MSG No. 226.125 $Fm\bar{3}c'$ [Type III, cubic]

Table 1: Wyckoff site: 8a, site symmetry: 4'32'

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

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

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]
2	$\left[\frac{1}{2}, \frac{1}{2}, \frac{1}{2}\right]$	[25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48]
3	$\left[0, \frac{1}{2}, \frac{1}{2}\right]$	[49,50,51,52,53,54,55,56,57,58,59,60,61,62,63,64,65,66,67,68,69,70,71,72]
4	$\left[\frac{1}{2}, 0, 0\right]$	[73,74,75,76,77,78,79,80,81,82,83,84,85,86,87,88,89,90,91,92,93,94,95,96]
5	$\left[\frac{1}{2}, 0, \frac{1}{2}\right]$	[97,98,99,100,101,102,103,104,105,106,107,108,109,110,111,112,113,114,115,116,117,118,119,120]
6	$\left[0, \frac{1}{2}, 0\right]$	[121,122,123,124,125,126,127,128,129,130,131,132,133,134,135,136,137,138,139,140,141,142,143,144]
7	$\left[\frac{1}{2}, \frac{1}{2}, 0\right]$	[145,146,147,148,149,150,151,152,153,154,155,156,157,158,159,160,161,162,163,164,165,166,167,168]
8	$\left[0, 0, \frac{1}{2}\right]$	[169,170,171,172,173,174,175,176,177,178,179,180,181,182,183,184,185,186,187,188,189,190,191,192]

Table 3: Wyckoff site: 24c, site symmetry: -4'm.2'

No.	position	mapping
1	$\left[\frac{1}{4}, 0, 0\right]$	[1,2,15,16,81,82,85,86]
2	$\left[\frac{3}{4}, 0, 0\right]$	[3,4,13,14,73,74,93,94]
3	$\left[0, \frac{1}{4}, 0\right]$	[5,12,20,22,126,128,137,139]
4	$\left[0, 0, \frac{1}{4}\right]$	[6,9,19,23,171,180,184,191]
5	$\left[0, 0, \frac{3}{4}\right]$	[7,11,18,21,172,179,183,192]
6	$\left[0, \frac{3}{4}, 0\right]$	[8,10,17,24,125,127,138,140]
7	$\left[\frac{3}{4}, \frac{1}{2}, \frac{1}{2}\right]$	[25,26,45,46,51,52,61,62]
8	$\left[\frac{1}{2}, \frac{1}{2}, \frac{1}{4}\right]$	[27,36,40,47,150,153,163,167]
9	$\left[\frac{1}{2}, \frac{1}{2}, \frac{3}{4}\right]$	[28,35,39,48,151,155,162,165]
10	$\left[\frac{1}{2}, \frac{3}{4}, \frac{1}{2}\right]$	[29,31,42,44,104,106,113,120]
11	$\left[\frac{1}{2}, \frac{1}{4}, \frac{1}{2}\right]$	[30,32,41,43,101,108,116,118]
12	$\left[\frac{1}{4}, \frac{1}{2}, \frac{1}{2}\right]$	[33,34,37,38,49,50,63,64]
13	$\left[0, \frac{3}{4}, \frac{1}{2}\right]$	[53,60,68,70,174,176,185,187]
14	$\left[0, \frac{1}{2}, \frac{3}{4}\right]$	[54,57,67,71,123,132,136,143]
15	$\left[0, \frac{1}{2}, \frac{1}{4}\right]$	[55,59,66,69,124,131,135,144]

continued ...

Table 3

No.	position	mapping
16	$\left[0, \frac{1}{4}, \frac{1}{2}\right]$	[56,58,65,72,173,175,186,188]
17	$\left[\frac{1}{2}, 0, \frac{3}{4}\right]$	[75,84,88,95,102,105,115,119]
18	$\left[\frac{1}{2}, 0, \frac{1}{4}\right]$	[76,83,87,96,103,107,114,117]
19	$\left[\frac{1}{2}, \frac{1}{4}, 0\right]$	[77,79,90,92,152,154,161,168]
20	$\left[\frac{1}{2}, \frac{3}{4}, 0\right]$	[78,80,89,91,149,156,164,166]
21	$\left[\frac{3}{4}, 0, \frac{1}{2}\right]$	[97,98,111,112,177,178,181,182]
22	$\left[\frac{1}{4}, 0, \frac{1}{2}\right]$	[99,100,109,110,169,170,189,190]
23	$\left[\frac{1}{4}, \frac{1}{2}, 0\right]$	[121,122,141,142,147,148,157,158]
24	$\left[\frac{3}{4}, \frac{1}{2}, 0\right]$	[129,130,133,134,145,146,159,160]

Table 4: Wyckoff site: 24d, site symmetry: 4'/m..

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

Table 5: Wyckoff site: `48e`, site symmetry: `2mm..`

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

continued ...

Table 5

No.	position	mapping
47	$\left[0, -x, \frac{1}{2}\right]$	[174,176,185,187]
48	$\left[-x, 0, \frac{1}{2}\right]$	[177,178,181,182]

Table 6: Wyckoff site: 48f, site symmetry: 4’..

