MSG No. 227.132 $Fd'\bar{3}'m'$ [Type III, cubic]

Table 1: Wyckoff site: 8a, site symmetry: -4'3m'

No.	position	mapping
1	$\left[\frac{1}{8}, \frac{1}{8}, \frac{1}{8}\right]$	[1,8,9,10,17,18,19,20,21,22,23,24,26,27,28,29,30,31,35,36,37,38,39,40]
2	$\left[\frac{3}{8}, \frac{7}{8}, \frac{3}{8}\right]$	[2,7,15,33,43,48,51,52,59,82,92,93,108,110,112,121,137,138,149,150,157,176,190,191]
3	$\left[\frac{3}{8}, \frac{3}{8}, \frac{7}{8}\right]$	[3,4,11,34,44,45,50,55,63,81,91,96,101,102,109,128,142,143,156,158,160,169,185,186]
4	$\left[\frac{7}{8}, \frac{3}{8}, \frac{3}{8}\right]$	[5,6,13,32,46,47,60,62,64,73,89,90,99,100,107,130,140,141,146,151,159,177,187,192]
5	$\left[\frac{7}{8}, \frac{7}{8}, \frac{7}{8}\right]$	[12,14,16,25,41,42,53,54,61,80,94,95,98,103,111,129,139,144,147,148,155,178,188,189]
6	$\left[\frac{1}{8}, \frac{5}{8}, \frac{5}{8}\right]$	[49,56,57,58,65,66,67,68,69,70,71,72,74,75,76,77,78,79,83,84,85,86,87,88]
7	$\left[\frac{5}{8}, \frac{1}{8}, \frac{5}{8}\right]$	[97,104,105,106,113,114,115,116,117,118,119,120,122,123,124,125,126,127,131,132,133,134,135,136]
8	$\left[\frac{5}{8}, \frac{5}{8}, \frac{1}{8}\right]$	[145,152,153,154,161,162,163,164,165,166,167,168,170,171,172,173,174,175,179,180,181,182,183,184]

Table 2: Wyckoff site: 8b, site symmetry: -4'3m'

No.	position	mapping
1	$\left[\frac{3}{8}, \frac{3}{8}, \frac{3}{8}\right]$	[1,17,18,36,38,40,56,70,71,77,78,85,105,115,120,122,127,135,154,164,165,171,172,179]
2	$\left[\frac{5}{8}, \frac{5}{8}, \frac{5}{8}\right]$	[2,3,4,5,6,7,11,12,13,14,15,16,25,32,33,34,41,42,43,44,45,46,47,48]
3	$\left[\frac{3}{8}, \frac{7}{8}, \frac{7}{8}\right]$	[8,22,23,29,30,37,49,65,66,84,86,88,106,116,117,123,124,131,153,163,168,170,175,183]
4	$\left[\frac{7}{8}, \frac{3}{8}, \frac{7}{8}\right]$	[9,19,24,26,31,39,58,68,69,75,76,83,97,113,114,132,134,136,152,166,167,173,174,181]
5	$\left[\frac{7}{8}, \frac{7}{8}, \frac{3}{8}\right]$	[10,20,21,27,28,35,57,67,72,74,79,87,104,118,119,125,126,133,145,161,162,180,182,184]
6	$\left[\frac{5}{8}, \frac{1}{8}, \frac{1}{8}\right]$	[50,51,52,53,54,55,59,60,61,62,63,64,73,80,81,82,89,90,91,92,93,94,95,96]
7	$\left[\frac{1}{8}, \frac{5}{8}, \frac{1}{8}\right]$	[98,99,100,101,102,103,107,108,109,110,111,112,121,128,129,130,137,138,139,140,141,142,143,144]
8	$\left[\frac{1}{8}, \frac{1}{8}, \frac{5}{8}\right]$	[146,147,148,149,150,151,155,156,157,158,159,160,169,176,177,178,185,186,187,188,189,190,191,192]

Table 3: Wyckoff site: 16c, site symmetry: .-3'm'

No.	position	mapping
1	[0, 0, 0]	[1,12,14,16,17,18,25,36,38,40,41,42]
2	$\left[\frac{1}{4}, 0, \frac{1}{4}\right]$	[2,7,9,15,19,24,26,31,33,39,43,48]
3	$\left[\frac{1}{4}, \frac{1}{4}, 0\right]$	[3,4,10,11,20,21,27,28,34,35,44,45]
4	$\left[0, \frac{1}{4}, \frac{1}{4}\right]$	[5,6,8,13,22,23,29,30,32,37,46,47]
5	$\left[0, \frac{1}{2}, \frac{1}{2}\right]$	[49,60,62,64,65,66,73,84,86,88,89,90]
6	$\left[\frac{1}{4}, \frac{1}{2}, \frac{3}{4}\right]$	[50,55,57,63,67,72,74,79,81,87,91,96]
7	$\left[\frac{1}{4}, \frac{3}{4}, \frac{1}{2}\right]$	[51,52,58,59,68,69,75,76,82,83,92,93]
8	$\left[0, \frac{3}{4}, \frac{3}{4}\right]$	[53,54,56,61,70,71,77,78,80,85,94,95]
9	$\left[\frac{1}{2}, 0, \frac{1}{2}\right]$	[97,108,110,112,113,114,121,132,134,136,137,138]
10	$\left[\frac{3}{4}, 0, \frac{3}{4}\right]$	[98,103,105,111,115,120,122,127,129,135,139,144]
11	$\left[\frac{3}{4}, \frac{1}{4}, \frac{1}{2}\right]$	[99,100,106,107,116,117,123,124,130,131,140,141]
12	$\left[\frac{1}{2}, \frac{1}{4}, \frac{3}{4}\right]$	[101,102,104,109,118,119,125,126,128,133,142,143]
13	$\left[\frac{1}{2}, \frac{1}{2}, 0\right]$	[145,156,158,160,161,162,169,180,182,184,185,186]
14	$\left[\frac{3}{4}, \frac{1}{2}, \frac{1}{4}\right]$	[146,151,153,159,163,168,170,175,177,183,187,192]
15	$\left[\frac{3}{4}, \frac{3}{4}, 0\right]$	[147,148,154,155,164,165,171,172,178,179,188,189]

continued ...

Table 3

No.	position	mapping
16	$\left[\frac{1}{2}, \frac{3}{4}, \frac{1}{4}\right]$	[149,150,152,157,166,167,173,174,176,181,190,191]

Table 4: Wyckoff site: 16d, site symmetry: .-3'm'

