

MSG No. 216.77 $F_S\bar{4}3m$ [Type IV, cubic]

Table 1: Wyckoff site: 8a, site symmetry: $-43m$

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

Table 2: Wyckoff site: 8b, site symmetry: $-43m$

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

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

No.	position	mapping
1	$[0, \frac{1}{4}, \frac{1}{4}]$	$[1, 22, 26, 45, 99, 109, 124, 134]$
2	$[0, \frac{3}{4}, \frac{3}{4}]$	$[2, 21, 25, 46, 100, 110, 123, 133]$
3	$[0, \frac{1}{4}, \frac{3}{4}]$	$[3, 13, 28, 38, 97, 118, 122, 141]$
4	$[0, \frac{3}{4}, \frac{1}{4}]$	$[4, 14, 27, 37, 98, 117, 121, 142]$
5	$[\frac{1}{4}, 0, \frac{1}{4}]$	$[5, 20, 60, 66, 106, 113, 152, 163]$
6	$[\frac{1}{4}, \frac{1}{4}, 0]$	$[6, 24, 81, 87, 131, 136, 151, 167]$
7	$[\frac{3}{4}, \frac{1}{4}, 0]$	$[7, 23, 83, 88, 129, 135, 150, 168]$
8	$[\frac{3}{4}, 0, \frac{1}{4}]$	$[8, 19, 58, 65, 108, 114, 149, 164]$
9	$[\frac{3}{4}, \frac{3}{4}, 0]$	$[9, 15, 78, 96, 127, 143, 155, 160]$
10	$[\frac{1}{4}, 0, \frac{3}{4}]$	$[10, 17, 56, 67, 101, 116, 156, 162]$
11	$[\frac{1}{4}, \frac{3}{4}, 0]$	$[11, 16, 79, 95, 126, 144, 153, 159]$
12	$[\frac{3}{4}, 0, \frac{3}{4}]$	$[12, 18, 53, 68, 104, 115, 154, 161]$
13	$[\frac{1}{4}, \frac{1}{2}, \frac{3}{4}]$	$[29, 44, 84, 90, 130, 137, 176, 187]$
14	$[\frac{1}{4}, \frac{3}{4}, \frac{1}{2}]$	$[30, 48, 57, 63, 107, 112, 175, 191]$
15	$[\frac{3}{4}, \frac{3}{4}, \frac{1}{2}]$	$[31, 47, 59, 64, 105, 111, 174, 192]$

continued ...

Table 3

No.	position	mapping
16	$[\frac{3}{4}, \frac{1}{2}, \frac{3}{4}]$	[32, 43, 82, 89, 132, 138, 173, 188]
17	$[\frac{3}{4}, \frac{1}{4}, \frac{1}{2}]$	[33, 39, 54, 72, 103, 119, 179, 184]
18	$[\frac{1}{4}, \frac{1}{2}, \frac{1}{4}]$	[34, 41, 80, 91, 125, 140, 180, 186]
19	$[\frac{1}{4}, \frac{1}{4}, \frac{1}{2}]$	[35, 40, 55, 71, 102, 120, 177, 183]
20	$[\frac{3}{4}, \frac{1}{2}, \frac{1}{4}]$	[36, 42, 77, 92, 128, 139, 178, 185]
21	$[\frac{1}{2}, \frac{1}{4}, \frac{3}{4}]$	[49, 70, 74, 93, 147, 157, 172, 182]
22	$[\frac{1}{2}, \frac{3}{4}, \frac{1}{4}]$	[50, 69, 73, 94, 148, 158, 171, 181]
23	$[\frac{1}{2}, \frac{1}{4}, \frac{1}{4}]$	[51, 61, 76, 86, 145, 166, 170, 189]
24	$[\frac{1}{2}, \frac{3}{4}, \frac{3}{4}]$	[52, 62, 75, 85, 146, 165, 169, 190]

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

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

Table 5: Wyckoff site: 32e, site symmetry: $\bar{3}m$

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

Table 6: Wyckoff site: 48f, site symmetry: $2.mm$

No.	position	mapping
1	$[x, 0, 0]$	$[1, 2, 21, 22]$
2	$[-x, 0, 0]$	$[3, 4, 13, 14]$
3	$[0, x, 0]$	$[5, 12, 18, 20]$
4	$[0, 0, x]$	$[6, 9, 15, 24]$
5	$[0, 0, -x]$	$[7, 11, 16, 23]$
6	$[0, -x, 0]$	$[8, 10, 17, 19]$
7	$[x, \frac{1}{2}, \frac{1}{2}]$	$[25, 26, 45, 46]$

continued ...

