

MSG No. 226.124 $Fm\bar{3}'c$ [Type III, cubic]

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

No.	position	mapping
1	$[\frac{1}{4}, \frac{1}{4}, \frac{1}{4}]$	[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	$[\frac{1}{4}, \frac{3}{4}, \frac{3}{4}]$	[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	$[\frac{3}{4}, \frac{1}{4}, \frac{3}{4}]$	[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	$[\frac{3}{4}, \frac{3}{4}, \frac{1}{4}]$	[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	$[\frac{1}{4}, \frac{3}{4}, \frac{1}{4}]$	[13, 18, 23, 39, 43, 48, 62, 63, 67, 88, 92, 93, 116, 118, 120, 133, 137, 138, 160, 161, 165, 182, 190, 191]
6	$[\frac{1}{4}, \frac{1}{4}, \frac{3}{4}]$	[14, 15, 19, 40, 44, 45, 61, 66, 71, 87, 91, 96, 112, 113, 117, 134, 142, 143, 164, 166, 168, 181, 185, 186]
7	$[\frac{3}{4}, \frac{1}{4}, \frac{1}{4}]$	[16, 17, 21, 38, 46, 47, 68, 70, 72, 85, 89, 90, 110, 111, 115, 136, 140, 141, 157, 162, 167, 183, 187, 192]
8	$[\frac{3}{4}, \frac{3}{4}, \frac{3}{4}]$	[20, 22, 24, 37, 41, 42, 64, 65, 69, 86, 94, 95, 109, 114, 119, 135, 139, 144, 158, 159, 163, 184, 188, 189]

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, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48]
2	$[\frac{1}{2}, \frac{1}{2}, \frac{1}{2}]$	[13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36]
3	$[0, \frac{1}{2}, \frac{1}{2}]$	[49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96]
4	$[\frac{1}{2}, 0, 0]$	[61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84]
5	$[\frac{1}{2}, 0, \frac{1}{2}]$	[97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144]
6	$[0, \frac{1}{2}, 0]$	[109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132]
7	$[\frac{1}{2}, \frac{1}{2}, 0]$	[145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192]
8	$[0, 0, \frac{1}{2}]$	[157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180]

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

No.	position	mapping
1	$[\frac{1}{4}, 0, 0]$	[1, 2, 39, 40, 61, 62, 81, 82]
2	$[\frac{3}{4}, 0, 0]$	[3, 4, 37, 38, 69, 70, 73, 74]
3	$[0, \frac{1}{4}, 0]$	[5, 12, 44, 46, 113, 115, 126, 128]
4	$[0, 0, \frac{1}{4}]$	[6, 9, 43, 47, 160, 167, 171, 180]
5	$[0, 0, \frac{3}{4}]$	[7, 11, 42, 45, 159, 168, 172, 179]
6	$[0, \frac{3}{4}, 0]$	[8, 10, 41, 48, 114, 116, 125, 127]
7	$[\frac{1}{4}, \frac{1}{2}, \frac{1}{2}]$	[13, 14, 33, 34, 49, 50, 87, 88]
8	$[\frac{1}{2}, \frac{1}{2}, \frac{3}{4}]$	[15, 24, 28, 35, 151, 155, 186, 189]
9	$[\frac{1}{2}, \frac{1}{2}, \frac{1}{4}]$	[16, 23, 27, 36, 150, 153, 187, 191]
10	$[\frac{1}{2}, \frac{1}{4}, \frac{1}{2}]$	[17, 19, 30, 32, 101, 108, 140, 142]
11	$[\frac{1}{2}, \frac{3}{4}, \frac{1}{2}]$	[18, 20, 29, 31, 104, 106, 137, 144]
12	$[\frac{3}{4}, \frac{1}{2}, \frac{1}{2}]$	[21, 22, 25, 26, 51, 52, 85, 86]
13	$[0, \frac{3}{4}, \frac{1}{2}]$	[53, 60, 92, 94, 161, 163, 174, 176]
14	$[0, \frac{1}{2}, \frac{3}{4}]$	[54, 57, 91, 95, 112, 119, 123, 132]
15	$[0, \frac{1}{2}, \frac{1}{4}]$	[55, 59, 90, 93, 111, 120, 124, 131]

continued ...