No.	position	mapping
1	$\left[x, \frac{1}{4}, \frac{1}{4}\right]$	[1,50,121,170]
2	$\left[x, \frac{3}{4}, \frac{3}{4}\right]$	[2,49,122,169]
3	$\left[-x, \frac{1}{4}, \frac{3}{4}\right]$	[3,52,130,177]
4	$\left[-x, \frac{3}{4}, \frac{1}{4}\right]$	[4,51,129,178]
5	$\left[\frac{1}{4}, x, \frac{1}{4}\right]$	[5,77,108,175]
6	$\left[\frac{1}{4}, \frac{1}{4}, x\right]$	[6,76,131,153]
7	$\left[\frac{3}{4}, \frac{1}{4}, -x\right]$	[7,75,132,155]
8	$\left[\frac{3}{4}, -x, \frac{1}{4}\right]$	[8,78,106,176]
9	$\left[\frac{3}{4}, \frac{3}{4}, x\right]$	[9,83,124,150]
10	$\left[\frac{1}{4}, -x, \frac{3}{4}\right]$	[10,80,104,174]
11	$\left[\frac{1}{4}, \frac{3}{4}, -x\right]$	[11,84,123,151]
12	$\left[\frac{3}{4}, x, \frac{3}{4}\right]$	[12,79,101,173]
13	$\left[-x, \frac{3}{4}, \frac{3}{4}\right]$	[13,62,133,182]
14	$\left[-x, \frac{1}{4}, \frac{1}{4}\right]$	[14,61,134,181]
15	$\left[x, \frac{3}{4}, \frac{1}{4}\right]$	[15,64,142,189]
16	$\left[x, \frac{1}{4}, \frac{3}{4}\right]$	[16,63,141,190]
17	$\left[\frac{3}{4}, -x, \frac{3}{4}\right]$	[17,89,120,187]
18	$\left[\frac{3}{4}, \frac{3}{4}, -x\right]$	[18,88,143,165]
19	$\left[\frac{1}{4}, \frac{3}{4}, x\right]$	[19,87,144,167]
20	$\left[\frac{1}{4}, x, \frac{3}{4}\right]$	[20,90,118,188]
21	$\left[\frac{1}{4}, \frac{1}{4}, -x\right]$	[21,95,136,162]
22	$\left[\frac{3}{4}, x, \frac{1}{4}\right]$	[22,92,116,186]
23	$\left[\frac{3}{4}, \frac{1}{4}, x\right]$	[23,96,135,163]
24	$\left[\frac{1}{4}, -x, \frac{1}{4}\right]$	[24,91,113,185]
25	$\left[x+\frac{1}{2}, \frac{1}{4}, \frac{3}{4}\right]$	[25,74,97,146]
26	$\left[x+\frac{1}{2}, \frac{3}{4}, \frac{1}{4}\right]$	[26,73,98,145]
27	$\left[\frac{3}{4}, \frac{3}{4}, \frac{1}{2}-x\right]$	[27,55,107,180]
28	$\left[\frac{1}{4}, \frac{3}{4}, x+\frac{1}{2}\right]$	[28,54,105,179]
29	$\left[\frac{1}{4}, x+\frac{1}{2}, \frac{3}{4}\right]$	[29,53,127,156]
30	$\left[\frac{3}{4}, \frac{1}{2}-x, \frac{3}{4}\right]$	[30,56,128,154]
31	$\left[\frac{3}{4}, x+\frac{1}{2}, \frac{1}{4}\right]$	[31,60,125,149]
32	$\left[\frac{1}{4}, \frac{1}{2}-x, \frac{1}{4}\right]$	[32,58,126,152]
33	$\left[\frac{1}{2}-x, \frac{3}{4}, \frac{3}{4}\right]$	[33,82,100,147]
34	$\left[\frac{1}{2}-x, \frac{1}{4}, \frac{1}{4}\right]$	[34,81,99,148]
35	$\left[\frac{3}{4}, \frac{1}{4}, x+\frac{1}{2}\right]$	[35,57,102,172]
36	$\left[\frac{1}{4}, \frac{1}{4}, \frac{1}{2}-x\right]$	[36,59,103,171]
37	$\left[\frac{1}{2}-x, \frac{3}{4}, \frac{1}{4}\right]$	[37,86,109,158]
38	$\left[\frac{1}{2}-x, \frac{1}{4}, \frac{3}{4}\right]$	[38,85,110,157]

continued ...

Table 6

No.	position	mapping
39	$\left[\frac{1}{4},\ \frac{1}{4},\ x+\frac{1}{2}\right]$	[39,67,119,192]
40	$\left[\frac{3}{4},\ \frac{1}{4},\ \frac{1}{2}-x\right]$	[40,66,117,191]
41	$\left[\frac{3}{4},\ \frac{1}{2}-x,\ \frac{1}{4}\right]$	[41,65,139,168]
42	$\left[\frac{1}{4},\ x+\frac{1}{2},\ \frac{1}{4}\right]$	[42,68,140,166]
43	$\left[\frac{1}{4},\ \frac{1}{2}-x,\ \frac{3}{4}\right]$	[43,72,137,161]
44	$\left[\frac{3}{4},\ x+\frac{1}{2},\ \frac{3}{4}\right]$	[44,70,138,164]
45	$\left[x+\frac{1}{2},\ \frac{1}{4},\ \frac{1}{4}\right]$	[45,94,112,159]
46	$\left[x+\frac{1}{2},\ \frac{3}{4},\ \frac{3}{4}\right]$	[46,93,111,160]
47	$\left[\frac{1}{4},\ \frac{3}{4},\ \frac{1}{2}-x\right]$	[47,69,114,184]
48	$\left[\frac{3}{4},\ \frac{3}{4},\ x+\frac{1}{2}\right]$	[48,71,115,183]

Table 7: Wyckoff site: 64g, site symmetry: .3.

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

continued ...

Table 7

No.	position	mapping
31	$\left[x+\frac{1}{2},\,-x,\,-x\right]$	[88,89,93]
32	$\left[x+\frac{1}{2},\,x,\,x\right]$	[92,94,96]
33	$\left[x+\frac{1}{2},\,x,\,x+\frac{1}{2}\right]$	[97,101,102]
34	$\left[x+\frac{1}{2},\,-x,\,\frac{1}{2}-x\right]$	[98,106,107]
35	$\left[\frac{1}{2}-x,\,x,\,\frac{1}{2}-x\right]$	[99,103,108]
36	$\left[\frac{1}{2}-x,\,-x,\,x+\frac{1}{2}\right]$	[100,104,105]
37	$\left[\frac{1}{2}-x,\,-x,\,\frac{1}{2}-x\right]$	[109,113,114]
38	$\left[\frac{1}{2}-x,\,x,\,x+\frac{1}{2}\right]$	[110,118,119]
39	$\left[x+\frac{1}{2},\,-x,\,x+\frac{1}{2}\right]$	[111,115,120]
40	$\left[x+\frac{1}{2},\,x,\,\frac{1}{2}-x\right]$	[112,116,117]
41	$\left[x,\,\frac{1}{2}-x,\,x\right]$	[121,126,131]
42	$\left[x,\,x+\frac{1}{2},\,-x\right]$	[122,123,127]
43	$\left[-x,\,x+\frac{1}{2},\,x\right]$	[124,125,129]
44	$\left[-x,\,\frac{1}{2}-x,\,-x\right]$	[128,130,132]
45	$\left[-x,\,x+\frac{1}{2},\,-x\right]$	[133,138,143]
46	$\left[-x,\,\frac{1}{2}-x,\,x\right]$	[134,135,139]
47	$\left[x,\,\frac{1}{2}-x,\,-x\right]$	[136,137,141]
48	$\left[x,\,x+\frac{1}{2},\,x\right]$	[140,142,144]
49	$\left[x+\frac{1}{2},\,x+\frac{1}{2},\,x\right]$	[145,149,150]
50	$\left[x+\frac{1}{2},\,\frac{1}{2}-x,\,-x\right]$	[146,154,155]
51	$\left[\frac{1}{2}-x,\,x+\frac{1}{2},\,-x\right]$	[147,151,156]
52	$\left[\frac{1}{2}-x,\,\frac{1}{2}-x,\,x\right]$	[148,152,153]
53	$\left[\frac{1}{2}-x,\,\frac{1}{2}-x,\,-x\right]$	[157,161,162]
54	$\left[\frac{1}{2}-x,\,x+\frac{1}{2},\,x\right]$	[158,166,167]
55	$\left[x+\frac{1}{2},\,\frac{1}{2}-x,\,x\right]$	[159,163,168]
56	$\left[x+\frac{1}{2},\,x+\frac{1}{2},\,-x\right]$	[160,164,165]
57	$\left[x,\,-x,\,x+\frac{1}{2}\right]$	[169,174,179]
58	$\left[x,\,x,\,\frac{1}{2}-x\right]$	[170,171,175]
59	$\left[-x,\,x,\,x+\frac{1}{2}\right]$	[172,173,177]
60	$\left[-x,\,-x,\,\frac{1}{2}-x\right]$	[176,178,180]
61	$\left[-x,\,x,\,\frac{1}{2}-x\right]$	[181,186,191]
62	$\left[-x,\,-x,\,x+\frac{1}{2}\right]$	[182,183,187]
63	$\left[x,\,-x,\,\frac{1}{2}-x\right]$	[184,185,189]
64	$\left[x,\,x,\,x+\frac{1}{2}\right]$	[188,190,192]