No.	position	mapping
1	$\left[\frac{1}{2}, \frac{1}{2}, \frac{1}{2}\right]$	[1,12,14,16,17,18,25,36,38,40,41,42]
2	$\left[\frac{3}{4}, \frac{1}{2}, \frac{3}{4}\right]$	[2,7,9,15,19,24,26,31,33,39,43,48]
3	$\left[\frac{3}{4}, \frac{3}{4}, \frac{1}{2}\right]$	[3,4,10,11,20,21,27,28,34,35,44,45]
4	$\left[\frac{1}{2}, \frac{3}{4}, \frac{3}{4}\right]$	[5,6,8,13,22,23,29,30,32,37,46,47]
5	$\left[\frac{1}{2}, 0, 0\right]$	[49,60,62,64,65,66,73,84,86,88,89,90]
6	$\left[\frac{3}{4}, 0, \frac{1}{4}\right]$	[50,55,57,63,67,72,74,79,81,87,91,96]
7	$\left[\frac{3}{4}, \frac{1}{4}, 0\right]$	[51,52,58,59,68,69,75,76,82,83,92,93]
8	$\left[\frac{1}{2}, \frac{1}{4}, \frac{1}{4}\right]$	[53,54,56,61,70,71,77,78,80,85,94,95]
9	$\left[0, \frac{1}{2}, 0\right]$	[97,108,110,112,113,114,121,132,134,136,137,138]
10	$\left[\frac{1}{4}, \frac{1}{2}, \frac{1}{4}\right]$	[98,103,105,111,115,120,122,127,129,135,139,144]
11	$\left[\frac{1}{4}, \frac{3}{4}, 0\right]$	[99,100,106,107,116,117,123,124,130,131,140,141]
12	$\left[0, \frac{3}{4}, \frac{1}{4}\right]$	[101,102,104,109,118,119,125,126,128,133,142,143]
13	$\left[0, 0, \frac{1}{2}\right]$	[145,156,158,160,161,162,169,180,182,184,185,186]
14	$\left[\frac{1}{4}, 0, \frac{3}{4}\right]$	[146,151,153,159,163,168,170,175,177,183,187,192]
15	$\left[\frac{1}{4}, \frac{1}{4}, \frac{1}{2}\right]$	[147,148,154,155,164,165,171,172,178,179,188,189]
16	$\left[0, \frac{1}{4}, \frac{3}{4}\right]$	[149,150,152,157,166,167,173,174,176,181,190,191]

Table 5: Wyckoff site: 32e, site symmetry: .3m'

No.	position	mapping
1	$[x, x, x]$	[1,17,18,36,38,40]
2	$\left[x+\frac{1}{4}, -x, x+\frac{1}{4}\right]$	[2,7,15,33,43,48]
3	$\left[x+\frac{1}{4}, x+\frac{1}{4}, -x\right]$	[3,4,11,34,44,45]
4	$\left[-x, x+\frac{1}{4}, x+\frac{1}{4}\right]$	[5,6,13,32,46,47]
5	$\left[x, \frac{1}{4}-x, \frac{1}{4}-x\right]$	[8,22,23,29,30,37]
6	$\left[\frac{1}{4}-x, x, \frac{1}{4}-x\right]$	[9,19,24,26,31,39]
7	$\left[\frac{1}{4}-x, \frac{1}{4}-x, x\right]$	[10,20,21,27,28,35]
8	$[-x, -x, -x]$	[12,14,16,25,41,42]
9	$\left[x, x+\frac{1}{2}, x+\frac{1}{2}\right]$	[49,65,66,84,86,88]
10	$\left[x+\frac{1}{4}, \frac{1}{2}-x, x+\frac{3}{4}\right]$	[50,55,63,81,91,96]
11	$\left[x+\frac{1}{4}, x+\frac{3}{4}, \frac{1}{2}-x\right]$	[51,52,59,82,92,93]
12	$\left[-x, x+\frac{3}{4}, x+\frac{3}{4}\right]$	[53,54,61,80,94,95]
13	$\left[x, \frac{3}{4}-x, \frac{3}{4}-x\right]$	[56,70,71,77,78,85]
14	$\left[\frac{1}{4}-x, x+\frac{1}{2}, \frac{3}{4}-x\right]$	[57,67,72,74,79,87]
15	$\left[\frac{1}{4}-x, \frac{3}{4}-x, x+\frac{1}{2}\right]$	[58,68,69,75,76,83]
16	$\left[-x, \frac{1}{2}-x, \frac{1}{2}-x\right]$	[60,62,64,73,89,90]
17	$\left[x+\frac{1}{2}, x, x+\frac{1}{2}\right]$	[97,113,114,132,134,136]

continued ...

Table 5

No.	position	mapping
18	$\left[x+\frac{3}{4}, -x, x+\frac{3}{4}\right]$	[98,103,111,129,139,144]
19	$\left[x+\frac{3}{4}, x+\frac{1}{4}, \frac{1}{2}-x\right]$	[99,100,107,130,140,141]
20	$\left[\frac{1}{2}-x, x+\frac{1}{4}, x+\frac{3}{4}\right]$	[101,102,109,128,142,143]
21	$\left[x+\frac{1}{2}, \frac{1}{4}-x, \frac{3}{4}-x\right]$	[104,118,119,125,126,133]
22	$\left[\frac{3}{4}-x, x, \frac{3}{4}-x\right]$	[105,115,120,122,127,135]
23	$\left[\frac{3}{4}-x, \frac{1}{4}-x, x+\frac{1}{2}\right]$	[106,116,117,123,124,131]
24	$\left[\frac{1}{2}-x, -x, \frac{1}{2}-x\right]$	[108,110,112,121,137,138]
25	$\left[x+\frac{1}{2}, x+\frac{1}{2}, x\right]$	[145,161,162,180,182,184]
26	$\left[x+\frac{3}{4}, \frac{1}{2}-x, x+\frac{1}{4}\right]$	[146,151,159,177,187,192]
27	$\left[x+\frac{3}{4}, x+\frac{3}{4}, -x\right]$	[147,148,155,178,188,189]
28	$\left[\frac{1}{2}-x, x+\frac{3}{4}, x+\frac{1}{4}\right]$	[149,150,157,176,190,191]
29	$\left[x+\frac{1}{2}, \frac{3}{4}-x, \frac{1}{4}-x\right]$	[152,166,167,173,174,181]
30	$\left[\frac{3}{4}-x, x+\frac{1}{2}, \frac{1}{4}-x\right]$	[153,163,168,170,175,183]
31	$\left[\frac{3}{4}-x, \frac{3}{4}-x, x\right]$	[154,164,165,171,172,179]
32	$\left[\frac{1}{2}-x, \frac{1}{2}-x, -x\right]$	[156,158,160,169,185,186]

Table 6: Wyckoff site: 48f, site symmetry: 2.m'm'

No.	position	mapping
1	$\left[x, \frac{1}{8}, \frac{1}{8}\right]$	[1,8,37,38]
2	$\left[x+\frac{1}{4}, \frac{7}{8}, \frac{3}{8}\right]$	[2,33,51,82]
3	$\left[x+\frac{1}{4}, \frac{3}{8}, \frac{7}{8}\right]$	[3,34,50,81]
4	$\left[\frac{3}{8}, \frac{3}{8}, -x\right]$	[4,45,160,186]
5	$\left[\frac{7}{8}, \frac{3}{8}, x+\frac{1}{4}\right]$	[5,47,159,187]
6	$\left[\frac{7}{8}, x+\frac{1}{4}, \frac{3}{8}\right]$	[6,46,107,140]
7	$\left[\frac{3}{8}, -x, \frac{3}{8}\right]$	[7,48,108,137]
8	$\left[\frac{1}{4}-x, \frac{1}{8}, \frac{1}{8}\right]$	[9,10,26,27]
9	$\left[\frac{3}{8}, x+\frac{1}{4}, \frac{7}{8}\right]$	[11,44,102,142]
10	$\left[\frac{7}{8}, -x, \frac{7}{8}\right]$	[12,41,103,144]
11	$\left[-x, \frac{3}{8}, \frac{3}{8}\right]$	[13,32,62,73]
12	$\left[-x, \frac{7}{8}, \frac{7}{8}\right]$	[14,25,61,80]
13	$\left[\frac{3}{8}, \frac{7}{8}, x+\frac{1}{4}\right]$	[15,43,149,191]
14	$\left[\frac{7}{8}, \frac{7}{8}, -x\right]$	[16,42,148,189]
15	$\left[\frac{1}{8}, x, \frac{1}{8}\right]$	[17,24,31,36]
16	$\left[\frac{1}{8}, \frac{1}{8}, x\right]$	[18,21,28,40]
17	$\left[\frac{1}{8}, \frac{1}{8}, \frac{1}{4}-x\right]$	[19,23,29,39]
18	$\left[\frac{1}{8}, \frac{1}{4}-x, \frac{1}{8}\right]$	[20,22,30,35]
19	$\left[x, \frac{5}{8}, \frac{5}{8}\right]$	[49,56,85,86]
20	$\left[\frac{3}{8}, \frac{7}{8}, \frac{1}{2}-x\right]$	[52,93,112,138]
21	$\left[\frac{7}{8}, \frac{7}{8}, x+\frac{3}{4}\right]$	[53,95,111,139]
22	$\left[\frac{7}{8}, x+\frac{3}{4}, \frac{7}{8}\right]$	[54,94,155,188]
23	$\left[\frac{3}{8}, \frac{1}{2}-x, \frac{7}{8}\right]$	[55,96,156,185]
24	$\left[\frac{1}{4}-x, \frac{5}{8}, \frac{5}{8}\right]$	[57,58,74,75]
25	$\left[\frac{3}{8}, x+\frac{3}{4}, \frac{3}{8}\right]$	[59,92,150,190]