Table 3

No.	position	mapping
16	$[0, \frac{1}{4}, \frac{1}{2}]$	[56, 58, 89, 96, 162, 164, 173, 175]
17	$[\frac{1}{2}, 0, \frac{1}{4}]$	[63, 72, 76, 83, 103, 107, 138, 141]
18	$[\frac{1}{2}, 0, \frac{3}{4}]$	[64, 71, 75, 84, 102, 105, 139, 143]
19	$[\frac{1}{2}, \frac{3}{4}, 0]$	[65, 67, 78, 80, 149, 156, 188, 190]
20	$[\frac{1}{2}, \frac{1}{4}, 0]$	[66, 68, 77, 79, 152, 154, 185, 192]
21	$[\frac{3}{4}, 0, \frac{1}{2}]$	[97, 98, 135, 136, 157, 158, 177, 178]
22	$[\frac{1}{4}, 0, \frac{1}{2}]$	[99, 100, 133, 134, 165, 166, 169, 170]
23	$[\frac{3}{4}, \frac{1}{2}, 0]$	[109, 110, 129, 130, 145, 146, 183, 184]
24	$[\frac{1}{4}, \frac{1}{2}, 0]$	[117, 118, 121, 122, 147, 148, 181, 182]

Table 4: Wyckoff site: 24d, site symmetry: $4'/m' \dots$

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

Table 5: Wyckoff site: 48e, site symmetry: $2m'm'$. .

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

continued ...

Table 5

No.	position	mapping
47	$[0, x, \frac{1}{2}]$	[162,164,173,175]
48	$[x, 0, \frac{1}{2}]$	[165,166,169,170]

Table 6: Wyckoff site: 48f, site symmetry: $4'..$

No.	position	mapping
1	$[x, \frac{1}{4}, \frac{1}{4}]$	[1,50,121,170]
2	$[x, \frac{3}{4}, \frac{3}{4}]$	[2,49,122,169]
3	$[-x, \frac{1}{4}, \frac{3}{4}]$	[3,52,130,177]
4	$[-x, \frac{3}{4}, \frac{1}{4}]$	[4,51,129,178]
5	$[\frac{1}{4}, x, \frac{1}{4}]$	[5,77,108,175]
6	$[\frac{1}{4}, \frac{1}{4}, x]$	[6,76,131,153]
7	$[\frac{3}{4}, \frac{1}{4}, -x]$	[7,75,132,155]
8	$[\frac{3}{4}, -x, \frac{1}{4}]$	[8,78,106,176]
9	$[\frac{3}{4}, \frac{3}{4}, x]$	[9,83,124,150]
10	$[\frac{1}{4}, -x, \frac{3}{4}]$	[10,80,104,174]
11	$[\frac{1}{4}, \frac{3}{4}, -x]$	[11,84,123,151]
12	$[\frac{3}{4}, x, \frac{3}{4}]$	[12,79,101,173]
13	$[\frac{1}{2} - x, \frac{3}{4}, \frac{1}{4}]$	[13,62,133,182]
14	$[\frac{1}{2} - x, \frac{1}{4}, \frac{3}{4}]$	[14,61,134,181]
15	$[\frac{1}{4}, \frac{1}{4}, x + \frac{1}{2}]$	[15,91,143,168]
16	$[\frac{3}{4}, \frac{1}{4}, \frac{1}{2} - x]$	[16,90,141,167]
17	$[\frac{3}{4}, \frac{1}{2} - x, \frac{1}{4}]$	[17,89,115,192]
18	$[\frac{1}{4}, x + \frac{1}{2}, \frac{1}{4}]$	[18,92,116,190]
19	$[\frac{1}{4}, \frac{1}{2} - x, \frac{3}{4}]$	[19,96,113,185]
20	$[\frac{3}{4}, x + \frac{1}{2}, \frac{3}{4}]$	[20,94,114,188]
21	$[x + \frac{1}{2}, \frac{1}{4}, \frac{1}{4}]$	[21,70,136,183]
22	$[x + \frac{1}{2}, \frac{3}{4}, \frac{3}{4}]$	[22,69,135,184]
23	$[\frac{1}{4}, \frac{3}{4}, \frac{1}{2} - x]$	[23,93,138,160]
24	$[\frac{3}{4}, \frac{3}{4}, x + \frac{1}{2}]$	[24,95,139,159]
25	$[x + \frac{1}{2}, \frac{1}{4}, \frac{3}{4}]$	[25,74,97,146]
26	$[x + \frac{1}{2}, \frac{3}{4}, \frac{1}{4}]$	[26,73,98,145]
27	$[\frac{3}{4}, \frac{3}{4}, \frac{1}{2} - x]$	[27,55,107,180]
28	$[\frac{1}{4}, \frac{3}{4}, x + \frac{1}{2}]$	[28,54,105,179]
29	$[\frac{1}{4}, x + \frac{1}{2}, \frac{3}{4}]$	[29,53,127,156]
30	$[\frac{3}{4}, \frac{1}{2} - x, \frac{3}{4}]$	[30,56,128,154]
31	$[\frac{3}{4}, x + \frac{1}{2}, \frac{1}{4}]$	[31,60,125,149]
32	$[\frac{1}{4}, \frac{1}{2} - x, \frac{1}{4}]$	[32,58,126,152]
33	$[\frac{1}{2} - x, \frac{3}{4}, \frac{3}{4}]$	[33,82,100,147]
34	$[\frac{1}{2} - x, \frac{1}{4}, \frac{1}{4}]$	[34,81,99,148]
35	$[\frac{3}{4}, \frac{1}{4}, x + \frac{1}{2}]$	[35,57,102,172]
36	$[\frac{1}{4}, \frac{1}{4}, \frac{1}{2} - x]$	[36,59,103,171]
37	$[-x, \frac{3}{4}, \frac{3}{4}]$	[37,86,109,158]
38	$[-x, \frac{1}{4}, \frac{1}{4}]$	[38,85,110,157]