Table 6

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

Table 7: Wyckoff site: 48g, site symmetry: 2.mm

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

continued ...

Table 7

No.	position	mapping
47	$[\frac{1}{2} - x, \frac{1}{4}, \frac{3}{4}]$	[147, 157, 172, 182]
48	$[\frac{1}{2} - x, \frac{3}{4}, \frac{1}{4}]$	[148, 158, 171, 181]

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

No.	position	mapping
1	$[x, \frac{1}{4}, 0]$	[1, 122]
2	$[x, \frac{3}{4}, 0]$	[2, 121]
3	$[-x, \frac{1}{4}, 0]$	[3, 124]
4	$[-x, \frac{3}{4}, 0]$	[4, 123]
5	$[0, x, \frac{1}{4}]$	[5, 108]
6	$[\frac{1}{4}, 0, x]$	[6, 153]
7	$[\frac{3}{4}, 0, -x]$	[7, 155]
8	$[0, -x, \frac{1}{4}]$	[8, 106]
9	$[\frac{3}{4}, 0, x]$	[9, 150]
10	$[0, -x, \frac{3}{4}]$	[10, 104]
11	$[\frac{1}{4}, 0, -x]$	[11, 151]
12	$[0, x, \frac{3}{4}]$	[12, 101]
13	$[-x, 0, \frac{3}{4}]$	[13, 110]
14	$[-x, 0, \frac{1}{4}]$	[14, 109]
15	$[0, \frac{3}{4}, x]$	[15, 144]
16	$[0, \frac{3}{4}, -x]$	[16, 143]
17	$[\frac{1}{4}, -x, 0]$	[17, 163]
18	$[\frac{3}{4}, x, 0]$	[18, 164]
19	$[\frac{3}{4}, -x, 0]$	[19, 161]
20	$[\frac{1}{4}, x, 0]$	[20, 162]
21	$[x, 0, \frac{3}{4}]$	[21, 118]
22	$[x, 0, \frac{1}{4}]$	[22, 117]
23	$[0, \frac{1}{4}, -x]$	[23, 136]
24	$[0, \frac{1}{4}, x]$	[24, 135]
25	$[x, \frac{3}{4}, \frac{1}{2}]$	[25, 98]
26	$[x, \frac{1}{4}, \frac{1}{2}]$	[26, 97]
27	$[-x, \frac{3}{4}, \frac{1}{2}]$	[27, 100]
28	$[-x, \frac{1}{4}, \frac{1}{2}]$	[28, 99]
29	$[0, x + \frac{1}{2}, \frac{3}{4}]$	[29, 132]
30	$[\frac{1}{4}, \frac{1}{2}, x + \frac{1}{2}]$	[30, 177]
31	$[\frac{3}{4}, \frac{1}{2}, \frac{1}{2} - x]$	[31, 179]
32	$[0, \frac{1}{2} - x, \frac{3}{4}]$	[32, 130]
33	$[\frac{3}{4}, \frac{1}{2}, x + \frac{1}{2}]$	[33, 174]
34	$[0, \frac{1}{2} - x, \frac{1}{4}]$	[34, 128]
35	$[\frac{1}{4}, \frac{1}{2}, \frac{1}{2} - x]$	[35, 175]
36	$[0, x + \frac{1}{2}, \frac{1}{4}]$	[36, 125]
37	$[-x, \frac{1}{2}, \frac{1}{4}]$	[37, 134]
38	$[-x, \frac{1}{2}, \frac{3}{4}]$	[38, 133]

continued ...