continued ...

Table 6

No.	position	mapping
26	$\left[\frac{7}{8},\ \frac{1}{2}-x,\ \frac{3}{8}\right]$	[60,89,151,192]
27	$\left[\frac{3}{8},\ \frac{3}{8},\ x+\frac{3}{4}\right]$	[63,91,101,143]
28	$\left[\frac{7}{8},\ \frac{3}{8},\ \frac{1}{2}-x\right]$	[64,90,100,141]
29	$\left[\frac{1}{8},\ x+\frac{1}{2},\ \frac{5}{8}\right]$	[65,72,79,84]
30	$\left[\frac{1}{8},\ \frac{5}{8},\ x+\frac{1}{2}\right]$	[66,69,76,88]
31	$\left[\frac{1}{8},\ \frac{5}{8},\ \frac{3}{4}-x\right]$	[67,71,77,87]
32	$\left[\frac{1}{8},\ \frac{3}{4}-x,\ \frac{5}{8}\right]$	[68,70,78,83]
33	$\left[x+\frac{1}{2},\ \frac{1}{8},\ \frac{5}{8}\right]$	[97,104,133,134]
34	$\left[x+\frac{3}{4},\ \frac{7}{8},\ \frac{7}{8}\right]$	[98,129,147,178]
35	$\left[x+\frac{3}{4},\ \frac{3}{8},\ \frac{3}{8}\right]$	[99,130,146,177]
36	$\left[\frac{3}{4}-x,\ \frac{1}{8},\ \frac{5}{8}\right]$	[105,106,122,123]
37	$\left[\frac{1}{2}-x,\ \frac{3}{8},\ \frac{7}{8}\right]$	[109,128,158,169]
38	$\left[\frac{1}{2}-x,\ \frac{7}{8},\ \frac{3}{8}\right]$	[110,121,157,176]
39	$\left[\frac{5}{8},\ x,\ \frac{5}{8}\right]$	[113,120,127,132]
40	$\left[\frac{5}{8},\ \frac{1}{8},\ x+\frac{1}{2}\right]$	[114,117,124,136]
41	$\left[\frac{5}{8},\ \frac{1}{8},\ \frac{3}{4}-x\right]$	[115,119,125,135]
42	$\left[\frac{5}{8},\ \frac{1}{4}-x,\ \frac{5}{8}\right]$	[116,118,126,131]
43	$\left[x+\frac{1}{2},\ \frac{5}{8},\ \frac{1}{8}\right]$	[145,152,181,182]
44	$\left[\frac{3}{4}-x,\ \frac{5}{8},\ \frac{1}{8}\right]$	[153,154,170,171]
45	$\left[\frac{5}{8},\ x+\frac{1}{2},\ \frac{1}{8}\right]$	[161,168,175,180]
46	$\left[\frac{5}{8},\ \frac{5}{8},\ x\right]$	[162,165,172,184]
47	$\left[\frac{5}{8},\ \frac{5}{8},\ \frac{1}{4}-x\right]$	[163,167,173,183]
48	$\left[\frac{5}{8},\ \frac{3}{4}-x,\ \frac{1}{8}\right]$	[164,166,174,179]

Table 7: Wyckoff site: 96g, site symmetry: ..m'

No.	position	mapping
1	$[x,\ x,\ z]$	[1,36]
2	$\left[x+\frac{1}{4},\ -z,\ x+\frac{1}{4}\right]$	[2,43]
3	$\left[x+\frac{1}{4},\ z+\frac{1}{4},\ -x\right]$	[3,45]
4	$\left[z+\frac{1}{4},\ x+\frac{1}{4},\ -x\right]$	[4,44]
5	$\left[-z,\ x+\frac{1}{4},\ x+\frac{1}{4}\right]$	[5,46]
6	$\left[-x,\ x+\frac{1}{4},\ z+\frac{1}{4}\right]$	[6,32]
7	$\left[x+\frac{1}{4},\ -x,\ z+\frac{1}{4}\right]$	[7,33]
8	$\left[x,\ \frac{1}{4}-x,\ \frac{1}{4}-z\right]$	[8,30]
9	$\left[\frac{1}{4}-x,\ x,\ \frac{1}{4}-z\right]$	[9,31]
10	$\left[\frac{1}{4}-x,\ \frac{1}{4}-x,\ z\right]$	[10,35]
11	$\left[x+\frac{1}{4},\ x+\frac{1}{4},\ -z\right]$	[11,34]
12	$[-x,\ -x,\ -z]$	[12,25]
13	$\left[-x,\ z+\frac{1}{4},\ x+\frac{1}{4}\right]$	[13,47]
14	$[-x,\ -z,\ -x]$	[14,42]
15	$\left[z+\frac{1}{4},\ -x,\ x+\frac{1}{4}\right]$	[15,48]
16	$[-z,\ -x,\ -x]$	[16,41]
17	$[z,\ x,\ x]$	[17,40]

continued ...