continued ...

Table 6

No.	position	mapping
39	$[x, \frac{3}{4}, \frac{1}{4}]$	[39, 88, 118, 165]
40	$[x, \frac{1}{4}, \frac{3}{4}]$	[40, 87, 117, 166]
41	$[\frac{3}{4}, -x, \frac{3}{4}]$	[41, 65, 144, 163]
42	$[\frac{3}{4}, \frac{3}{4}, -x]$	[42, 64, 119, 189]
43	$[\frac{1}{4}, \frac{3}{4}, x]$	[43, 63, 120, 191]
44	$[\frac{1}{4}, x, \frac{3}{4}]$	[44, 66, 142, 164]
45	$[\frac{1}{4}, \frac{1}{4}, -x]$	[45, 71, 112, 186]
46	$[\frac{3}{4}, x, \frac{1}{4}]$	[46, 68, 140, 162]
47	$[\frac{3}{4}, \frac{1}{4}, x]$	[47, 72, 111, 187]
48	$[\frac{1}{4}, -x, \frac{1}{4}]$	[48, 67, 137, 161]

Table 7: Wyckoff site: 64g, site symmetry: $\cdot 3$.

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	$[\frac{1}{2} - x, x + \frac{1}{2}, \frac{1}{2} - x]$	[13, 18, 23]
6	$[\frac{1}{2} - x, \frac{1}{2} - x, x + \frac{1}{2}]$	[14, 15, 19]
7	$[x + \frac{1}{2}, \frac{1}{2} - x, \frac{1}{2} - x]$	[16, 17, 21]
8	$[x + \frac{1}{2}, x + \frac{1}{2}, x + \frac{1}{2}]$	[20, 22, 24]
9	$[x + \frac{1}{2}, \frac{1}{2} - x, x + \frac{1}{2}]$	[25, 30, 35]
10	$[x + \frac{1}{2}, x + \frac{1}{2}, \frac{1}{2} - x]$	[26, 27, 31]
11	$[\frac{1}{2} - x, x + \frac{1}{2}, x + \frac{1}{2}]$	[28, 29, 33]
12	$[\frac{1}{2} - x, \frac{1}{2} - x, \frac{1}{2} - x]$	[32, 34, 36]
13	$[-x, -x, -x]$	[37, 41, 42]
14	$[-x, x, x]$	[38, 46, 47]
15	$[x, -x, x]$	[39, 43, 48]
16	$[x, x, -x]$	[40, 44, 45]
17	$[x, x + \frac{1}{2}, x + \frac{1}{2}]$	[49, 53, 54]
18	$[x, \frac{1}{2} - x, \frac{1}{2} - x]$	[50, 58, 59]
19	$[-x, x + \frac{1}{2}, \frac{1}{2} - x]$	[51, 55, 60]
20	$[-x, \frac{1}{2} - x, x + \frac{1}{2}]$	[52, 56, 57]
21	$[\frac{1}{2} - x, x, -x]$	[61, 66, 71]
22	$[\frac{1}{2} - x, -x, x]$	[62, 63, 67]
23	$[x + \frac{1}{2}, -x, -x]$	[64, 65, 69]
24	$[x + \frac{1}{2}, x, x]$	[68, 70, 72]
25	$[x + \frac{1}{2}, -x, x]$	[73, 78, 83]
26	$[x + \frac{1}{2}, x, -x]$	[74, 75, 79]
27	$[\frac{1}{2} - x, x, x]$	[76, 77, 81]
28	$[\frac{1}{2} - x, -x, -x]$	[80, 82, 84]
29	$[-x, \frac{1}{2} - x, \frac{1}{2} - x]$	[85, 89, 90]
30	$[-x, x + \frac{1}{2}, x + \frac{1}{2}]$	[86, 94, 95]

continued ...