Table 8

No.	position	mapping
39	$[0, \frac{1}{4}, x + \frac{1}{2}]$	[39,120]
40	$[0, \frac{1}{4}, \frac{1}{2} - x]$	[40,119]
41	$[\frac{1}{4}, \frac{1}{2} - x, \frac{1}{2}]$	[41,187]
42	$[\frac{3}{4}, x + \frac{1}{2}, \frac{1}{2}]$	[42,188]
43	$[\frac{3}{4}, \frac{1}{2} - x, \frac{1}{2}]$	[43,185]
44	$[\frac{1}{4}, x + \frac{1}{2}, \frac{1}{2}]$	[44,186]
45	$[x, \frac{1}{2}, \frac{1}{4}]$	[45,142]
46	$[x, \frac{1}{2}, \frac{3}{4}]$	[46,141]
47	$[0, \frac{3}{4}, \frac{1}{2} - x]$	[47,112]
48	$[0, \frac{3}{4}, x + \frac{1}{2}]$	[48,111]
49	$[x + \frac{1}{2}, \frac{1}{4}, \frac{1}{2}]$	[49,170]
50	$[x + \frac{1}{2}, \frac{3}{4}, \frac{1}{2}]$	[50,169]
51	$[\frac{1}{2} - x, \frac{1}{4}, \frac{1}{2}]$	[51,172]
52	$[\frac{1}{2} - x, \frac{3}{4}, \frac{1}{2}]$	[52,171]
53	$[\frac{1}{2}, x, \frac{3}{4}]$	[53,156]
54	$[\frac{3}{4}, 0, x + \frac{1}{2}]$	[54,105]
55	$[\frac{1}{4}, 0, \frac{1}{2} - x]$	[55,107]
56	$[\frac{1}{2}, -x, \frac{3}{4}]$	[56,154]
57	$[\frac{1}{4}, 0, x + \frac{1}{2}]$	[57,102]
58	$[\frac{1}{2}, -x, \frac{1}{4}]$	[58,152]
59	$[\frac{3}{4}, 0, \frac{1}{2} - x]$	[59,103]
60	$[\frac{1}{2}, x, \frac{1}{4}]$	[60,149]
61	$[\frac{1}{2} - x, 0, \frac{1}{4}]$	[61,158]
62	$[\frac{1}{2} - x, 0, \frac{3}{4}]$	[62,157]
63	$[\frac{1}{2}, \frac{3}{4}, x + \frac{1}{2}]$	[63,192]
64	$[\frac{1}{2}, \frac{3}{4}, \frac{1}{2} - x]$	[64,191]
65	$[\frac{3}{4}, -x, \frac{1}{2}]$	[65,115]
66	$[\frac{1}{4}, x, \frac{1}{2}]$	[66,116]
67	$[\frac{1}{4}, -x, \frac{1}{2}]$	[67,113]
68	$[\frac{3}{4}, x, \frac{1}{2}]$	[68,114]
69	$[x + \frac{1}{2}, 0, \frac{1}{4}]$	[69,166]
70	$[x + \frac{1}{2}, 0, \frac{3}{4}]$	[70,165]
71	$[\frac{1}{2}, \frac{1}{4}, \frac{1}{2} - x]$	[71,184]
72	$[\frac{1}{2}, \frac{1}{4}, x + \frac{1}{2}]$	[72,183]
73	$[x + \frac{1}{2}, \frac{3}{4}, 0]$	[73,146]
74	$[x + \frac{1}{2}, \frac{1}{4}, 0]$	[74,145]
75	$[\frac{1}{2} - x, \frac{3}{4}, 0]$	[75,148]
76	$[\frac{1}{2} - x, \frac{1}{4}, 0]$	[76,147]
77	$[\frac{1}{2}, x + \frac{1}{2}, \frac{1}{4}]$	[77,180]
78	$[\frac{3}{4}, \frac{1}{2}, x]$	[78,129]
79	$[\frac{1}{4}, \frac{1}{2}, -x]$	[79,131]
80	$[\frac{1}{2}, \frac{1}{2} - x, \frac{1}{4}]$	[80,178]
81	$[\frac{1}{4}, \frac{1}{2}, x]$	[81,126]
82	$[\frac{1}{2}, \frac{1}{2} - x, \frac{3}{4}]$	[82,176]
83	$[\frac{3}{4}, \frac{1}{2}, -x]$	[83,127]
84	$[\frac{1}{2}, x + \frac{1}{2}, \frac{3}{4}]$	[84,173]
85	$[\frac{1}{2} - x, \frac{1}{2}, \frac{3}{4}]$	[85,182]

continued ...

Table 8

No.	position	mapping
86	$[\frac{1}{2} - x, \frac{1}{2}, \frac{1}{4}]$	[86,181]
87	$[\frac{1}{2}, \frac{1}{4}, x]$	[87,168]
88	$[\frac{1}{2}, \frac{1}{4}, -x]$	[88,167]
89	$[\frac{3}{4}, \frac{1}{2} - x, 0]$	[89,139]
90	$[\frac{1}{4}, x + \frac{1}{2}, 0]$	[90,140]
91	$[\frac{1}{4}, \frac{1}{2} - x, 0]$	[91,137]
92	$[\frac{3}{4}, x + \frac{1}{2}, 0]$	[92,138]
93	$[x + \frac{1}{2}, \frac{1}{2}, \frac{3}{4}]$	[93,190]
94	$[x + \frac{1}{2}, \frac{1}{2}, \frac{1}{4}]$	[94,189]
95	$[\frac{1}{2}, \frac{3}{4}, -x]$	[95,160]
96	$[\frac{1}{2}, \frac{3}{4}, x]$	[96,159]