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

No.	position	mapping
1	$\left[\frac{1}{4},\,y,\,y\right]$	[1,81]
2	$\left[\frac{1}{4},\,-y,\,-y\right]$	[2,82]
3	$\left[\frac{3}{4},\,y,\,-y\right]$	[3,74]
4	$\left[\frac{3}{4},\,-y,\,y\right]$	[4,73]
5	$\left[y,\,\frac{1}{4},\,y\right]$	[5,126]
6	$\left[y,\,y,\,\frac{1}{4}\right]$	[6,171]

continued ...

Table 8

No.	position	mapping
7	$\left[-y,\, y,\, \frac{3}{4}\right]$	[7,172]
8	$\left[-y,\, \frac{3}{4},\, y\right]$	[8,125]
9	$\left[-y,\, -y,\, \frac{1}{4}\right]$	[9,180]
10	$\left[y,\, \frac{3}{4},\, -y\right]$	[10,127]
11	$\left[y,\, -y,\, \frac{3}{4}\right]$	[11,179]
12	$\left[-y,\, \frac{1}{4},\, -y\right]$	[12,128]
13	$\left[\frac{3}{4},\, -y,\, -y\right]$	[13,93]
14	$\left[\frac{3}{4},\, y,\, y\right]$	[14,94]
15	$\left[\frac{1}{4},\, -y,\, y\right]$	[15,86]
16	$\left[\frac{1}{4},\, y,\, -y\right]$	[16,85]
17	$\left[-y,\, \frac{3}{4},\, -y\right]$	[17,138]
18	$\left[-y,\, -y,\, \frac{3}{4}\right]$	[18,183]
19	$\left[y,\, -y,\, \frac{1}{4}\right]$	[19,184]
20	$\left[y,\, \frac{1}{4},\, -y\right]$	[20,137]
21	$\left[y,\, y,\, \frac{3}{4}\right]$	[21,192]
22	$\left[-y,\, \frac{1}{4},\, y\right]$	[22,139]
23	$\left[-y,\, y,\, \frac{1}{4}\right]$	[23,191]
24	$\left[y,\, \frac{3}{4},\, y\right]$	[24,140]
25	$\left[\frac{3}{4},\, \frac{1}{2}-y,\, y+\frac{1}{2}\right]$	[25,52]
26	$\left[\frac{3}{4},\, y+\frac{1}{2},\, \frac{1}{2}-y\right]$	[26,51]
27	$\left[y+\frac{1}{2},\, y+\frac{1}{2},\, \frac{1}{4}\right]$	[27,150]
28	$\left[\frac{1}{2}-y,\, y+\frac{1}{2},\, \frac{3}{4}\right]$	[28,151]
29	$\left[\frac{1}{2}-y,\, \frac{3}{4},\, y+\frac{1}{2}\right]$	[29,104]
30	$\left[y+\frac{1}{2},\, \frac{1}{4},\, y+\frac{1}{2}\right]$	[30,101]
31	$\left[y+\frac{1}{2},\, \frac{3}{4},\, \frac{1}{2}-y\right]$	[31,106]
32	$\left[\frac{1}{2}-y,\, \frac{1}{4},\, \frac{1}{2}-y\right]$	[32,108]
33	$\left[\frac{1}{4},\, y+\frac{1}{2},\, y+\frac{1}{2}\right]$	[33,49]
34	$\left[\frac{1}{4},\, \frac{1}{2}-y,\, \frac{1}{2}-y\right]$	[34,50]
35	$\left[y+\frac{1}{2},\, \frac{1}{2}-y,\, \frac{3}{4}\right]$	[35,155]
36	$\left[\frac{1}{2}-y,\, \frac{1}{2}-y,\, \frac{1}{4}\right]$	[36,153]
37	$\left[\frac{1}{4},\, y+\frac{1}{2},\, \frac{1}{2}-y\right]$	[37,64]
38	$\left[\frac{1}{4},\, \frac{1}{2}-y,\, y+\frac{1}{2}\right]$	[38,63]
39	$\left[\frac{1}{2}-y,\, \frac{1}{2}-y,\, \frac{3}{4}\right]$	[39,162]
40	$\left[y+\frac{1}{2},\, \frac{1}{2}-y,\, \frac{1}{4}\right]$	[40,163]
41	$\left[y+\frac{1}{2},\, \frac{1}{4},\, \frac{1}{2}-y\right]$	[41,116]
42	$\left[\frac{1}{2}-y,\, \frac{3}{4},\, \frac{1}{2}-y\right]$	[42,113]
43	$\left[\frac{1}{2}-y,\, \frac{1}{4},\, y+\frac{1}{2}\right]$	[43,118]
44	$\left[y+\frac{1}{2},\, \frac{3}{4},\, y+\frac{1}{2}\right]$	[44,120]
45	$\left[\frac{3}{4},\, \frac{1}{2}-y,\, \frac{1}{2}-y\right]$	[45,61]
46	$\left[\frac{3}{4},\, y+\frac{1}{2},\, y+\frac{1}{2}\right]$	[46,62]
47	$\left[\frac{1}{2}-y,\, y+\frac{1}{2},\, \frac{1}{4}\right]$	[47,167]
48	$\left[y+\frac{1}{2},\, y+\frac{1}{2},\, \frac{3}{4}\right]$	[48,165]
49	$\left[y,\, \frac{3}{4},\, y+\frac{1}{2}\right]$	[53,174]
50	$\left[y,\, y+\frac{1}{2},\, \frac{3}{4}\right]$	[54,123]
51	$\left[-y,\, y+\frac{1}{2},\, \frac{1}{4}\right]$	[55,124]
52	$\left[-y,\, \frac{1}{4},\, y+\frac{1}{2}\right]$	[56,173]
53	$\left[-y,\, \frac{1}{2}-y,\, \frac{3}{4}\right]$	[57,132]

continued ...