Table 7

No.	position	mapping
31	$[x, \frac{1}{2} - x, x + \frac{1}{2}]$	[87, 91, 96]
32	$[x, x + \frac{1}{2}, \frac{1}{2} - x]$	[88, 92, 93]
33	$[x + \frac{1}{2}, x, x + \frac{1}{2}]$	[97, 101, 102]
34	$[x + \frac{1}{2}, -x, \frac{1}{2} - x]$	[98, 106, 107]
35	$[\frac{1}{2} - x, x, \frac{1}{2} - x]$	[99, 103, 108]
36	$[\frac{1}{2} - x, -x, x + \frac{1}{2}]$	[100, 104, 105]
37	$[-x, x + \frac{1}{2}, -x]$	[109, 114, 119]
38	$[-x, \frac{1}{2} - x, x]$	[110, 111, 115]
39	$[x, \frac{1}{2} - x, -x]$	[112, 113, 117]
40	$[x, x + \frac{1}{2}, x]$	[116, 118, 120]
41	$[x, \frac{1}{2} - x, x]$	[121, 126, 131]
42	$[x, x + \frac{1}{2}, -x]$	[122, 123, 127]
43	$[-x, x + \frac{1}{2}, x]$	[124, 125, 129]
44	$[-x, \frac{1}{2} - x, -x]$	[128, 130, 132]
45	$[\frac{1}{2} - x, -x, \frac{1}{2} - x]$	[133, 137, 138]
46	$[\frac{1}{2} - x, x, x + \frac{1}{2}]$	[134, 142, 143]
47	$[x + \frac{1}{2}, -x, x + \frac{1}{2}]$	[135, 139, 144]
48	$[x + \frac{1}{2}, x, \frac{1}{2} - x]$	[136, 140, 141]
49	$[x + \frac{1}{2}, x + \frac{1}{2}, x]$	[145, 149, 150]
50	$[x + \frac{1}{2}, \frac{1}{2} - x, -x]$	[146, 154, 155]
51	$[\frac{1}{2} - x, x + \frac{1}{2}, -x]$	[147, 151, 156]
52	$[\frac{1}{2} - x, \frac{1}{2} - x, x]$	[148, 152, 153]
53	$[-x, x, \frac{1}{2} - x]$	[157, 162, 167]
54	$[-x, -x, x + \frac{1}{2}]$	[158, 159, 163]
55	$[x, -x, \frac{1}{2} - x]$	[160, 161, 165]
56	$[x, x, x + \frac{1}{2}]$	[164, 166, 168]
57	$[x, -x, x + \frac{1}{2}]$	[169, 174, 179]
58	$[x, x, \frac{1}{2} - x]$	[170, 171, 175]
59	$[-x, x, x + \frac{1}{2}]$	[172, 173, 177]
60	$[-x, -x, \frac{1}{2} - x]$	[176, 178, 180]
61	$[\frac{1}{2} - x, \frac{1}{2} - x, -x]$	[181, 185, 186]
62	$[\frac{1}{2} - x, x + \frac{1}{2}, x]$	[182, 190, 191]
63	$[x + \frac{1}{2}, \frac{1}{2} - x, x]$	[183, 187, 192]
64	$[x + \frac{1}{2}, x + \frac{1}{2}, -x]$	[184, 188, 189]

Table 8: Wyckoff site: 96h, site symmetry: $\dots 2'$

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

continued ...