Table 9: Wyckoff site: **96i**, site symmetry: $\bar{3}m$

No.	position	mapping
1	$[x, x, z]$	[1,20]
2	$[x, -x, -z]$	[2,17]
3	$[-x, x, -z]$	[3,18]
4	$[-x, -x, z]$	[4,19]
5	$[z, x, x]$	[5,24]
6	$[x, z, x]$	[6,22]
7	$[-x, z, -x]$	[7,13]
8	$[-z, -x, x]$	[8,15]
9	$[-x, -z, x]$	[9,14]
10	$[z, -x, -x]$	[10,16]
11	$[x, -z, -x]$	[11,21]
12	$[-z, x, -x]$	[12,23]
13	$[x, x + \frac{1}{2}, z + \frac{1}{2}]$	[25,44]
14	$[x, \frac{1}{2} - x, \frac{1}{2} - z]$	[26,41]
15	$[-x, x + \frac{1}{2}, \frac{1}{2} - z]$	[27,42]
16	$[-x, \frac{1}{2} - x, z + \frac{1}{2}]$	[28,43]
17	$[z, x + \frac{1}{2}, x + \frac{1}{2}]$	[29,48]
18	$[x, z + \frac{1}{2}, x + \frac{1}{2}]$	[30,46]
19	$[-x, z + \frac{1}{2}, \frac{1}{2} - x]$	[31,37]
20	$[-z, \frac{1}{2} - x, x + \frac{1}{2}]$	[32,39]
21	$[-x, \frac{1}{2} - z, x + \frac{1}{2}]$	[33,38]
22	$[z, \frac{1}{2} - x, \frac{1}{2} - x]$	[34,40]
23	$[x, \frac{1}{2} - z, \frac{1}{2} - x]$	[35,45]
24	$[-z, x + \frac{1}{2}, \frac{1}{2} - x]$	[36,47]
25	$[x + \frac{1}{2}, x, z + \frac{1}{2}]$	[49,68]
26	$[x + \frac{1}{2}, -x, \frac{1}{2} - z]$	[50,65]
27	$[\frac{1}{2} - x, x, \frac{1}{2} - z]$	[51,66]
28	$[\frac{1}{2} - x, -x, z + \frac{1}{2}]$	[52,67]
29	$[z + \frac{1}{2}, x, x + \frac{1}{2}]$	[53,72]

continued ...

Table 9

No.	position	mapping
30	$[x + \frac{1}{2}, z, x + \frac{1}{2}]$	[54, 70]
31	$[\frac{1}{2} - x, z, \frac{1}{2} - x]$	[55, 61]
32	$[\frac{1}{2} - z, -x, x + \frac{1}{2}]$	[56, 63]
33	$[\frac{1}{2} - x, -z, x + \frac{1}{2}]$	[57, 62]
34	$[z + \frac{1}{2}, -x, \frac{1}{2} - x]$	[58, 64]
35	$[x + \frac{1}{2}, -z, \frac{1}{2} - x]$	[59, 69]
36	$[\frac{1}{2} - z, x, \frac{1}{2} - x]$	[60, 71]
37	$[x + \frac{1}{2}, x + \frac{1}{2}, z]$	[73, 92]
38	$[x + \frac{1}{2}, \frac{1}{2} - x, -z]$	[74, 89]
39	$[\frac{1}{2} - x, x + \frac{1}{2}, -z]$	[75, 90]
40	$[\frac{1}{2} - x, \frac{1}{2} - x, z]$	[76, 91]
41	$[z + \frac{1}{2}, x + \frac{1}{2}, x]$	[77, 96]
42	$[x + \frac{1}{2}, z + \frac{1}{2}, x]$	[78, 94]
43	$[\frac{1}{2} - x, z + \frac{1}{2}, -x]$	[79, 85]
44	$[\frac{1}{2} - z, \frac{1}{2} - x, x]$	[80, 87]
45	$[\frac{1}{2} - x, \frac{1}{2} - z, x]$	[81, 86]
46	$[z + \frac{1}{2}, \frac{1}{2} - x, -x]$	[82, 88]
47	$[x + \frac{1}{2}, \frac{1}{2} - z, -x]$	[83, 93]
48	$[\frac{1}{2} - z, x + \frac{1}{2}, -x]$	[84, 95]
49	$[x, x, z + \frac{1}{2}]$	[97, 116]
50	$[x, -x, \frac{1}{2} - z]$	[98, 113]
51	$[-x, x, \frac{1}{2} - z]$	[99, 114]
52	$[-x, -x, z + \frac{1}{2}]$	[100, 115]
53	$[z, x, x + \frac{1}{2}]$	[101, 120]
54	$[x, z, x + \frac{1}{2}]$	[102, 118]
55	$[-x, z, \frac{1}{2} - x]$	[103, 109]
56	$[-z, -x, x + \frac{1}{2}]$	[104, 111]
57	$[-x, -z, x + \frac{1}{2}]$	[105, 110]
58	$[z, -x, \frac{1}{2} - x]$	[106, 112]
59	$[x, -z, \frac{1}{2} - x]$	[107, 117]
60	$[-z, x, \frac{1}{2} - x]$	[108, 119]
61	$[x, x + \frac{1}{2}, z]$	[121, 140]
62	$[x, \frac{1}{2} - x, -z]$	[122, 137]
63	$[-x, x + \frac{1}{2}, -z]$	[123, 138]
64	$[-x, \frac{1}{2} - x, z]$	[124, 139]
65	$[z, x + \frac{1}{2}, x]$	[125, 144]
66	$[x, z + \frac{1}{2}, x]$	[126, 142]
67	$[-x, z + \frac{1}{2}, -x]$	[127, 133]
68	$[-z, \frac{1}{2} - x, x]$	[128, 135]
69	$[-x, \frac{1}{2} - z, x]$	[129, 134]
70	$[z, \frac{1}{2} - x, -x]$	[130, 136]
71	$[x, \frac{1}{2} - z, -x]$	[131, 141]
72	$[-z, x + \frac{1}{2}, -x]$	[132, 143]
73	$[x + \frac{1}{2}, x, z]$	[145, 164]
74	$[x + \frac{1}{2}, -x, -z]$	[146, 161]
75	$[\frac{1}{2} - x, x, -z]$	[147, 162]
76	$[\frac{1}{2} - x, -x, z]$	[148, 163]