Table 7

No.	position	mapping
18	$[x,\ z,\ x]$	[18,38]
19	$[\frac{1}{4}-x,\ z,\ \frac{1}{4}-x]$	[19,26]
20	$[\frac{1}{4}-z,\ \frac{1}{4}-x,\ x]$	[20,28]
21	$[\frac{1}{4}-x,\ \frac{1}{4}-z,\ x]$	[21,27]
22	$[z,\ \frac{1}{4}-x,\ \frac{1}{4}-x]$	[22,29]
23	$[x,\ \frac{1}{4}-z,\ \frac{1}{4}-x]$	[23,37]
24	$[\frac{1}{4}-z,\ x,\ \frac{1}{4}-x]$	[24,39]
25	$[x,\ x+\frac{1}{2},\ z+\frac{1}{2}]$	[49,84]
26	$[x+\frac{1}{4},\ \frac{1}{2}-z,\ x+\frac{3}{4}]$	[50,91]
27	$[x+\frac{1}{4},\ z+\frac{3}{4},\ \frac{1}{2}-x]$	[51,93]
28	$[z+\frac{1}{4},\ x+\frac{3}{4},\ \frac{1}{2}-x]$	[52,92]
29	$[-z,\ x+\frac{3}{4},\ x+\frac{3}{4}]$	[53,94]
30	$[-x,\ x+\frac{3}{4},\ z+\frac{3}{4}]$	[54,80]
31	$[x+\frac{1}{4},\ \frac{1}{2}-x,\ z+\frac{3}{4}]$	[55,81]
32	$[x,\ \frac{3}{4}-x,\ \frac{3}{4}-z]$	[56,78]
33	$[\frac{1}{4}-x,\ x+\frac{1}{2},\ \frac{3}{4}-z]$	[57,79]
34	$[\frac{1}{4}-x,\ \frac{3}{4}-x,\ z+\frac{1}{2}]$	[58,83]
35	$[x+\frac{1}{4},\ x+\frac{3}{4},\ \frac{1}{2}-z]$	[59,82]
36	$[-x,\ \frac{1}{2}-x,\ \frac{1}{2}-z]$	[60,73]
37	$[-x,\ z+\frac{3}{4},\ x+\frac{3}{4}]$	[61,95]
38	$[-x,\ \frac{1}{2}-z,\ \frac{1}{2}-x]$	[62,90]
39	$[z+\frac{1}{4},\ \frac{1}{2}-x,\ x+\frac{3}{4}]$	[63,96]
40	$[-z,\ \frac{1}{2}-x,\ \frac{1}{2}-x]$	[64,89]
41	$[z,\ x+\frac{1}{2},\ x+\frac{1}{2}]$	[65,88]
42	$[x,\ z+\frac{1}{2},\ x+\frac{1}{2}]$	[66,86]
43	$[\frac{1}{4}-x,\ z+\frac{1}{2},\ \frac{3}{4}-x]$	[67,74]
44	$[\frac{1}{4}-z,\ \frac{3}{4}-x,\ x+\frac{1}{2}]$	[68,76]
45	$[\frac{1}{4}-x,\ \frac{3}{4}-z,\ x+\frac{1}{2}]$	[69,75]
46	$[z,\ \frac{3}{4}-x,\ \frac{3}{4}-x]$	[70,77]
47	$[x,\ \frac{3}{4}-z,\ \frac{3}{4}-x]$	[71,85]
48	$[\frac{1}{4}-z,\ x+\frac{1}{2},\ \frac{3}{4}-x]$	[72,87]
49	$[x+\frac{1}{2},\ x,\ z+\frac{1}{2}]$	[97,132]
50	$[x+\frac{3}{4},\ -z,\ x+\frac{3}{4}]$	[98,139]
51	$[x+\frac{3}{4},\ z+\frac{1}{4},\ \frac{1}{2}-x]$	[99,141]
52	$[z+\frac{3}{4},\ x+\frac{1}{4},\ \frac{1}{2}-x]$	[100,140]
53	$[\frac{1}{2}-z,\ x+\frac{1}{4},\ x+\frac{3}{4}]$	[101,142]
54	$[\frac{1}{2}-x,\ x+\frac{1}{4},\ z+\frac{3}{4}]$	[102,128]
55	$[x+\frac{3}{4},\ -x,\ z+\frac{3}{4}]$	[103,129]
56	$[x+\frac{1}{2},\ \frac{1}{4}-x,\ \frac{3}{4}-z]$	[104,126]
57	$[\frac{3}{4}-x,\ x,\ \frac{3}{4}-z]$	[105,127]
58	$[\frac{3}{4}-x,\ \frac{1}{4}-x,\ z+\frac{1}{2}]$	[106,131]
59	$[x+\frac{3}{4},\ x+\frac{1}{4},\ \frac{1}{2}-z]$	[107,130]
60	$[\frac{1}{2}-x,\ -x,\ \frac{1}{2}-z]$	[108,121]
61	$[\frac{1}{2}-x,\ z+\frac{1}{4},\ x+\frac{3}{4}]$	[109,143]
62	$[\frac{1}{2}-x,\ -z,\ \frac{1}{2}-x]$	[110,138]
63	$[z+\frac{3}{4},\ -x,\ x+\frac{3}{4}]$	[111,144]
64	$[\frac{1}{2}-z,\ -x,\ \frac{1}{2}-x]$	[112,137]

continued ...

Table 7

No.	position	mapping
65	$\left[z+\frac{1}{2},\ x,\ x+\frac{1}{2}\right]$	[113,136]
66	$\left[x+\frac{1}{2},\ z,\ x+\frac{1}{2}\right]$	[114,134]
67	$\left[\frac{3}{4}-x,\ z,\ \frac{3}{4}-x\right]$	[115,122]
68	$\left[\frac{3}{4}-z,\ \frac{1}{4}-x,\ x+\frac{1}{2}\right]$	[116,124]
69	$\left[\frac{3}{4}-x,\ \frac{1}{4}-z,\ x+\frac{1}{2}\right]$	[117,123]
70	$\left[z+\frac{1}{2},\ \frac{1}{4}-x,\ \frac{3}{4}-x\right]$	[118,125]
71	$\left[x+\frac{1}{2},\ \frac{1}{4}-z,\ \frac{3}{4}-x\right]$	[119,133]
72	$\left[\frac{3}{4}-z,\ x,\ \frac{3}{4}-x\right]$	[120,135]
73	$\left[x+\frac{1}{2},\ x+\frac{1}{2},\ z\right]$	[145,180]
74	$\left[x+\frac{3}{4},\ \frac{1}{2}-z,\ x+\frac{1}{4}\right]$	[146,187]
75	$\left[x+\frac{3}{4},\ z+\frac{3}{4},\ -x\right]$	[147,189]
76	$\left[z+\frac{3}{4},\ x+\frac{3}{4},\ -x\right]$	[148,188]
77	$\left[\frac{1}{2}-z,\ x+\frac{3}{4},\ x+\frac{1}{4}\right]$	[149,190]
78	$\left[\frac{1}{2}-x,\ x+\frac{3}{4},\ z+\frac{1}{4}\right]$	[150,176]
79	$\left[x+\frac{3}{4},\ \frac{1}{2}-x,\ z+\frac{1}{4}\right]$	[151,177]
80	$\left[x+\frac{1}{2},\ \frac{3}{4}-x,\ \frac{1}{4}-z\right]$	[152,174]
81	$\left[\frac{3}{4}-x,\ x+\frac{1}{2},\ \frac{1}{4}-z\right]$	[153,175]
82	$\left[\frac{3}{4}-x,\ \frac{3}{4}-x,\ z\right]$	[154,179]
83	$\left[x+\frac{3}{4},\ x+\frac{3}{4},\ -z\right]$	[155,178]
84	$\left[\frac{1}{2}-x,\ \frac{1}{2}-x,\ -z\right]$	[156,169]
85	$\left[\frac{1}{2}-x,\ z+\frac{3}{4},\ x+\frac{1}{4}\right]$	[157,191]
86	$\left[\frac{1}{2}-x,\ \frac{1}{2}-z,\ -x\right]$	[158,186]
87	$\left[z+\frac{3}{4},\ \frac{1}{2}-x,\ x+\frac{1}{4}\right]$	[159,192]
88	$\left[\frac{1}{2}-z,\ \frac{1}{2}-x,\ -x\right]$	[160,185]
89	$\left[z+\frac{1}{2},\ x+\frac{1}{2},\ x\right]$	[161,184]
90	$\left[x+\frac{1}{2},\ z+\frac{1}{2},\ x\right]$	[162,182]
91	$\left[\frac{3}{4}-x,\ z+\frac{1}{2},\ \frac{1}{4}-x\right]$	[163,170]
92	$\left[\frac{3}{4}-z,\ \frac{3}{4}-x,\ x\right]$	[164,172]
93	$\left[\frac{3}{4}-x,\ \frac{3}{4}-z,\ x\right]$	[165,171]
94	$\left[z+\frac{1}{2},\ \frac{3}{4}-x,\ \frac{1}{4}-x\right]$	[166,173]
95	$\left[x+\frac{1}{2},\ \frac{3}{4}-z,\ \frac{1}{4}-x\right]$	[167,181]
96	$\left[\frac{3}{4}-z,\ x+\frac{1}{2},\ \frac{1}{4}-x\right]$	[168,183]