Table 8

No.	position	mapping
7	$[-y, y, \frac{3}{4}]$	[7, 172]
8	$[-y, \frac{3}{4}, y]$	[8, 125]
9	$[-y, -y, \frac{1}{4}]$	[9, 180]
10	$[y, \frac{3}{4}, -y]$	[10, 127]
11	$[y, -y, \frac{3}{4}]$	[11, 179]
12	$[-y, \frac{1}{4}, -y]$	[12, 128]
13	$[\frac{1}{4}, y + \frac{1}{2}, \frac{1}{2} - y]$	[13, 88]
14	$[\frac{1}{4}, \frac{1}{2} - y, y + \frac{1}{2}]$	[14, 87]
15	$[\frac{1}{2} - y, \frac{1}{2} - y, \frac{3}{4}]$	[15, 186]
16	$[y + \frac{1}{2}, \frac{1}{2} - y, \frac{1}{4}]$	[16, 187]
17	$[y + \frac{1}{2}, \frac{1}{4}, \frac{1}{2} - y]$	[17, 140]
18	$[\frac{1}{2} - y, \frac{3}{4}, \frac{1}{2} - y]$	[18, 137]
19	$[\frac{1}{2} - y, \frac{1}{4}, y + \frac{1}{2}]$	[19, 142]
20	$[y + \frac{1}{2}, \frac{3}{4}, y + \frac{1}{2}]$	[20, 144]
21	$[\frac{3}{4}, \frac{1}{2} - y, \frac{1}{2} - y]$	[21, 85]
22	$[\frac{3}{4}, y + \frac{1}{2}, y + \frac{1}{2}]$	[22, 86]
23	$[\frac{1}{2} - y, y + \frac{1}{2}, \frac{1}{4}]$	[23, 191]
24	$[y + \frac{1}{2}, y + \frac{1}{2}, \frac{3}{4}]$	[24, 189]
25	$[\frac{3}{4}, \frac{1}{2} - y, y + \frac{1}{2}]$	[25, 52]
26	$[\frac{3}{4}, y + \frac{1}{2}, \frac{1}{2} - y]$	[26, 51]
27	$[y + \frac{1}{2}, y + \frac{1}{2}, \frac{1}{4}]$	[27, 150]
28	$[\frac{1}{2} - y, y + \frac{1}{2}, \frac{3}{4}]$	[28, 151]
29	$[\frac{1}{2} - y, \frac{3}{4}, y + \frac{1}{2}]$	[29, 104]
30	$[y + \frac{1}{2}, \frac{1}{4}, y + \frac{1}{2}]$	[30, 101]
31	$[y + \frac{1}{2}, \frac{3}{4}, \frac{1}{2} - y]$	[31, 106]
32	$[\frac{1}{2} - y, \frac{1}{4}, \frac{1}{2} - y]$	[32, 108]
33	$[\frac{1}{4}, y + \frac{1}{2}, y + \frac{1}{2}]$	[33, 49]
34	$[\frac{1}{4}, \frac{1}{2} - y, \frac{1}{2} - y]$	[34, 50]
35	$[y + \frac{1}{2}, \frac{1}{2} - y, \frac{3}{4}]$	[35, 155]
36	$[\frac{1}{2} - y, \frac{1}{2} - y, \frac{1}{4}]$	[36, 153]
37	$[\frac{3}{4}, -y, -y]$	[37, 69]
38	$[\frac{3}{4}, y, y]$	[38, 70]
39	$[\frac{1}{4}, -y, y]$	[39, 62]
40	$[\frac{1}{4}, y, -y]$	[40, 61]
41	$[-y, \frac{3}{4}, -y]$	[41, 114]
42	$[-y, -y, \frac{3}{4}]$	[42, 159]
43	$[y, -y, \frac{1}{4}]$	[43, 160]
44	$[y, \frac{1}{4}, -y]$	[44, 113]
45	$[y, y, \frac{3}{4}]$	[45, 168]
46	$[-y, \frac{1}{4}, y]$	[46, 115]
47	$[-y, y, \frac{1}{4}]$	[47, 167]
48	$[y, \frac{3}{4}, y]$	[48, 116]
49	$[y, \frac{3}{4}, y + \frac{1}{2}]$	[53, 174]
50	$[y, y + \frac{1}{2}, \frac{3}{4}]$	[54, 123]
51	$[-y, y + \frac{1}{2}, \frac{1}{4}]$	[55, 124]
52	$[-y, \frac{1}{4}, y + \frac{1}{2}]$	[56, 173]
53	$[-y, \frac{1}{2} - y, \frac{3}{4}]$	[57, 132]

continued ...