continued ...

Table 9

No.	position	mapping
77	$[z + \frac{1}{2}, x, x]$	[149,168]
78	$[x + \frac{1}{2}, z, x]$	[150,166]
79	$[\frac{1}{2} - x, z, -x]$	[151,157]
80	$[\frac{1}{2} - z, -x, x]$	[152,159]
81	$[\frac{1}{2} - x, -z, x]$	[153,158]
82	$[z + \frac{1}{2}, -x, -x]$	[154,160]
83	$[x + \frac{1}{2}, -z, -x]$	[155,165]
84	$[\frac{1}{2} - z, x, -x]$	[156,167]
85	$[x + \frac{1}{2}, x + \frac{1}{2}, z + \frac{1}{2}]$	[169,188]
86	$[x + \frac{1}{2}, \frac{1}{2} - x, \frac{1}{2} - z]$	[170,185]
87	$[\frac{1}{2} - x, x + \frac{1}{2}, \frac{1}{2} - z]$	[171,186]
88	$[\frac{1}{2} - x, \frac{1}{2} - x, z + \frac{1}{2}]$	[172,187]
89	$[z + \frac{1}{2}, x + \frac{1}{2}, x + \frac{1}{2}]$	[173,192]
90	$[x + \frac{1}{2}, z + \frac{1}{2}, x + \frac{1}{2}]$	[174,190]
91	$[\frac{1}{2} - x, z + \frac{1}{2}, \frac{1}{2} - x]$	[175,181]
92	$[\frac{1}{2} - z, \frac{1}{2} - x, x + \frac{1}{2}]$	[176,183]
93	$[\frac{1}{2} - x, \frac{1}{2} - z, x + \frac{1}{2}]$	[177,182]
94	$[z + \frac{1}{2}, \frac{1}{2} - x, \frac{1}{2} - x]$	[178,184]
95	$[x + \frac{1}{2}, \frac{1}{2} - z, \frac{1}{2} - x]$	[179,189]
96	$[\frac{1}{2} - z, x + \frac{1}{2}, \frac{1}{2} - x]$	[180,191]

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	$[-x, z, -y]$	[13]
14	$[-x, -z, y]$	[14]
15	$[-z, -y, x]$	[15]
16	$[z, -y, -x]$	[16]
17	$[y, -x, -z]$	[17]
18	$[-y, x, -z]$	[18]
19	$[-y, -x, z]$	[19]
20	$[y, x, z]$	[20]

continued ...

