$[-z,\,-y,\,-x]$	[24]