Table 8

No.	position	mapping
54	$[y, \frac{1}{4}, \frac{1}{2} - y]$	[58, 175]
55	$[y, \frac{1}{2} - y, \frac{1}{4}]$	[59, 131]
56	$[-y, \frac{3}{4}, \frac{1}{2} - y]$	[60, 176]
57	$[\frac{1}{2} - y, -y, \frac{1}{4}]$	[63, 138]
58	$[y + \frac{1}{2}, -y, \frac{3}{4}]$	[64, 139]
59	$[y + \frac{1}{2}, \frac{3}{4}, -y]$	[65, 188]
60	$[\frac{1}{2} - y, \frac{1}{4}, -y]$	[66, 185]
61	$[\frac{1}{2} - y, \frac{3}{4}, y]$	[67, 190]
62	$[y + \frac{1}{2}, \frac{1}{4}, y]$	[68, 192]
63	$[\frac{1}{2} - y, y, \frac{3}{4}]$	[71, 143]
64	$[y + \frac{1}{2}, y, \frac{1}{4}]$	[72, 141]
65	$[y + \frac{1}{2}, y, \frac{3}{4}]$	[75, 102]
66	$[\frac{1}{2} - y, y, \frac{1}{4}]$	[76, 103]
67	$[\frac{1}{2} - y, \frac{1}{4}, y]$	[77, 152]
68	$[y + \frac{1}{2}, \frac{3}{4}, y]$	[78, 149]
69	$[y + \frac{1}{2}, \frac{1}{4}, -y]$	[79, 154]
70	$[\frac{1}{2} - y, \frac{3}{4}, -y]$	[80, 156]
71	$[y + \frac{1}{2}, -y, \frac{1}{4}]$	[83, 107]
72	$[\frac{1}{2} - y, -y, \frac{3}{4}]$	[84, 105]
73	$[-y, \frac{1}{4}, \frac{1}{2} - y]$	[89, 162]
74	$[-y, \frac{1}{2} - y, \frac{1}{4}]$	[90, 111]
75	$[y, \frac{1}{2} - y, \frac{3}{4}]$	[91, 112]
76	$[y, \frac{3}{4}, \frac{1}{2} - y]$	[92, 161]
77	$[y, y + \frac{1}{2}, \frac{1}{4}]$	[93, 120]
78	$[-y, \frac{3}{4}, y + \frac{1}{2}]$	[94, 163]
79	$[-y, y + \frac{1}{2}, \frac{3}{4}]$	[95, 119]
80	$[y, \frac{1}{4}, y + \frac{1}{2}]$	[96, 164]
81	$[\frac{3}{4}, y, y + \frac{1}{2}]$	[97, 177]
82	$[\frac{3}{4}, -y, \frac{1}{2} - y]$	[98, 178]
83	$[\frac{1}{4}, y, \frac{1}{2} - y]$	[99, 170]
84	$[\frac{1}{4}, -y, y + \frac{1}{2}]$	[100, 169]
85	$[\frac{3}{4}, y + \frac{1}{2}, -y]$	[109, 184]
86	$[\frac{3}{4}, \frac{1}{2} - y, y]$	[110, 183]
87	$[\frac{1}{4}, \frac{1}{2} - y, -y]$	[117, 181]
88	$[\frac{1}{4}, y + \frac{1}{2}, y]$	[118, 182]
89	$[\frac{1}{4}, \frac{1}{2} - y, y]$	[121, 148]
90	$[\frac{1}{4}, y + \frac{1}{2}, -y]$	[122, 147]
91	$[\frac{3}{4}, y + \frac{1}{2}, y]$	[129, 145]
92	$[\frac{3}{4}, \frac{1}{2} - y, -y]$	[130, 146]
93	$[\frac{1}{4}, -y, \frac{1}{2} - y]$	[133, 165]
94	$[\frac{1}{4}, y, y + \frac{1}{2}]$	[134, 166]
95	$[\frac{3}{4}, -y, y + \frac{1}{2}]$	[135, 158]
96	$[\frac{3}{4}, y, \frac{1}{2} - y]$	[136, 157]

Table 9: Wyckoff site: $96i$, site symmetry: m' . .