Table 10

No.	position	mapping
21	$[x, -z, -y]$	[21]
22	$[x, z, y]$	[22]
23	$[-z, y, -x]$	[23]
24	$[z, y, x]$	[24]
25	$[x, y + \frac{1}{2}, z + \frac{1}{2}]$	[25]
26	$[x, \frac{1}{2} - y, \frac{1}{2} - z]$	[26]
27	$[-x, y + \frac{1}{2}, \frac{1}{2} - z]$	[27]
28	$[-x, \frac{1}{2} - y, z + \frac{1}{2}]$	[28]
29	$[z, x + \frac{1}{2}, y + \frac{1}{2}]$	[29]
30	$[y, z + \frac{1}{2}, x + \frac{1}{2}]$	[30]
31	$[-y, z + \frac{1}{2}, \frac{1}{2} - x]$	[31]
32	$[-z, \frac{1}{2} - x, y + \frac{1}{2}]$	[32]
33	$[-y, \frac{1}{2} - z, x + \frac{1}{2}]$	[33]
34	$[z, \frac{1}{2} - x, \frac{1}{2} - y]$	[34]
35	$[y, \frac{1}{2} - z, \frac{1}{2} - x]$	[35]
36	$[-z, x + \frac{1}{2}, \frac{1}{2} - y]$	[36]
37	$[-x, z + \frac{1}{2}, \frac{1}{2} - y]$	[37]
38	$[-x, \frac{1}{2} - z, y + \frac{1}{2}]$	[38]
39	$[-z, \frac{1}{2} - y, x + \frac{1}{2}]$	[39]
40	$[z, \frac{1}{2} - y, \frac{1}{2} - x]$	[40]
41	$[y, \frac{1}{2} - x, \frac{1}{2} - z]$	[41]
42	$[-y, x + \frac{1}{2}, \frac{1}{2} - z]$	[42]
43	$[-y, \frac{1}{2} - x, z + \frac{1}{2}]$	[43]
44	$[y, x + \frac{1}{2}, z + \frac{1}{2}]$	[44]
45	$[x, \frac{1}{2} - z, \frac{1}{2} - y]$	[45]
46	$[x, z + \frac{1}{2}, y + \frac{1}{2}]$	[46]
47	$[-z, y + \frac{1}{2}, \frac{1}{2} - x]$	[47]
48	$[z, y + \frac{1}{2}, x + \frac{1}{2}]$	[48]
49	$[x + \frac{1}{2}, y, z + \frac{1}{2}]$	[49]
50	$[x + \frac{1}{2}, -y, \frac{1}{2} - z]$	[50]
51	$[\frac{1}{2} - x, y, \frac{1}{2} - z]$	[51]
52	$[\frac{1}{2} - x, -y, z + \frac{1}{2}]$	[52]
53	$[z + \frac{1}{2}, x, y + \frac{1}{2}]$	[53]
54	$[y + \frac{1}{2}, z, x + \frac{1}{2}]$	[54]
55	$[\frac{1}{2} - y, z, \frac{1}{2} - x]$	[55]
56	$[\frac{1}{2} - z, -x, y + \frac{1}{2}]$	[56]
57	$[\frac{1}{2} - y, -z, x + \frac{1}{2}]$	[57]
58	$[z + \frac{1}{2}, -x, \frac{1}{2} - y]$	[58]
59	$[y + \frac{1}{2}, -z, \frac{1}{2} - x]$	[59]
60	$[\frac{1}{2} - z, x, \frac{1}{2} - y]$	[60]
61	$[\frac{1}{2} - x, z, \frac{1}{2} - y]$	[61]
62	$[\frac{1}{2} - x, -z, y + \frac{1}{2}]$	[62]
63	$[\frac{1}{2} - z, -y, x + \frac{1}{2}]$	[63]
64	$[z + \frac{1}{2}, -y, \frac{1}{2} - x]$	[64]
65	$[y + \frac{1}{2}, -x, \frac{1}{2} - z]$	[65]
66	$[\frac{1}{2} - y, x, \frac{1}{2} - z]$	[66]
67	$[\frac{1}{2} - y, -x, z + \frac{1}{2}]$	[67]

continued ...