Table 8: Wyckoff site: 96h, site symmetry: ..2

No.	position	mapping
1	$[0,\ y,\ -y]$	[1,14]
2	$\left[\frac{1}{4},\ y,\ y+\frac{1}{4}\right]$	[2,9]
3	$\left[\frac{1}{4},\ \frac{1}{4}-y,\ -y\right]$	[3,10]
4	$\left[\frac{1}{4}-y,\ y+\frac{1}{4},\ 0\right]$	[4,21]
5	$\left[y,\ y+\frac{1}{4},\ \frac{1}{4}\right]$	[5,23]
6	$\left[-y,\ \frac{1}{4},\ \frac{1}{4}-y\right]$	[6,22]
7	$\left[y+\frac{1}{4},\ 0,\ \frac{1}{4}-y\right]$	[7,24]
8	$\left[0,\ \frac{1}{4}-y,\ y+\frac{1}{4}\right]$	[8,13]

continued ...

Table 8

No.	position	mapping
9	$\left[y+\frac{1}{4},\ \frac{1}{4},\ y\right]$	[11,20]
10	$[-y,\ 0,\ y]$	[12,17]
11	$\left[\frac{1}{4}-y,\ -y,\ \frac{1}{4}\right]$	[15,19]
12	$[y,\ -y,\ 0]$	[16,18]
13	$[0,\ -y,\ y]$	[25,38]
14	$\left[\frac{1}{4},\ -y,\ \frac{1}{4}-y\right]$	[26,33]
15	$\left[\frac{1}{4},\ y+\frac{1}{4},\ y\right]$	[27,34]
16	$\left[y+\frac{1}{4},\ \frac{1}{4}-y,\ 0\right]$	[28,45]
17	$\left[-y,\ \frac{1}{4}-y,\ \frac{1}{4}\right]$	[29,47]
18	$\left[y,\ \frac{1}{4},\ y+\frac{1}{4}\right]$	[30,46]
19	$\left[\frac{1}{4}-y,\ 0,\ y+\frac{1}{4}\right]$	[31,48]
20	$\left[0,\ y+\frac{1}{4},\ \frac{1}{4}-y\right]$	[32,37]
21	$\left[\frac{1}{4}-y,\ \frac{1}{4},\ -y\right]$	[35,44]
22	$[y,\ 0,\ -y]$	[36,41]
23	$\left[y+\frac{1}{4},\ y,\ \frac{1}{4}\right]$	[39,43]
24	$[-y,\ y,\ 0]$	[40,42]
25	$\left[0,\ y+\frac{1}{2},\ \frac{1}{2}-y\right]$	[49,62]
26	$\left[\frac{1}{4},\ y+\frac{1}{2},\ y+\frac{3}{4}\right]$	[50,57]
27	$\left[\frac{1}{4},\ \frac{3}{4}-y,\ \frac{1}{2}-y\right]$	[51,58]
28	$\left[\frac{1}{4}-y,\ y+\frac{3}{4},\ \frac{1}{2}\right]$	[52,69]
29	$\left[y,\ y+\frac{3}{4},\ \frac{3}{4}\right]$	[53,71]
30	$\left[-y,\ \frac{3}{4},\ \frac{3}{4}-y\right]$	[54,70]
31	$\left[y+\frac{1}{4},\ \frac{1}{2},\ \frac{3}{4}-y\right]$	[55,72]
32	$\left[0,\ \frac{3}{4}-y,\ y+\frac{3}{4}\right]$	[56,61]
33	$\left[y+\frac{1}{4},\ \frac{3}{4},\ y+\frac{1}{2}\right]$	[59,68]
34	$\left[-y,\ \frac{1}{2},\ y+\frac{1}{2}\right]$	[60,65]
35	$\left[\frac{1}{4}-y,\ \frac{1}{2}-y,\ \frac{3}{4}\right]$	[63,67]
36	$\left[y,\ \frac{1}{2}-y,\ \frac{1}{2}\right]$	[64,66]
37	$\left[0,\ \frac{1}{2}-y,\ y+\frac{1}{2}\right]$	[73,86]
38	$\left[\frac{1}{4},\ \frac{1}{2}-y,\ \frac{3}{4}-y\right]$	[74,81]
39	$\left[\frac{1}{4},\ y+\frac{3}{4},\ y+\frac{1}{2}\right]$	[75,82]
40	$\left[y+\frac{1}{4},\ \frac{3}{4}-y,\ \frac{1}{2}\right]$	[76,93]
41	$\left[-y,\ \frac{3}{4}-y,\ \frac{3}{4}\right]$	[77,95]
42	$\left[y,\ \frac{3}{4},\ y+\frac{3}{4}\right]$	[78,94]
43	$\left[\frac{1}{4}-y,\ \frac{1}{2},\ y+\frac{3}{4}\right]$	[79,96]
44	$\left[0,\ y+\frac{3}{4},\ \frac{3}{4}-y\right]$	[80,85]
45	$\left[\frac{1}{4}-y,\ \frac{3}{4},\ \frac{1}{2}-y\right]$	[83,92]
46	$\left[y,\ \frac{1}{2},\ \frac{1}{2}-y\right]$	[84,89]
47	$\left[y+\frac{1}{4},\ y+\frac{1}{2},\ \frac{3}{4}\right]$	[87,91]
48	$\left[-y,\ y+\frac{1}{2},\ \frac{1}{2}\right]$	[88,90]
49	$\left[\frac{1}{2},\ y,\ \frac{1}{2}-y\right]$	[97,110]
50	$\left[\frac{3}{4},\ y,\ y+\frac{3}{4}\right]$	[98,105]
51	$\left[\frac{3}{4},\ \frac{1}{4}-y,\ \frac{1}{2}-y\right]$	[99,106]
52	$\left[\frac{3}{4}-y,\ y+\frac{1}{4},\ \frac{1}{2}\right]$	[100,117]
53	$\left[y+\frac{1}{2},\ y+\frac{1}{4},\ \frac{3}{4}\right]$	[101,119]
54	$\left[\frac{1}{2}-y,\ \frac{1}{4},\ \frac{3}{4}-y\right]$	[102,118]
55	$\left[y+\frac{3}{4},\ 0,\ \frac{3}{4}-y\right]$	[103,120]

continued ...