Table 8

No.	position	mapping
54	$\left[y,\ \frac{1}{4},\ \frac{1}{2}-y\right]$	[58,175]
55	$\left[y,\ \frac{1}{2}-y,\ \frac{1}{4}\right]$	[59,131]
56	$\left[-y,\ \frac{3}{4},\ \frac{1}{2}-y\right]$	[60,176]
57	$\left[-y,\ \frac{1}{4},\ \frac{1}{2}-y\right]$	[65,186]
58	$\left[-y,\ \frac{1}{2}-y,\ \frac{1}{4}\right]$	[66,135]
59	$\left[y,\ \frac{1}{2}-y,\ \frac{3}{4}\right]$	[67,136]
60	$\left[y,\ \frac{3}{4},\ \frac{1}{2}-y\right]$	[68,185]
61	$\left[y,\ y+\frac{1}{2},\ \frac{1}{4}\right]$	[69,144]
62	$\left[-y,\ \frac{3}{4},\ y+\frac{1}{2}\right]$	[70,187]
63	$\left[-y,\ y+\frac{1}{2},\ \frac{3}{4}\right]$	[71,143]
64	$\left[y,\ \frac{1}{4},\ y+\frac{1}{2}\right]$	[72,188]
65	$\left[y+\frac{1}{2},\ y,\ \frac{3}{4}\right]$	[75,102]
66	$\left[\frac{1}{2}-y,\ y,\ \frac{1}{4}\right]$	[76,103]
67	$\left[\frac{1}{2}-y,\ \frac{1}{4},\ y\right]$	[77,152]
68	$\left[y+\frac{1}{2},\ \frac{3}{4},\ y\right]$	[78,149]
69	$\left[y+\frac{1}{2},\ \frac{1}{4},\ -y\right]$	[79,154]
70	$\left[\frac{1}{2}-y,\ \frac{3}{4},\ -y\right]$	[80,156]
71	$\left[y+\frac{1}{2},\ -y,\ \frac{1}{4}\right]$	[83,107]
72	$\left[\frac{1}{2}-y,\ -y,\ \frac{3}{4}\right]$	[84,105]
73	$\left[\frac{1}{2}-y,\ -y,\ \frac{1}{4}\right]$	[87,114]
74	$\left[y+\frac{1}{2},\ -y,\ \frac{3}{4}\right]$	[88,115]
75	$\left[y+\frac{1}{2},\ \frac{3}{4},\ -y\right]$	[89,164]
76	$\left[\frac{1}{2}-y,\ \frac{1}{4},\ -y\right]$	[90,161]
77	$\left[\frac{1}{2}-y,\ \frac{3}{4},\ y\right]$	[91,166]
78	$\left[y+\frac{1}{2},\ \frac{1}{4},\ y\right]$	[92,168]
79	$\left[\frac{1}{2}-y,\ y,\ \frac{3}{4}\right]$	[95,119]
80	$\left[y+\frac{1}{2},\ y,\ \frac{1}{4}\right]$	[96,117]
81	$\left[\frac{3}{4},\ y,\ y+\frac{1}{2}\right]$	[97,177]
82	$\left[\frac{3}{4},\ -y,\ \frac{1}{2}-y\right]$	[98,178]
83	$\left[\frac{1}{4},\ y,\ \frac{1}{2}-y\right]$	[99,170]
84	$\left[\frac{1}{4},\ -y,\ y+\frac{1}{2}\right]$	[100,169]
85	$\left[\frac{1}{4},\ -y,\ \frac{1}{2}-y\right]$	[109,189]
86	$\left[\frac{1}{4},\ y,\ y+\frac{1}{2}\right]$	[110,190]
87	$\left[\frac{3}{4},\ -y,\ y+\frac{1}{2}\right]$	[111,182]
88	$\left[\frac{3}{4},\ y,\ \frac{1}{2}-y\right]$	[112,181]
89	$\left[\frac{1}{4},\ \frac{1}{2}-y,\ y\right]$	[121,148]
90	$\left[\frac{1}{4},\ y+\frac{1}{2},\ -y\right]$	[122,147]
91	$\left[\frac{3}{4},\ y+\frac{1}{2},\ y\right]$	[129,145]
92	$\left[\frac{3}{4},\ \frac{1}{2}-y,\ -y\right]$	[130,146]
93	$\left[\frac{3}{4},\ y+\frac{1}{2},\ -y\right]$	[133,160]
94	$\left[\frac{3}{4},\ \frac{1}{2}-y,\ y\right]$	[134,159]
95	$\left[\frac{1}{4},\ \frac{1}{2}-y,\ -y\right]$	[141,157]
96	$\left[\frac{1}{4},\ y+\frac{1}{2},\ y\right]$	[142,158]