No.	position	mapping
1	$[0, y, z]$	[1,38]
2	$[0, -y, -z]$	[2,37]
3	$[0, y, -z]$	[3,40]
4	$[0, -y, z]$	[4,39]
5	$[z, 0, y]$	[5,48]
6	$[y, z, 0]$	[6,45]
7	$[-y, z, 0]$	[7,47]
8	$[-z, 0, y]$	[8,46]
9	$[-y, -z, 0]$	[9,42]
10	$[z, 0, -y]$	[10,44]
11	$[y, -z, 0]$	[11,43]
12	$[-z, 0, -y]$	[12,41]
13	$[\frac{1}{2}, z + \frac{1}{2}, \frac{1}{2} - y]$	[13,26]
14	$[\frac{1}{2}, \frac{1}{2} - z, y + \frac{1}{2}]$	[14,25]
15	$[\frac{1}{2} - z, \frac{1}{2} - y, \frac{1}{2}]$	[15,36]
16	$[z + \frac{1}{2}, \frac{1}{2} - y, \frac{1}{2}]$	[16,35]
17	$[y + \frac{1}{2}, \frac{1}{2}, \frac{1}{2} - z]$	[17,31]
18	$[\frac{1}{2} - y, \frac{1}{2}, \frac{1}{2} - z]$	[18,32]
19	$[\frac{1}{2} - y, \frac{1}{2}, z + \frac{1}{2}]$	[19,29]
20	$[y + \frac{1}{2}, \frac{1}{2}, z + \frac{1}{2}]$	[20,30]
21	$[\frac{1}{2}, \frac{1}{2} - z, \frac{1}{2} - y]$	[21,34]
22	$[\frac{1}{2}, z + \frac{1}{2}, y + \frac{1}{2}]$	[22,33]
23	$[\frac{1}{2} - z, y + \frac{1}{2}, \frac{1}{2}]$	[23,28]
24	$[z + \frac{1}{2}, y + \frac{1}{2}, \frac{1}{2}]$	[24,27]
25	$[0, y + \frac{1}{2}, z + \frac{1}{2}]$	[49,86]
26	$[0, \frac{1}{2} - y, \frac{1}{2} - z]$	[50,85]
27	$[0, y + \frac{1}{2}, \frac{1}{2} - z]$	[51,88]
28	$[0, \frac{1}{2} - y, z + \frac{1}{2}]$	[52,87]
29	$[z, \frac{1}{2}, y + \frac{1}{2}]$	[53,96]
30	$[y, z + \frac{1}{2}, \frac{1}{2}]$	[54,93]
31	$[-y, z + \frac{1}{2}, \frac{1}{2}]$	[55,95]
32	$[-z, \frac{1}{2}, y + \frac{1}{2}]$	[56,94]
33	$[-y, \frac{1}{2} - z, \frac{1}{2}]$	[57,90]
34	$[z, \frac{1}{2}, \frac{1}{2} - y]$	[58,92]
35	$[y, \frac{1}{2} - z, \frac{1}{2}]$	[59,91]
36	$[-z, \frac{1}{2}, \frac{1}{2} - y]$	[60,89]
37	$[\frac{1}{2}, z, -y]$	[61,74]
38	$[\frac{1}{2}, -z, y]$	[62,73]
39	$[\frac{1}{2} - z, -y, 0]$	[63,84]
40	$[z + \frac{1}{2}, -y, 0]$	[64,83]
41	$[y + \frac{1}{2}, 0, -z]$	[65,79]
42	$[\frac{1}{2} - y, 0, -z]$	[66,80]
43	$[\frac{1}{2} - y, 0, z]$	[67,77]
44	$[y + \frac{1}{2}, 0, z]$	[68,78]
45	$[\frac{1}{2}, -z, -y]$	[69,82]
46	$[\frac{1}{2}, z, y]$	[70,81]

continued ...

Table 9

No.	position	mapping
47	$[\frac{1}{2} - z, y, 0]$	[71,76]
48	$[z + \frac{1}{2}, y, 0]$	[72,75]
49	$[\frac{1}{2}, y, z + \frac{1}{2}]$	[97,134]
50	$[\frac{1}{2}, -y, \frac{1}{2} - z]$	[98,133]
51	$[\frac{1}{2}, y, \frac{1}{2} - z]$	[99,136]
52	$[\frac{1}{2}, -y, z + \frac{1}{2}]$	[100,135]
53	$[z + \frac{1}{2}, 0, y + \frac{1}{2}]$	[101,144]
54	$[y + \frac{1}{2}, z, \frac{1}{2}]$	[102,141]
55	$[\frac{1}{2} - y, z, \frac{1}{2}]$	[103,143]
56	$[\frac{1}{2} - z, 0, y + \frac{1}{2}]$	[104,142]
57	$[\frac{1}{2} - y, -z, \frac{1}{2}]$	[105,138]
58	$[z + \frac{1}{2}, 0, \frac{1}{2} - y]$	[106,140]
59	$[y + \frac{1}{2}, -z, \frac{1}{2}]$	[107,139]
60	$[\frac{1}{2} - z, 0, \frac{1}{2} - y]$	[108,137]
61	$[0, z + \frac{1}{2}, -y]$	[109,122]
62	$[0, \frac{1}{2} - z, y]$	[110,121]
63	$[-z, \frac{1}{2} - y, 0]$	[111,132]
64	$[z, \frac{1}{2} - y, 0]$	[112,131]
65	$[y, \frac{1}{2}, -z]$	[113,127]
66	$[-y, \frac{1}{2}, -z]$	[114,128]
67	$[-y, \frac{1}{2}, z]$	[115,125]
68	$[y, \frac{1}{2}, z]$	[116,126]
69	$[0, \frac{1}{2} - z, -y]$	[117,130]
70	$[0, z + \frac{1}{2}, y]$	[118,129]
71	$[-z, y + \frac{1}{2}, 0]$	[119,124]
72	$[z, y + \frac{1}{2}, 0]$	[120,123]
73	$[\frac{1}{2}, y + \frac{1}{2}, z]$	[145,182]
74	$[\frac{1}{2}, \frac{1}{2} - y, -z]$	[146,181]
75	$[\frac{1}{2}, y + \frac{1}{2}, -z]$	[147,184]
76	$[\frac{1}{2}, \frac{1}{2} - y, z]$	[148,183]
77	$[z + \frac{1}{2}, \frac{1}{2}, y]$	[149,192]
78	$[y + \frac{1}{2}, z + \frac{1}{2}, 0]$	[150,189]
79	$[\frac{1}{2} - y, z + \frac{1}{2}, 0]$	[151,191]
80	$[\frac{1}{2} - z, \frac{1}{2}, y]$	[152,190]
81	$[\frac{1}{2} - y, \frac{1}{2} - z, 0]$	[153,186]
82	$[z + \frac{1}{2}, \frac{1}{2}, -y]$	[154,188]
83	$[y + \frac{1}{2}, \frac{1}{2} - z, 0]$	[155,187]
84	$[\frac{1}{2} - z, \frac{1}{2}, -y]$	[156,185]
85	$[0, z, \frac{1}{2} - y]$	[157,170]
86	$[0, -z, y + \frac{1}{2}]$	[158,169]
87	$[-z, -y, \frac{1}{2}]$	[159,180]
88	$[z, -y, \frac{1}{2}]$	[160,179]
89	$[y, 0, \frac{1}{2} - z]$	[161,175]
90	$[-y, 0, \frac{1}{2} - z]$	[162,176]
91	$[-y, 0, z + \frac{1}{2}]$	[163,173]
92	$[y, 0, z + \frac{1}{2}]$	[164,174]
93	$[0, -z, \frac{1}{2} - y]$	[165,178]