Table 10

No.	position	mapping
68	$[y + \frac{1}{2}, x, z + \frac{1}{2}]$	[68]
69	$[x + \frac{1}{2}, -z, \frac{1}{2} - y]$	[69]
70	$[x + \frac{1}{2}, z, y + \frac{1}{2}]$	[70]
71	$[\frac{1}{2} - z, y, \frac{1}{2} - x]$	[71]
72	$[z + \frac{1}{2}, y, x + \frac{1}{2}]$	[72]
73	$[x + \frac{1}{2}, y + \frac{1}{2}, z]$	[73]
74	$[x + \frac{1}{2}, \frac{1}{2} - y, -z]$	[74]
75	$[\frac{1}{2} - x, y + \frac{1}{2}, -z]$	[75]
76	$[\frac{1}{2} - x, \frac{1}{2} - y, z]$	[76]
77	$[z + \frac{1}{2}, x + \frac{1}{2}, y]$	[77]
78	$[y + \frac{1}{2}, z + \frac{1}{2}, x]$	[78]
79	$[\frac{1}{2} - y, z + \frac{1}{2}, -x]$	[79]
80	$[\frac{1}{2} - z, \frac{1}{2} - x, y]$	[80]
81	$[\frac{1}{2} - y, \frac{1}{2} - z, x]$	[81]
82	$[z + \frac{1}{2}, \frac{1}{2} - x, -y]$	[82]
83	$[y + \frac{1}{2}, \frac{1}{2} - z, -x]$	[83]
84	$[\frac{1}{2} - z, x + \frac{1}{2}, -y]$	[84]
85	$[\frac{1}{2} - x, z + \frac{1}{2}, -y]$	[85]
86	$[\frac{1}{2} - x, \frac{1}{2} - z, y]$	[86]
87	$[\frac{1}{2} - z, \frac{1}{2} - y, x]$	[87]
88	$[z + \frac{1}{2}, \frac{1}{2} - y, -x]$	[88]
89	$[y + \frac{1}{2}, \frac{1}{2} - x, -z]$	[89]
90	$[\frac{1}{2} - y, x + \frac{1}{2}, -z]$	[90]
91	$[\frac{1}{2} - y, \frac{1}{2} - x, z]$	[91]
92	$[y + \frac{1}{2}, x + \frac{1}{2}, z]$	[92]
93	$[x + \frac{1}{2}, \frac{1}{2} - z, -y]$	[93]
94	$[x + \frac{1}{2}, z + \frac{1}{2}, y]$	[94]
95	$[\frac{1}{2} - z, y + \frac{1}{2}, -x]$	[95]
96	$[z + \frac{1}{2}, y + \frac{1}{2}, x]$	[96]
97	$[x, y, z + \frac{1}{2}]$	[97]
98	$[x, -y, \frac{1}{2} - z]$	[98]
99	$[-x, y, \frac{1}{2} - z]$	[99]
100	$[-x, -y, z + \frac{1}{2}]$	[100]
101	$[z, x, y + \frac{1}{2}]$	[101]
102	$[y, z, x + \frac{1}{2}]$	[102]
103	$[-y, z, \frac{1}{2} - x]$	[103]
104	$[-z, -x, y + \frac{1}{2}]$	[104]
105	$[-y, -z, x + \frac{1}{2}]$	[105]
106	$[z, -x, \frac{1}{2} - y]$	[106]
107	$[y, -z, \frac{1}{2} - x]$	[107]
108	$[-z, x, \frac{1}{2} - y]$	[108]
109	$[-x, z, \frac{1}{2} - y]$	[109]
110	$[-x, -z, y + \frac{1}{2}]$	[110]
111	$[-z, -y, x + \frac{1}{2}]$	[111]
112	$[z, -y, \frac{1}{2} - x]$	[112]
113	$[y, -x, \frac{1}{2} - z]$	[113]
114	$[-y, x, \frac{1}{2} - z]$	[114]

continued ...

Table 10

No.	position	mapping
115	$[-y, -x, z + \frac{1}{2}]$	[115]
116	$[y, x, z + \frac{1}{2}]$	[116]
117	$[x, -z, \frac{1}{2} - y]$	[117]
118	$[x, z, y + \frac{1}{2}]$	[118]
119	$[-z, y, \frac{1}{2} - x]$	[119]
120	$[z, y, x + \frac{1}{2}]$	[120]
121	$[x, y + \frac{1}{2}, z]$	[121]
122	$[x, \frac{1}{2} - y, -z]$	[122]
123	$[-x, y + \frac{1}{2}, -z]$	[123]
124	$[-x, \frac{1}{2} - y, z]$	[124]
125	$[z, x + \frac{1}{2}, y]$	[125]
126	$[y, z + \frac{1}{2}, x]$	[126]
127	$[-y, z + \frac{1}{2}, -x]$	[127]
128	$[-z, \frac{1}{2} - x, y]$	[128]
129	$[-y, \frac{1}{2} - z, x]$	[129]
130	$[z, \frac{1}{2} - x, -y]$	[130]
131	$[y, \frac{1}{2} - z, -x]$	[131]
132	$[-z, x + \frac{1}{2}, -y]$	[132]
133	$[-x, z + \frac{1}{2}, -y]$	[133]
134	$[-x, \frac{1}{2} - z, y]$	[134]
135	$[-z, \frac{1}{2} - y, x]$	[135]
136	$[z, \frac{1}{2} - y, -x]$	[136]
137	$[y, \frac{1}{2} - x, -z]$	[137]
138	$[-y, x + \frac{1}{2}, -z]$	[138]
139	$[-y, \frac{1}{2} - x, z]$	[139]
140	$[y, x + \frac{1}{2}, z]$	[140]
141	$[x, \frac{1}{2} - z, -y]$	[141]
142	$[x, z + \frac{1}{2}, y]$	[142]
143	$[-z, y + \frac{1}{2}, -x]$	[143]
144	$[z, y + \frac{1}{2}, x]$	[144]
145	$[x + \frac{1}{2}, y, z]$	[145]
146	$[x + \frac{1}{2}, -y, -z]$	[146]
147	$[\frac{1}{2} - x, y, -z]$	[147]
148	$[\frac{1}{2} - x, -y, z]$	[148]
149	$[z + \frac{1}{2}, x, y]$	[149]
150	$[y + \frac{1}{2}, z, x]$	[150]
151	$[\frac{1}{2} - y, z, -x]$	[151]
152	$[\frac{1}{2} - z, -x, y]$	[152]
153	$[\frac{1}{2} - y, -z, x]$	[153]
154	$[z + \frac{1}{2}, -x, -y]$	[154]
155	$[y + \frac{1}{2}, -z, -x]$	[155]
156	$[\frac{1}{2} - z, x, -y]$	[156]
157	$[\frac{1}{2} - x, z, -y]$	[157]
158	$[\frac{1}{2} - x, -z, y]$	[158]
159	$[\frac{1}{2} - z, -y, x]$	[159]
160	$[z + \frac{1}{2}, -y, -x]$	[160]
161	$[y + \frac{1}{2}, -x, -z]$	[161]