Table 9: Wyckoff site: `96i`, site symmetry: `m..`

No.	position	mapping
1	$[0,\ y,\ z]$	`[1,14]`
2	$[0,\ -y,\ -z]$	`[2,13]`
3	$[0,\ y,\ -z]$	`[3,16]`
4	$[0,\ -y,\ z]$	`[4,15]`
5	$[z,\ 0,\ y]$	`[5,24]`
6	$[y,\ z,\ 0]$	`[6,21]`
7	$[-y,\ z,\ 0]$	`[7,23]`
8	$[-z,\ 0,\ y]$	`[8,22]`
9	$[-y,\ -z,\ 0]$	`[9,18]`
10	$[z,\ 0,\ -y]$	`[10,20]`
11	$[y,\ -z,\ 0]$	`[11,19]`
12	$[-z,\ 0,\ -y]$	`[12,17]`
13	$\left[\frac{1}{2},\ \frac{1}{2}-z,\ y+\frac{1}{2}\right]$	`[25,38]`
14	$\left[\frac{1}{2},\ z+\frac{1}{2},\ \frac{1}{2}-y\right]$	`[26,37]`
15	$\left[z+\frac{1}{2},\ y+\frac{1}{2},\ \frac{1}{2}\right]$	`[27,48]`
16	$\left[\frac{1}{2}-z,\ y+\frac{1}{2},\ \frac{1}{2}\right]$	`[28,47]`
17	$\left[\frac{1}{2}-y,\ \frac{1}{2},\ z+\frac{1}{2}\right]$	`[29,43]`
18	$\left[y+\frac{1}{2},\ \frac{1}{2},\ z+\frac{1}{2}\right]$	`[30,44]`
19	$\left[y+\frac{1}{2},\ \frac{1}{2},\ \frac{1}{2}-z\right]$	`[31,41]`
20	$\left[\frac{1}{2}-y,\ \frac{1}{2},\ \frac{1}{2}-z\right]$	`[32,42]`
21	$\left[\frac{1}{2},\ z+\frac{1}{2},\ y+\frac{1}{2}\right]$	`[33,46]`
22	$\left[\frac{1}{2},\ \frac{1}{2}-z,\ \frac{1}{2}-y\right]$	`[34,45]`
23	$\left[z+\frac{1}{2},\ \frac{1}{2}-y,\ \frac{1}{2}\right]$	`[35,40]`
24	$\left[\frac{1}{2}-z,\ \frac{1}{2}-y,\ \frac{1}{2}\right]$	`[36,39]`
25	$\left[0,\ y+\frac{1}{2},\ z+\frac{1}{2}\right]$	`[49,62]`
26	$\left[0,\ \frac{1}{2}-y,\ \frac{1}{2}-z\right]$	`[50,61]`
27	$\left[0,\ y+\frac{1}{2},\ \frac{1}{2}-z\right]$	`[51,64]`
28	$\left[0,\ \frac{1}{2}-y,\ z+\frac{1}{2}\right]$	`[52,63]`
29	$\left[z,\ \frac{1}{2},\ y+\frac{1}{2}\right]$	`[53,72]`
30	$\left[y,\ z+\frac{1}{2},\ \frac{1}{2}\right]$	`[54,69]`
31	$\left[-y,\ z+\frac{1}{2},\ \frac{1}{2}\right]$	`[55,71]`
32	$\left[-z,\ \frac{1}{2},\ y+\frac{1}{2}\right]$	`[56,70]`
33	$\left[-y,\ \frac{1}{2}-z,\ \frac{1}{2}\right]$	`[57,66]`
34	$\left[z,\ \frac{1}{2},\ \frac{1}{2}-y\right]$	`[58,68]`
35	$\left[y,\ \frac{1}{2}-z,\ \frac{1}{2}\right]$	`[59,67]`
36	$\left[-z,\ \frac{1}{2},\ \frac{1}{2}-y\right]$	`[60,65]`
37	$\left[\frac{1}{2},\ -z,\ y\right]$	`[73,86]`
38	$\left[\frac{1}{2},\ z,\ -y\right]$	`[74,85]`
39	$\left[z+\frac{1}{2},\ y,\ 0\right]$	`[75,96]`
40	$\left[\frac{1}{2}-z,\ y,\ 0\right]$	`[76,95]`
41	$\left[\frac{1}{2}-y,\ 0,\ z\right]$	`[77,91]`
42	$\left[y+\frac{1}{2},\ 0,\ z\right]$	`[78,92]`
43	$\left[y+\frac{1}{2},\ 0,\ -z\right]$	`[79,89]`
44	$\left[\frac{1}{2}-y,\ 0,\ -z\right]$	`[80,90]`
45	$\left[\frac{1}{2},\ z,\ y\right]$	`[81,94]`
46	$\left[\frac{1}{2},\ -z,\ -y\right]$	`[82,93]`

continued ...

Table 9

No.	position	mapping
47	$\left[z+\frac{1}{2}, -y, 0\right]$	[83,88]
48	$\left[\frac{1}{2}-z, -y, 0\right]$	[84,87]
49	$\left[\frac{1}{2}, y, z+\frac{1}{2}\right]$	[97,110]
50	$\left[\frac{1}{2}, -y, \frac{1}{2}-z\right]$	[98,109]
51	$\left[\frac{1}{2}, y, \frac{1}{2}-z\right]$	[99,112]
52	$\left[\frac{1}{2}, -y, z+\frac{1}{2}\right]$	[100,111]
53	$\left[z+\frac{1}{2}, 0, y+\frac{1}{2}\right]$	[101,120]
54	$\left[y+\frac{1}{2}, z, \frac{1}{2}\right]$	[102,117]
55	$\left[\frac{1}{2}-y, z, \frac{1}{2}\right]$	[103,119]
56	$\left[\frac{1}{2}-z, 0, y+\frac{1}{2}\right]$	[104,118]
57	$\left[\frac{1}{2}-y, -z, \frac{1}{2}\right]$	[105,114]
58	$\left[z+\frac{1}{2}, 0, \frac{1}{2}-y\right]$	[106,116]
59	$\left[y+\frac{1}{2}, -z, \frac{1}{2}\right]$	[107,115]
60	$\left[\frac{1}{2}-z, 0, \frac{1}{2}-y\right]$	[108,113]
61	$\left[0, \frac{1}{2}-z, y\right]$	[121,134]
62	$\left[0, z+\frac{1}{2}, -y\right]$	[122,133]
63	$\left[z, y+\frac{1}{2}, 0\right]$	[123,144]
64	$\left[-z, y+\frac{1}{2}, 0\right]$	[124,143]
65	$\left[-y, \frac{1}{2}, z\right]$	[125,139]
66	$\left[y, \frac{1}{2}, z\right]$	[126,140]
67	$\left[y, \frac{1}{2}, -z\right]$	[127,137]
68	$\left[-y, \frac{1}{2}, -z\right]$	[128,138]
69	$\left[0, z+\frac{1}{2}, y\right]$	[129,142]
70	$\left[0, \frac{1}{2}-z, -y\right]$	[130,141]
71	$\left[z, \frac{1}{2}-y, 0\right]$	[131,136]
72	$\left[-z, \frac{1}{2}-y, 0\right]$	[132,135]
73	$\left[\frac{1}{2}, y+\frac{1}{2}, z\right]$	[145,158]
74	$\left[\frac{1}{2}, \frac{1}{2}-y, -z\right]$	[146,157]
75	$\left[\frac{1}{2}, y+\frac{1}{2}, -z\right]$	[147,160]
76	$\left[\frac{1}{2}, \frac{1}{2}-y, z\right]$	[148,159]
77	$\left[z+\frac{1}{2}, \frac{1}{2}, y\right]$	[149,168]
78	$\left[y+\frac{1}{2}, z+\frac{1}{2}, 0\right]$	[150,165]
79	$\left[\frac{1}{2}-y, z+\frac{1}{2}, 0\right]$	[151,167]
80	$\left[\frac{1}{2}-z, \frac{1}{2}, y\right]$	[152,166]
81	$\left[\frac{1}{2}-y, \frac{1}{2}-z, 0\right]$	[153,162]
82	$\left[z+\frac{1}{2}, \frac{1}{2}, -y\right]$	[154,164]
83	$\left[y+\frac{1}{2}, \frac{1}{2}-z, 0\right]$	[155,163]
84	$\left[\frac{1}{2}-z, \frac{1}{2}, -y\right]$	[156,161]
85	$\left[0, -z, y+\frac{1}{2}\right]$	[169,182]
86	$\left[0, z, \frac{1}{2}-y\right]$	[170,181]
87	$\left[z, y, \frac{1}{2}\right]$	[171,192]
88	$\left[-z, y, \frac{1}{2}\right]$	[172,191]
89	$\left[-y, 0, z+\frac{1}{2}\right]$	[173,187]
90	$\left[y, 0, z+\frac{1}{2}\right]$	[174,188]
91	$\left[y, 0, \frac{1}{2}-z\right]$	[175,185]
92	$\left[-y, 0, \frac{1}{2}-z\right]$	[176,186]
93	$\left[0, z, y+\frac{1}{2}\right]$	[177,190]