Table 8

No.	position	mapping
56	$\left[\frac{1}{2},\ \frac{1}{4}-y,\ y+\frac{3}{4}\right]$	[104,109]
57	$\left[y+\frac{3}{4},\ \frac{1}{4},\ y+\frac{1}{2}\right]$	[107,116]
58	$\left[\frac{1}{2}-y,\ 0,\ y+\frac{1}{2}\right]$	[108,113]
59	$\left[\frac{3}{4}-y,\ -y,\ \frac{3}{4}\right]$	[111,115]
60	$\left[y+\frac{1}{2},\ -y,\ \frac{1}{2}\right]$	[112,114]
61	$\left[\frac{1}{2},\ -y,\ y+\frac{1}{2}\right]$	[121,134]
62	$\left[\frac{3}{4},\ -y,\ \frac{3}{4}-y\right]$	[122,129]
63	$\left[\frac{3}{4},\ y+\frac{1}{4},\ y+\frac{1}{2}\right]$	[123,130]
64	$\left[y+\frac{3}{4},\ \frac{1}{4}-y,\ \frac{1}{2}\right]$	[124,141]
65	$\left[\frac{1}{2}-y,\ \frac{1}{4}-y,\ \frac{3}{4}\right]$	[125,143]
66	$\left[y+\frac{1}{2},\ \frac{1}{4},\ y+\frac{3}{4}\right]$	[126,142]
67	$\left[\frac{3}{4}-y,\ 0,\ y+\frac{3}{4}\right]$	[127,144]
68	$\left[\frac{1}{2},\ y+\frac{1}{4},\ \frac{3}{4}-y\right]$	[128,133]
69	$\left[\frac{3}{4}-y,\ \frac{1}{4},\ \frac{1}{2}-y\right]$	[131,140]
70	$\left[y+\frac{1}{2},\ 0,\ \frac{1}{2}-y\right]$	[132,137]
71	$\left[y+\frac{3}{4},\ y,\ \frac{3}{4}\right]$	[135,139]
72	$\left[\frac{1}{2}-y,\ y,\ \frac{1}{2}\right]$	[136,138]
73	$\left[\frac{1}{2},\ y+\frac{1}{2},\ -y\right]$	[145,158]
74	$\left[\frac{3}{4},\ y+\frac{1}{2},\ y+\frac{1}{4}\right]$	[146,153]
75	$\left[\frac{3}{4},\ \frac{3}{4}-y,\ -y\right]$	[147,154]
76	$\left[\frac{3}{4}-y,\ y+\frac{3}{4},\ 0\right]$	[148,165]
77	$\left[y+\frac{1}{2},\ y+\frac{3}{4},\ \frac{1}{4}\right]$	[149,167]
78	$\left[\frac{1}{2}-y,\ \frac{3}{4},\ \frac{1}{4}-y\right]$	[150,166]
79	$\left[y+\frac{3}{4},\ \frac{1}{2},\ \frac{1}{4}-y\right]$	[151,168]
80	$\left[\frac{1}{2},\ \frac{3}{4}-y,\ y+\frac{1}{4}\right]$	[152,157]
81	$\left[y+\frac{3}{4},\ \frac{3}{4},\ y\right]$	[155,164]
82	$\left[\frac{1}{2}-y,\ \frac{1}{2},\ y\right]$	[156,161]
83	$\left[\frac{3}{4}-y,\ \frac{1}{2}-y,\ \frac{1}{4}\right]$	[159,163]
84	$\left[y+\frac{1}{2},\ \frac{1}{2}-y,\ 0\right]$	[160,162]
85	$\left[\frac{1}{2},\ \frac{1}{2}-y,\ y\right]$	[169,182]
86	$\left[\frac{3}{4},\ \frac{1}{2}-y,\ \frac{1}{4}-y\right]$	[170,177]
87	$\left[\frac{3}{4},\ y+\frac{3}{4},\ y\right]$	[171,178]
88	$\left[y+\frac{3}{4},\ \frac{3}{4}-y,\ 0\right]$	[172,189]
89	$\left[\frac{1}{2}-y,\ \frac{3}{4}-y,\ \frac{1}{4}\right]$	[173,191]
90	$\left[y+\frac{1}{2},\ \frac{3}{4},\ y+\frac{1}{4}\right]$	[174,190]
91	$\left[\frac{3}{4}-y,\ \frac{1}{2},\ y+\frac{1}{4}\right]$	[175,192]
92	$\left[\frac{1}{2},\ y+\frac{3}{4},\ \frac{1}{4}-y\right]$	[176,181]
93	$\left[\frac{3}{4}-y,\ \frac{3}{4},\ -y\right]$	[179,188]
94	$\left[y+\frac{1}{2},\ \frac{1}{2},\ -y\right]$	[180,185]
95	$\left[y+\frac{3}{4},\ y+\frac{1}{2},\ \frac{1}{4}\right]$	[183,187]
96	$\left[\frac{1}{2}-y,\ y+\frac{1}{2},\ 0\right]$	[184,186]

Table 9: Wyckoff site: `192i`, site symmetry: `1`

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

continued ...