continued ...

Table 10

No.	position	mapping
162	$[\frac{1}{2} - y, x, -z]$	[162]
163	$[\frac{1}{2} - y, -x, z]$	[163]
164	$[y + \frac{1}{2}, x, z]$	[164]
165	$[x + \frac{1}{2}, -z, -y]$	[165]
166	$[x + \frac{1}{2}, z, y]$	[166]
167	$[\frac{1}{2} - z, y, -x]$	[167]
168	$[z + \frac{1}{2}, y, x]$	[168]
169	$[x + \frac{1}{2}, y + \frac{1}{2}, z + \frac{1}{2}]$	[169]
170	$[x + \frac{1}{2}, \frac{1}{2} - y, \frac{1}{2} - z]$	[170]
171	$[\frac{1}{2} - x, y + \frac{1}{2}, \frac{1}{2} - z]$	[171]
172	$[\frac{1}{2} - x, \frac{1}{2} - y, z + \frac{1}{2}]$	[172]
173	$[z + \frac{1}{2}, x + \frac{1}{2}, y + \frac{1}{2}]$	[173]
174	$[y + \frac{1}{2}, z + \frac{1}{2}, x + \frac{1}{2}]$	[174]
175	$[\frac{1}{2} - y, z + \frac{1}{2}, \frac{1}{2} - x]$	[175]
176	$[\frac{1}{2} - z, \frac{1}{2} - x, y + \frac{1}{2}]$	[176]
177	$[\frac{1}{2} - y, \frac{1}{2} - z, x + \frac{1}{2}]$	[177]
178	$[z + \frac{1}{2}, \frac{1}{2} - x, \frac{1}{2} - y]$	[178]
179	$[y + \frac{1}{2}, \frac{1}{2} - z, \frac{1}{2} - x]$	[179]
180	$[\frac{1}{2} - z, x + \frac{1}{2}, \frac{1}{2} - y]$	[180]
181	$[\frac{1}{2} - x, z + \frac{1}{2}, \frac{1}{2} - y]$	[181]
182	$[\frac{1}{2} - x, \frac{1}{2} - z, y + \frac{1}{2}]$	[182]
183	$[\frac{1}{2} - z, \frac{1}{2} - y, x + \frac{1}{2}]$	[183]
184	$[z + \frac{1}{2}, \frac{1}{2} - y, \frac{1}{2} - x]$	[184]
185	$[y + \frac{1}{2}, \frac{1}{2} - x, \frac{1}{2} - z]$	[185]
186	$[\frac{1}{2} - y, x + \frac{1}{2}, \frac{1}{2} - z]$	[186]
187	$[\frac{1}{2} - y, \frac{1}{2} - x, z + \frac{1}{2}]$	[187]
188	$[y + \frac{1}{2}, x + \frac{1}{2}, z + \frac{1}{2}]$	[188]
189	$[x + \frac{1}{2}, \frac{1}{2} - z, \frac{1}{2} - y]$	[189]
190	$[x + \frac{1}{2}, z + \frac{1}{2}, y + \frac{1}{2}]$	[190]
191	$[\frac{1}{2} - z, y + \frac{1}{2}, \frac{1}{2} - x]$	[191]
192	$[z + \frac{1}{2}, y + \frac{1}{2}, x + \frac{1}{2}]$	[192]