continued ...

Table 9

No.	position	mapping
94	$\left[0,\, -z,\, \frac{1}{2}-y\right]$	[178,189]
95	$\left[z,\, -y,\, \frac{1}{2}\right]$	[179,184]
96	$\left[-z,\, -y,\, \frac{1}{2}\right]$	[180,183]

Table 10: Wyckoff site: 192j, 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	$[y,\, z,\, x]$	[6]
7	$[-y,\, z,\, -x]$	[7]
8	$[-z,\, -x,\, y]$	[8]
9	$[-y,\, -z,\, x]$	[9]
10	$[z,\, -x,\, -y]$	[10]
11	$[y,\, -z,\, -x]$	[11]
12	$[-z,\, x,\, -y]$	[12]
13	$[-x,\, -y,\, -z]$	[13]
14	$[-x,\, y,\, z]$	[14]
15	$[x,\, -y,\, z]$	[15]
16	$[x,\, y,\, -z]$	[16]
17	$[-z,\, -x,\, -y]$	[17]
18	$[-y,\, -z,\, -x]$	[18]
19	$[y,\, -z,\, x]$	[19]
20	$[z,\, x,\, -y]$	[20]
21	$[y,\, z,\, -x]$	[21]
22	$[-z,\, x,\, y]$	[22]
23	$[-y,\, z,\, x]$	[23]
24	$[z,\, -x,\, y]$	[24]
25	$\left[x+\frac{1}{2},\, \frac{1}{2}-z,\, y+\frac{1}{2}\right]$	[25]
26	$\left[x+\frac{1}{2},\, z+\frac{1}{2},\, \frac{1}{2}-y\right]$	[26]
27	$\left[z+\frac{1}{2},\, y+\frac{1}{2},\, \frac{1}{2}-x\right]$	[27]
28	$\left[\frac{1}{2}-z,\, y+\frac{1}{2},\, x+\frac{1}{2}\right]$	[28]
29	$\left[\frac{1}{2}-y,\, x+\frac{1}{2},\, z+\frac{1}{2}\right]$	[29]
30	$\left[y+\frac{1}{2},\, \frac{1}{2}-x,\, z+\frac{1}{2}\right]$	[30]
31	$\left[y+\frac{1}{2},\, x+\frac{1}{2},\, \frac{1}{2}-z\right]$	[31]
32	$\left[\frac{1}{2}-y,\, \frac{1}{2}-x,\, \frac{1}{2}-z\right]$	[32]
33	$\left[\frac{1}{2}-x,\, z+\frac{1}{2},\, y+\frac{1}{2}\right]$	[33]
34	$\left[\frac{1}{2}-x,\, \frac{1}{2}-z,\, \frac{1}{2}-y\right]$	[34]
35	$\left[z+\frac{1}{2},\, \frac{1}{2}-y,\, x+\frac{1}{2}\right]$	[35]
36	$\left[\frac{1}{2}-z,\, \frac{1}{2}-y,\, \frac{1}{2}-x\right]$	[36]
37	$\left[\frac{1}{2}-x,\, z+\frac{1}{2},\, \frac{1}{2}-y\right]$	[37]

continued ...

