

MPG No. 31.2.116 $\bar{4}3m1'$ [Type II, cubic]

Table 1: Wyckoff site: **1o**, site symmetry: **-43m1'**

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, 25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48]

Table 2: Wyckoff site: **4a**, site symmetry: **.3m**

No.	position	mapping
1	[x, x, x]	[1,5,9,13,17,21,25,29,33,37,41,45]
2	[-x, -x, x]	[4,8,12,16,20,24,28,32,36,40,44,48]
3	[-x, x, -x]	[3,7,11,15,19,23,27,31,35,39,43,47]
4	[x, -x, -x]	[2,6,10,14,18,22,26,30,34,38,42,46]

Table 3: Wyckoff site: **6b**, site symmetry: **2.mm**

No.	position	mapping
1	[x, 0, 0]	[1,2,17,18,25,26,41,42]
2	[-x, 0, 0]	[3,4,19,20,27,28,43,44]
3	[0, x, 0]	[9,11,13,15,33,35,37,39]
4	[0, -x, 0]	[10,12,14,16,34,36,38,40]
5	[0, 0, x]	[5,8,21,24,29,32,45,48]
6	[0, 0, -x]	[6,7,22,23,30,31,46,47]

Table 4: Wyckoff site: **12c**, site symmetry: **...m**

No.	position	mapping
1	[x, x, z]	[1,13,25,37]
2	[-x, -x, z]	[4,16,28,40]
3	[-x, x, -z]	[3,15,27,39]
4	[x, -x, -z]	[2,14,26,38]
5	[z, x, x]	[9,21,33,45]
6	[z, -x, -x]	[10,22,34,46]
7	[-z, -x, x]	[12,24,36,48]
8	[-z, x, -x]	[11,23,35,47]
9	[x, z, x]	[5,17,29,41]
10	[-x, z, -x]	[7,19,31,43]
11	[x, -z, -x]	[6,18,30,42]
12	[-x, -z, x]	[8,20,32,44]

Table 5: Wyckoff site: 24d, site symmetry: 1

No.	position	mapping
1	$[x, y, z]$	[1,25]
2	$[-x, -y, z]$	[4,28]
3	$[-x, y, -z]$	[3,27]
4	$[x, -y, -z]$	[2,26]
5	$[z, x, y]$	[9,33]
6	$[z, -x, -y]$	[10,34]
7	$[-z, -x, y]$	[12,36]
8	$[-z, x, -y]$	[11,35]
9	$[y, z, x]$	[5,29]
10	$[-y, z, -x]$	[7,31]
11	$[y, -z, -x]$	[6,30]
12	$[-y, -z, x]$	[8,32]
13	$[y, x, z]$	[13,37]
14	$[-y, -x, z]$	[16,40]
15	$[y, -x, -z]$	[14,38]
16	$[-y, x, -z]$	[15,39]
17	$[x, z, y]$	[17,41]
18	$[-x, z, -y]$	[19,43]
19	$[-x, -z, y]$	[20,44]
20	$[x, -z, -y]$	[18,42]
21	$[z, y, x]$	[21,45]
22	$[z, -y, -x]$	[22,46]
23	$[-z, y, -x]$	[23,47]
24	$[-z, -y, x]$	[24,48]