Table 9

No.	position	mapping
47	$\left[-y,\, z+\frac{1}{4},\, x+\frac{1}{4}\right]$	[47]
48	$\left[z+\frac{1}{4},\, -x,\, y+\frac{1}{4}\right]$	[48]
49	$\left[x,\, y+\frac{1}{2},\, z+\frac{1}{2}\right]$	[49]
50	$\left[x+\frac{1}{4},\, \frac{1}{2}-z,\, y+\frac{3}{4}\right]$	[50]
51	$\left[x+\frac{1}{4},\, z+\frac{3}{4},\, \frac{1}{2}-y\right]$	[51]
52	$\left[z+\frac{1}{4},\, y+\frac{3}{4},\, \frac{1}{2}-x\right]$	[52]
53	$\left[-z,\, y+\frac{3}{4},\, x+\frac{3}{4}\right]$	[53]
54	$\left[-y,\, x+\frac{3}{4},\, z+\frac{3}{4}\right]$	[54]
55	$\left[y+\frac{1}{4},\, \frac{1}{2}-x,\, z+\frac{3}{4}\right]$	[55]
56	$\left[x,\, \frac{3}{4}-y,\, \frac{3}{4}-z\right]$	[56]
57	$\left[\frac{1}{4}-x,\, y+\frac{1}{2},\, \frac{3}{4}-z\right]$	[57]
58	$\left[\frac{1}{4}-x,\, \frac{3}{4}-y,\, z+\frac{1}{2}\right]$	[58]
59	$\left[y+\frac{1}{4},\, x+\frac{3}{4},\, \frac{1}{2}-z\right]$	[59]
60	$\left[-y,\, \frac{1}{2}-x,\, \frac{1}{2}-z\right]$	[60]
61	$\left[-x,\, z+\frac{3}{4},\, y+\frac{3}{4}\right]$	[61]
62	$\left[-x,\, \frac{1}{2}-z,\, \frac{1}{2}-y\right]$	[62]
63	$\left[z+\frac{1}{4},\, \frac{1}{2}-y,\, x+\frac{3}{4}\right]$	[63]
64	$\left[-z,\, \frac{1}{2}-y,\, \frac{1}{2}-x\right]$	[64]
65	$\left[z,\, x+\frac{1}{2},\, y+\frac{1}{2}\right]$	[65]
66	$\left[y,\, z+\frac{1}{2},\, x+\frac{1}{2}\right]$	[66]
67	$\left[\frac{1}{4}-y,\, z+\frac{1}{2},\, \frac{3}{4}-x\right]$	[67]
68	$\left[\frac{1}{4}-z,\, \frac{3}{4}-x,\, y+\frac{1}{2}\right]$	[68]
69	$\left[\frac{1}{4}-y,\, \frac{3}{4}-z,\, x+\frac{1}{2}\right]$	[69]
70	$\left[z,\, \frac{3}{4}-x,\, \frac{3}{4}-y\right]$	[70]
71	$\left[y,\, \frac{3}{4}-z,\, \frac{3}{4}-x\right]$	[71]
72	$\left[\frac{1}{4}-z,\, x+\frac{1}{2},\, \frac{3}{4}-y\right]$	[72]
73	$\left[-x,\, \frac{1}{2}-y,\, \frac{1}{2}-z\right]$	[73]
74	$\left[\frac{1}{4}-x,\, z+\frac{1}{2},\, \frac{3}{4}-y\right]$	[74]
75	$\left[\frac{1}{4}-x,\, \frac{3}{4}-z,\, y+\frac{1}{2}\right]$	[75]
76	$\left[\frac{1}{4}-z,\, \frac{3}{4}-y,\, x+\frac{1}{2}\right]$	[76]
77	$\left[z,\, \frac{3}{4}-y,\, \frac{3}{4}-x\right]$	[77]
78	$\left[y,\, \frac{3}{4}-x,\, \frac{3}{4}-z\right]$	[78]
79	$\left[\frac{1}{4}-y,\, x+\frac{1}{2},\, \frac{3}{4}-z\right]$	[79]
80	$\left[-x,\, y+\frac{3}{4},\, z+\frac{3}{4}\right]$	[80]
81	$\left[x+\frac{1}{4},\, \frac{1}{2}-y,\, z+\frac{3}{4}\right]$	[81]
82	$\left[x+\frac{1}{4},\, y+\frac{3}{4},\, \frac{1}{2}-z\right]$	[82]
83	$\left[\frac{1}{4}-y,\, \frac{3}{4}-x,\, z+\frac{1}{2}\right]$	[83]
84	$\left[y,\, x+\frac{1}{2},\, z+\frac{1}{2}\right]$	[84]
85	$\left[x,\, \frac{3}{4}-z,\, \frac{3}{4}-y\right]$	[85]
86	$\left[x,\, z+\frac{1}{2},\, y+\frac{1}{2}\right]$	[86]
87	$\left[\frac{1}{4}-z,\, y+\frac{1}{2},\, \frac{3}{4}-x\right]$	[87]
88	$\left[z,\, y+\frac{1}{2},\, x+\frac{1}{2}\right]$	[88]
89	$\left[-z,\, \frac{1}{2}-x,\, \frac{1}{2}-y\right]$	[89]
90	$\left[-y,\, \frac{1}{2}-z,\, \frac{1}{2}-x\right]$	[90]
91	$\left[y+\frac{1}{4},\, \frac{1}{2}-z,\, x+\frac{3}{4}\right]$	[91]
92	$\left[z+\frac{1}{4},\, x+\frac{3}{4},\, \frac{1}{2}-y\right]$	[92]
93	$\left[y+\frac{1}{4},\, z+\frac{3}{4},\, \frac{1}{2}-x\right]$	[93]

continued ...

Table 9

No.	position	mapping
94	$\left[-z,\, x+\frac{3}{4},\, y+\frac{3}{4}\right]$	[94]
95	$\left[-y,\, z+\frac{3}{4},\, x+\frac{3}{4}\right]$	[95]
96	$\left[z+\frac{1}{4},\, \frac{1}{2}-x,\, y+\frac{3}{4}\right]$	[96]
97	$\left[x+\frac{1}{2},\, y,\, z+\frac{1}{2}\right]$	[97]
98	$\left[x+\frac{3}{4},\, -z,\, y+\frac{3}{4}\right]$	[98]
99	$\left[x+\frac{3}{4},\, z+\frac{1}{4},\, \frac{1}{2}-y\right]$	[99]
100	$\left[z+\frac{3}{4},\, y+\frac{1}{4},\, \frac{1}{2}-x\right]$	[100]
101	$\left[\frac{1}{2}-z,\, y+\frac{1}{4},\, x+\frac{3}{4}\right]$	[101]
102	$\left[\frac{1}{2}-y,\, x+\frac{1}{4},\, z+\frac{3}{4}\right]$	[102]
103	$\left[y+\frac{3}{4},\, -x,\, z+\frac{3}{4}\right]$	[103]
104	$\left[x+\frac{1}{2},\, \frac{1}{4}-y,\, \frac{3}{4}-z\right]$	[104]
105	$\left[\frac{3}{4}-x,\, y,\, \frac{3}{4}-z\right]$	[105]
106	$\left[\frac{3}{4}-x,\, \frac{1}{4}-y,\, z+\frac{1}{2}\right]$	[106]
107	$\left[y+\frac{3}{4},\, x+\frac{1}{4},\, \frac{1}{2}-z\right]$	[107]
108	$\left[\frac{1}{2}-y,\, -x,\, \frac{1}{2}-z\right]$	[108]
109	$\left[\frac{1}{2}-x,\, z+\frac{1}{4},\, y+\frac{3}{4}\right]$	[109]
110	$\left[\frac{1}{2}-x,\, -z,\, \frac{1}{2}-y\right]$	[110]
111	$\left[z+\frac{3}{4},\, -y,\, x+\frac{3}{4}\right]$	[111]
112	$\left[\frac{1}{2}-z,\, -y,\, \frac{1}{2}-x\right]$	[112]
113	$\left[z+\frac{1}{2},\, x,\, y+\frac{1}{2}\right]$	[113]
114	$\left[y+\frac{1}{2},\, z,\, x+\frac{1}{2}\right]$	[114]
115	$\left[\frac{3}{4}-y,\, z,\, \frac{3}{4}-x\right]$	[115]
116	$\left[\frac{3}{4}-z,\, \frac{1}{4}-x,\, y+\frac{1}{2}\right]$	[116]
117	$\left[\frac{3}{4}-y,\, \frac{1}{4}-z,\, x+\frac{1}{2}\right]$	[117]
118	$\left[z+\frac{1}{2},\, \frac{1}{4}-x,\, \frac{3}{4}-y\right]$	[118]
119	$\left[y+\frac{1}{2},\, \frac{1}{4}-z,\, \frac{3}{4}-x\right]$	[119]
120	$\left[\frac{3}{4}-z,\, x,\, \frac{3}{4}-y\right]$	[120]
121	$\left[\frac{1}{2}-x,\, -y,\, \frac{1}{2}-z\right]$	[121]
122	$\left[\frac{3}{4}-x,\, z,\, \frac{3}{4}-y\right]$	[122]
123	$\left[\frac{3}{4}-x,\, \frac{1}{4}-z,\, y+\frac{1}{2}\right]$	[123]
124	$\left[\frac{3}{4}-z,\, \frac{1}{4}-y,\, x+\frac{1}{2}\right]$	[124]
125	$\left[z+\frac{1}{2},\, \frac{1}{4}-y,\, \frac{3}{4}-x\right]$	[125]
126	$\left[y+\frac{1}{2},\, \frac{1}{4}-x,\, \frac{3}{4}-z\right]$	[126]
127	$\left[\frac{3}{4}-y,\, x,\, \frac{3}{4}-z\right]$	[127]
128	$\left[\frac{1}{2}-x,\, y+\frac{1}{4},\, z+\frac{3}{4}\right]$	[128]
129	$\left[x+\frac{3}{4},\, -y,\, z+\frac{3}{4}\right]$	[129]
130	$\left[x+\frac{3}{4},\, y+\frac{1}{4},\, \frac{1}{2}-z\right]$	[130]
131	$\left[\frac{3}{4}-y,\, \frac{1}{4}-x,\, z+\frac{1}{2}\right]$	[131]
132	$\left[y+\frac{1}{2},\, x,\, z+\frac{1}{2}\right]$	[132]
133	$\left[x+\frac{1}{2},\, \frac{1}{4}-z,\, \frac{3}{4}-y\right]$	[133]
134	$\left[x+\frac{1}{2},\, z,\, y+\frac{1}{2}\right]$	[134]
135	$\left[\frac{3}{4}-z,\, y,\, \frac{3}{4}-x\right]$	[135]
136	$\left[z+\frac{1}{2},\, y,\, x+\frac{1}{2}\right]$	[136]
137	$\left[\frac{1}{2}-z,\, -x,\, \frac{1}{2}-y\right]$	[137]
138	$\left[\frac{1}{2}-y,\, -z,\, \frac{1}{2}-x\right]$	[138]
139	$\left[y+\frac{3}{4},\, -z,\, x+\frac{3}{4}\right]$	[139]
140	$\left[z+\frac{3}{4},\, x+\frac{1}{4},\, \frac{1}{2}-y\right]$	[140]

continued ...