continued ...

Table 9

No.	position	mapping
94	$[0, z, y + \frac{1}{2}]$	[166,177]
95	$[-z, y, \frac{1}{2}]$	[167,172]
96	$[z, y, \frac{1}{2}]$	[168,171]

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	$[\frac{1}{2} - x, z + \frac{1}{2}, \frac{1}{2} - y]$	[13]
14	$[\frac{1}{2} - x, \frac{1}{2} - z, y + \frac{1}{2}]$	[14]
15	$[\frac{1}{2} - z, \frac{1}{2} - y, x + \frac{1}{2}]$	[15]
16	$[z + \frac{1}{2}, \frac{1}{2} - y, \frac{1}{2} - x]$	[16]
17	$[y + \frac{1}{2}, \frac{1}{2} - x, \frac{1}{2} - z]$	[17]
18	$[\frac{1}{2} - y, x + \frac{1}{2}, \frac{1}{2} - z]$	[18]
19	$[\frac{1}{2} - y, \frac{1}{2} - x, z + \frac{1}{2}]$	[19]
20	$[y + \frac{1}{2}, x + \frac{1}{2}, z + \frac{1}{2}]$	[20]
21	$[x + \frac{1}{2}, \frac{1}{2} - z, \frac{1}{2} - y]$	[21]
22	$[x + \frac{1}{2}, z + \frac{1}{2}, y + \frac{1}{2}]$	[22]
23	$[\frac{1}{2} - z, y + \frac{1}{2}, \frac{1}{2} - x]$	[23]
24	$[z + \frac{1}{2}, y + \frac{1}{2}, x + \frac{1}{2}]$	[24]
25	$[x + \frac{1}{2}, \frac{1}{2} - z, y + \frac{1}{2}]$	[25]
26	$[x + \frac{1}{2}, z + \frac{1}{2}, \frac{1}{2} - y]$	[26]
27	$[z + \frac{1}{2}, y + \frac{1}{2}, \frac{1}{2} - x]$	[27]
28	$[\frac{1}{2} - z, y + \frac{1}{2}, x + \frac{1}{2}]$	[28]
29	$[\frac{1}{2} - y, x + \frac{1}{2}, z + \frac{1}{2}]$	[29]
30	$[y + \frac{1}{2}, \frac{1}{2} - x, z + \frac{1}{2}]$	[30]
31	$[y + \frac{1}{2}, x + \frac{1}{2}, \frac{1}{2} - z]$	[31]
32	$[\frac{1}{2} - y, \frac{1}{2} - x, \frac{1}{2} - z]$	[32]
33	$[\frac{1}{2} - x, z + \frac{1}{2}, y + \frac{1}{2}]$	[33]
34	$[\frac{1}{2} - x, \frac{1}{2} - z, \frac{1}{2} - y]$	[34]
35	$[z + \frac{1}{2}, \frac{1}{2} - y, x + \frac{1}{2}]$	[35]
36	$[\frac{1}{2} - z, \frac{1}{2} - y, \frac{1}{2} - x]$	[36]
37	$[-x, -y, -z]$	[37]

continued ...

Table 10

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

continued ...

Table 10

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

continued ...

Table 10

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

continued ...

Table 10

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