Table 10

No.	position	mapping
38	$\left[\frac{1}{2}-x,\ \frac{1}{2}-z,\ y+\frac{1}{2}\right]$	[38]
39	$\left[\frac{1}{2}-z,\ \frac{1}{2}-y,\ x+\frac{1}{2}\right]$	[39]
40	$\left[z+\frac{1}{2},\ \frac{1}{2}-y,\ \frac{1}{2}-x\right]$	[40]
41	$\left[y+\frac{1}{2},\ \frac{1}{2}-x,\ \frac{1}{2}-z\right]$	[41]
42	$\left[\frac{1}{2}-y,\ x+\frac{1}{2},\ \frac{1}{2}-z\right]$	[42]
43	$\left[\frac{1}{2}-y,\ \frac{1}{2}-x,\ z+\frac{1}{2}\right]$	[43]
44	$\left[y+\frac{1}{2},\ x+\frac{1}{2},\ z+\frac{1}{2}\right]$	[44]
45	$\left[x+\frac{1}{2},\ \frac{1}{2}-z,\ \frac{1}{2}-y\right]$	[45]
46	$\left[x+\frac{1}{2},\ z+\frac{1}{2},\ y+\frac{1}{2}\right]$	[46]
47	$\left[\frac{1}{2}-z,\ y+\frac{1}{2},\ \frac{1}{2}-x\right]$	[47]
48	$\left[z+\frac{1}{2},\ y+\frac{1}{2},\ x+\frac{1}{2}\right]$	[48]
49	$\left[x,\ y+\frac{1}{2},\ z+\frac{1}{2}\right]$	[49]
50	$\left[x,\ \frac{1}{2}-y,\ \frac{1}{2}-z\right]$	[50]
51	$\left[-x,\ y+\frac{1}{2},\ \frac{1}{2}-z\right]$	[51]
52	$\left[-x,\ \frac{1}{2}-y,\ z+\frac{1}{2}\right]$	[52]
53	$\left[z,\ x+\frac{1}{2},\ y+\frac{1}{2}\right]$	[53]
54	$\left[y,\ z+\frac{1}{2},\ x+\frac{1}{2}\right]$	[54]
55	$\left[-y,\ z+\frac{1}{2},\ \frac{1}{2}-x\right]$	[55]
56	$\left[-z,\ \frac{1}{2}-x,\ y+\frac{1}{2}\right]$	[56]
57	$\left[-y,\ \frac{1}{2}-z,\ x+\frac{1}{2}\right]$	[57]
58	$\left[z,\ \frac{1}{2}-x,\ \frac{1}{2}-y\right]$	[58]
59	$\left[y,\ \frac{1}{2}-z,\ \frac{1}{2}-x\right]$	[59]
60	$\left[-z,\ x+\frac{1}{2},\ \frac{1}{2}-y\right]$	[60]
61	$\left[-x,\ \frac{1}{2}-y,\ \frac{1}{2}-z\right]$	[61]
62	$\left[-x,\ y+\frac{1}{2},\ z+\frac{1}{2}\right]$	[62]
63	$\left[x,\ \frac{1}{2}-y,\ z+\frac{1}{2}\right]$	[63]
64	$\left[x,\ y+\frac{1}{2},\ \frac{1}{2}-z\right]$	[64]
65	$\left[-z,\ \frac{1}{2}-x,\ \frac{1}{2}-y\right]$	[65]
66	$\left[-y,\ \frac{1}{2}-z,\ \frac{1}{2}-x\right]$	[66]
67	$\left[y,\ \frac{1}{2}-z,\ x+\frac{1}{2}\right]$	[67]
68	$\left[z,\ x+\frac{1}{2},\ \frac{1}{2}-y\right]$	[68]
69	$\left[y,\ z+\frac{1}{2},\ \frac{1}{2}-x\right]$	[69]
70	$\left[-z,\ x+\frac{1}{2},\ y+\frac{1}{2}\right]$	[70]
71	$\left[-y,\ z+\frac{1}{2},\ x+\frac{1}{2}\right]$	[71]
72	$\left[z,\ \frac{1}{2}-x,\ y+\frac{1}{2}\right]$	[72]
73	$\left[x+\frac{1}{2},\ -z,\ y\right]$	[73]
74	$\left[x+\frac{1}{2},\ z,\ -y\right]$	[74]
75	$\left[z+\frac{1}{2},\ y,\ -x\right]$	[75]
76	$\left[\frac{1}{2}-z,\ y,\ x\right]$	[76]
77	$\left[\frac{1}{2}-y,\ x,\ z\right]$	[77]
78	$\left[y+\frac{1}{2},\ -x,\ z\right]$	[78]
79	$\left[y+\frac{1}{2},\ x,\ -z\right]$	[79]
80	$\left[\frac{1}{2}-y,\ -x,\ -z\right]$	[80]
81	$\left[\frac{1}{2}-x,\ z,\ y\right]$	[81]
82	$\left[\frac{1}{2}-x,\ -z,\ -y\right]$	[82]
83	$\left[z+\frac{1}{2},\ -y,\ x\right]$	[83]
84	$\left[\frac{1}{2}-z,\ -y,\ -x\right]$	[84]

continued ...

Table 10

No.	position	mapping
85	$\left[\frac{1}{2}-x,\, z,\, -y\right]$	[85]
86	$\left[\frac{1}{2}-x,\, -z,\, y\right]$	[86]
87	$\left[\frac{1}{2}-z,\, -y,\, x\right]$	[87]
88	$\left[z+\frac{1}{2},\, -y,\, -x\right]$	[88]
89	$\left[y+\frac{1}{2},\, -x,\, -z\right]$	[89]
90	$\left[\frac{1}{2}-y,\, x,\, -z\right]$	[90]
91	$\left[\frac{1}{2}-y,\, -x,\, z\right]$	[91]
92	$\left[y+\frac{1}{2},\, x,\, z\right]$	[92]
93	$\left[x+\frac{1}{2},\, -z,\, -y\right]$	[93]
94	$\left[x+\frac{1}{2},\, z,\, y\right]$	[94]
95	$\left[\frac{1}{2}-z,\, y,\, -x\right]$	[95]
96	$\left[z+\frac{1}{2},\, y,\, x\right]$	[96]
97	$\left[x+\frac{1}{2},\, y,\, z+\frac{1}{2}\right]$	[97]
98	$\left[x+\frac{1}{2},\, -y,\, \frac{1}{2}-z\right]$	[98]
99	$\left[\frac{1}{2}-x,\, y,\, \frac{1}{2}-z\right]$	[99]
100	$\left[\frac{1}{2}-x,\, -y,\, z+\frac{1}{2}\right]$	[100]
101	$\left[z+\frac{1}{2},\, x,\, y+\frac{1}{2}\right]$	[101]
102	$\left[y+\frac{1}{2},\, z,\, x+\frac{1}{2}\right]$	[102]
103	$\left[\frac{1}{2}-y,\, z,\, \frac{1}{2}-x\right]$	[103]
104	$\left[\frac{1}{2}-z,\, -x,\, y+\frac{1}{2}\right]$	[104]
105	$\left[\frac{1}{2}-y,\, -z,\, x+\frac{1}{2}\right]$	[105]
106	$\left[z+\frac{1}{2},\, -x,\, \frac{1}{2}-y\right]$	[106]
107	$\left[y+\frac{1}{2},\, -z,\, \frac{1}{2}-x\right]$	[107]
108	$\left[\frac{1}{2}-z,\, x,\, \frac{1}{2}-y\right]$	[108]
109	$\left[\frac{1}{2}-x,\, -y,\, \frac{1}{2}-z\right]$	[109]
110	$\left[\frac{1}{2}-x,\, y,\, z+\frac{1}{2}\right]$	[110]
111	$\left[x+\frac{1}{2},\, -y,\, z+\frac{1}{2}\right]$	[111]
112	$\left[x+\frac{1}{2},\, y,\, \frac{1}{2}-z\right]$	[112]
113	$\left[\frac{1}{2}-z,\, -x,\, \frac{1}{2}-y\right]$	[113]
114	$\left[\frac{1}{2}-y,\, -z,\, \frac{1}{2}-x\right]$	[114]
115	$\left[y+\frac{1}{2},\, -z,\, x+\frac{1}{2}\right]$	[115]
116	$\left[z+\frac{1}{2},\, x,\, \frac{1}{2}-y\right]$	[116]
117	$\left[y+\frac{1}{2},\, z,\, \frac{1}{2}-x\right]$	[117]
118	$\left[\frac{1}{2}-z,\, x,\, y+\frac{1}{2}\right]$	[118]
119	$\left[\frac{1}{2}-y,\, z,\, x+\frac{1}{2}\right]$	[119]
120	$\left[z+\frac{1}{2},\, -x,\, y+\frac{1}{2}\right]$	[120]
121	$\left[x,\, \frac{1}{2}-z,\, y\right]$	[121]
122	$\left[x,\, z+\frac{1}{2},\, -y\right]$	[122]
123	$\left[z,\, y+\frac{1}{2},\, -x\right]$	[123]
124	$\left[-z,\, y+\frac{1}{2},\, x\right]$	[124]
125	$\left[-y,\, x+\frac{1}{2},\, z\right]$	[125]
126	$\left[y,\, \frac{1}{2}-x,\, z\right]$	[126]
127	$\left[y,\, x+\frac{1}{2},\, -z\right]$	[127]
128	$\left[-y,\, \frac{1}{2}-x,\, -z\right]$	[128]
129	$\left[-x,\, z+\frac{1}{2},\, y\right]$	[129]
130	$\left[-x,\, \frac{1}{2}-z,\, -y\right]$	[130]
131	$\left[z,\, \frac{1}{2}-y,\, x\right]$	[131]

continued ...