Table 9

No.	position	mapping
141	$\left[y+\frac{3}{4},\, z+\frac{1}{4},\, \frac{1}{2}-x\right]$	[141]
142	$\left[\frac{1}{2}-z,\, x+\frac{1}{4},\, y+\frac{3}{4}\right]$	[142]
143	$\left[\frac{1}{2}-y,\, z+\frac{1}{4},\, x+\frac{3}{4}\right]$	[143]
144	$\left[z+\frac{3}{4},\, -x,\, y+\frac{3}{4}\right]$	[144]
145	$\left[x+\frac{1}{2},\, y+\frac{1}{2},\, z\right]$	[145]
146	$\left[x+\frac{3}{4},\, \frac{1}{2}-z,\, y+\frac{1}{4}\right]$	[146]
147	$\left[x+\frac{3}{4},\, z+\frac{3}{4},\, -y\right]$	[147]
148	$\left[z+\frac{3}{4},\, y+\frac{3}{4},\, -x\right]$	[148]
149	$\left[\frac{1}{2}-z,\, y+\frac{3}{4},\, x+\frac{1}{4}\right]$	[149]
150	$\left[\frac{1}{2}-y,\, x+\frac{3}{4},\, z+\frac{1}{4}\right]$	[150]
151	$\left[y+\frac{3}{4},\, \frac{1}{2}-x,\, z+\frac{1}{4}\right]$	[151]
152	$\left[x+\frac{1}{2},\, \frac{3}{4}-y,\, \frac{1}{4}-z\right]$	[152]
153	$\left[\frac{3}{4}-x,\, y+\frac{1}{2},\, \frac{1}{4}-z\right]$	[153]
154	$\left[\frac{3}{4}-x,\, \frac{3}{4}-y,\, z\right]$	[154]
155	$\left[y+\frac{3}{4},\, x+\frac{3}{4},\, -z\right]$	[155]
156	$\left[\frac{1}{2}-y,\, \frac{1}{2}-x,\, -z\right]$	[156]
157	$\left[\frac{1}{2}-x,\, z+\frac{3}{4},\, y+\frac{1}{4}\right]$	[157]
158	$\left[\frac{1}{2}-x,\, \frac{1}{2}-z,\, -y\right]$	[158]
159	$\left[z+\frac{3}{4},\, \frac{1}{2}-y,\, x+\frac{1}{4}\right]$	[159]
160	$\left[\frac{1}{2}-z,\, \frac{1}{2}-y,\, -x\right]$	[160]
161	$\left[z+\frac{1}{2},\, x+\frac{1}{2},\, y\right]$	[161]
162	$\left[y+\frac{1}{2},\, z+\frac{1}{2},\, x\right]$	[162]
163	$\left[\frac{3}{4}-y,\, z+\frac{1}{2},\, \frac{1}{4}-x\right]$	[163]
164	$\left[\frac{3}{4}-z,\, \frac{3}{4}-x,\, y\right]$	[164]
165	$\left[\frac{3}{4}-y,\, \frac{3}{4}-z,\, x\right]$	[165]
166	$\left[z+\frac{1}{2},\, \frac{3}{4}-x,\, \frac{1}{4}-y\right]$	[166]
167	$\left[y+\frac{1}{2},\, \frac{3}{4}-z,\, \frac{1}{4}-x\right]$	[167]
168	$\left[\frac{3}{4}-z,\, x+\frac{1}{2},\, \frac{1}{4}-y\right]$	[168]
169	$\left[\frac{1}{2}-x,\, \frac{1}{2}-y,\, -z\right]$	[169]
170	$\left[\frac{3}{4}-x,\, z+\frac{1}{2},\, \frac{1}{4}-y\right]$	[170]
171	$\left[\frac{3}{4}-x,\, \frac{3}{4}-z,\, y\right]$	[171]
172	$\left[\frac{3}{4}-z,\, \frac{3}{4}-y,\, x\right]$	[172]
173	$\left[z+\frac{1}{2},\, \frac{3}{4}-y,\, \frac{1}{4}-x\right]$	[173]
174	$\left[y+\frac{1}{2},\, \frac{3}{4}-x,\, \frac{1}{4}-z\right]$	[174]
175	$\left[\frac{3}{4}-y,\, x+\frac{1}{2},\, \frac{1}{4}-z\right]$	[175]
176	$\left[\frac{1}{2}-x,\, y+\frac{3}{4},\, z+\frac{1}{4}\right]$	[176]
177	$\left[x+\frac{3}{4},\, \frac{1}{2}-y,\, z+\frac{1}{4}\right]$	[177]
178	$\left[x+\frac{3}{4},\, y+\frac{3}{4},\, -z\right]$	[178]
179	$\left[\frac{3}{4}-y,\, \frac{3}{4}-x,\, z\right]$	[179]
180	$\left[y+\frac{1}{2},\, x+\frac{1}{2},\, z\right]$	[180]
181	$\left[x+\frac{1}{2},\, \frac{3}{4}-z,\, \frac{1}{4}-y\right]$	[181]
182	$\left[x+\frac{1}{2},\, z+\frac{1}{2},\, y\right]$	[182]
183	$\left[\frac{3}{4}-z,\, y+\frac{1}{2},\, \frac{1}{4}-x\right]$	[183]
184	$\left[z+\frac{1}{2},\, y+\frac{1}{2},\, x\right]$	[184]
185	$\left[\frac{1}{2}-z,\, \frac{1}{2}-x,\, -y\right]$	[185]
186	$\left[\frac{1}{2}-y,\, \frac{1}{2}-z,\, -x\right]$	[186]
187	$\left[y+\frac{3}{4},\, \frac{1}{2}-z,\, x+\frac{1}{4}\right]$	[187]

continued ...

Table 9

No.	position	mapping
188	$\left[z+\frac{3}{4},\, x+\frac{3}{4},\, -y\right]$	[188]
189	$\left[y+\frac{3}{4},\, z+\frac{3}{4},\, -x\right]$	[189]
190	$\left[\frac{1}{2}-z,\, x+\frac{3}{4},\, y+\frac{1}{4}\right]$	[190]
191	$\left[\frac{1}{2}-y,\, z+\frac{3}{4},\, x+\frac{1}{4}\right]$	[191]
192	$\left[z+\frac{3}{4},\, \frac{1}{2}-x,\, y+\frac{1}{4}\right]$	[192]