Table 10

No.	position	mapping
132	$\left[-z,\ \frac{1}{2}-y,\ -x\right]$	[132]
133	$\left[-x,\ z+\frac{1}{2},\ -y\right]$	[133]
134	$\left[-x,\ \frac{1}{2}-z,\ y\right]$	[134]
135	$\left[-z,\ \frac{1}{2}-y,\ x\right]$	[135]
136	$\left[z,\ \frac{1}{2}-y,\ -x\right]$	[136]
137	$\left[y,\ \frac{1}{2}-x,\ -z\right]$	[137]
138	$\left[-y,\ x+\frac{1}{2},\ -z\right]$	[138]
139	$\left[-y,\ \frac{1}{2}-x,\ z\right]$	[139]
140	$\left[y,\ x+\frac{1}{2},\ z\right]$	[140]
141	$\left[x,\ \frac{1}{2}-z,\ -y\right]$	[141]
142	$\left[x,\ z+\frac{1}{2},\ y\right]$	[142]
143	$\left[-z,\ y+\frac{1}{2},\ -x\right]$	[143]
144	$\left[z,\ y+\frac{1}{2},\ x\right]$	[144]
145	$\left[x+\frac{1}{2},\ y+\frac{1}{2},\ z\right]$	[145]
146	$\left[x+\frac{1}{2},\ \frac{1}{2}-y,\ -z\right]$	[146]
147	$\left[\frac{1}{2}-x,\ y+\frac{1}{2},\ -z\right]$	[147]
148	$\left[\frac{1}{2}-x,\ \frac{1}{2}-y,\ z\right]$	[148]
149	$\left[z+\frac{1}{2},\ x+\frac{1}{2},\ y\right]$	[149]
150	$\left[y+\frac{1}{2},\ z+\frac{1}{2},\ x\right]$	[150]
151	$\left[\frac{1}{2}-y,\ z+\frac{1}{2},\ -x\right]$	[151]
152	$\left[\frac{1}{2}-z,\ \frac{1}{2}-x,\ y\right]$	[152]
153	$\left[\frac{1}{2}-y,\ \frac{1}{2}-z,\ x\right]$	[153]
154	$\left[z+\frac{1}{2},\ \frac{1}{2}-x,\ -y\right]$	[154]
155	$\left[y+\frac{1}{2},\ \frac{1}{2}-z,\ -x\right]$	[155]
156	$\left[\frac{1}{2}-z,\ x+\frac{1}{2},\ -y\right]$	[156]
157	$\left[\frac{1}{2}-x,\ \frac{1}{2}-y,\ -z\right]$	[157]
158	$\left[\frac{1}{2}-x,\ y+\frac{1}{2},\ z\right]$	[158]
159	$\left[x+\frac{1}{2},\ \frac{1}{2}-y,\ z\right]$	[159]
160	$\left[x+\frac{1}{2},\ y+\frac{1}{2},\ -z\right]$	[160]
161	$\left[\frac{1}{2}-z,\ \frac{1}{2}-x,\ -y\right]$	[161]
162	$\left[\frac{1}{2}-y,\ \frac{1}{2}-z,\ -x\right]$	[162]
163	$\left[y+\frac{1}{2},\ \frac{1}{2}-z,\ x\right]$	[163]
164	$\left[z+\frac{1}{2},\ x+\frac{1}{2},\ -y\right]$	[164]
165	$\left[y+\frac{1}{2},\ z+\frac{1}{2},\ -x\right]$	[165]
166	$\left[\frac{1}{2}-z,\ x+\frac{1}{2},\ y\right]$	[166]
167	$\left[\frac{1}{2}-y,\ z+\frac{1}{2},\ x\right]$	[167]
168	$\left[z+\frac{1}{2},\ \frac{1}{2}-x,\ y\right]$	[168]
169	$\left[x,\ -z,\ y+\frac{1}{2}\right]$	[169]
170	$\left[x,\ z,\ \frac{1}{2}-y\right]$	[170]
171	$\left[z,\ y,\ \frac{1}{2}-x\right]$	[171]
172	$\left[-z,\ y,\ x+\frac{1}{2}\right]$	[172]
173	$\left[-y,\ x,\ z+\frac{1}{2}\right]$	[173]
174	$\left[y,\ -x,\ z+\frac{1}{2}\right]$	[174]
175	$\left[y,\ x,\ \frac{1}{2}-z\right]$	[175]
176	$\left[-y,\ -x,\ \frac{1}{2}-z\right]$	[176]
177	$\left[-x,\ z,\ y+\frac{1}{2}\right]$	[177]
178	$\left[-x,\ -z,\ \frac{1}{2}-y\right]$	[178]

continued ...

Table 10

No.	position	mapping
179	$\left[z,\, -y,\, x+\frac{1}{2}\right]$	[179]
180	$\left[-z,\, -y,\, \frac{1}{2}-x\right]$	[180]
181	$\left[-x,\, z,\, \frac{1}{2}-y\right]$	[181]
182	$\left[-x,\, -z,\, y+\frac{1}{2}\right]$	[182]
183	$\left[-z,\, -y,\, x+\frac{1}{2}\right]$	[183]
184	$\left[z,\, -y,\, \frac{1}{2}-x\right]$	[184]
185	$\left[y,\, -x,\, \frac{1}{2}-z\right]$	[185]
186	$\left[-y,\, x,\, \frac{1}{2}-z\right]$	[186]
187	$\left[-y,\, -x,\, z+\frac{1}{2}\right]$	[187]
188	$\left[y,\, x,\, z+\frac{1}{2}\right]$	[188]
189	$\left[x,\, -z,\, \frac{1}{2}-y\right]$	[189]
190	$\left[x,\, z,\, y+\frac{1}{2}\right]$	[190]
191	$\left[-z,\, y,\, \frac{1}{2}-x\right]$	[191]
192	$\left[z,\, y,\, x+\frac{1}{2}\right]$	[192]