MSG No. 167.108 $R_I\bar{3}c$ [Type IV, trigonal]

Table 1: Wyckoff site: `6a`, site symmetry: `-3m'`.

No.	position	mapping
1	$[0,\ 0,\ 0]$	`[1,2,3,7,8,9,40,41,42,46,47,48]`
2	$\left[0,\ 0,\ \frac{1}{2}\right]$	`[4,5,6,10,11,12,37,38,39,43,44,45]`
3	$\left[\frac{2}{3},\ \frac{1}{3},\ \frac{1}{3}\right]$	`[13,14,15,19,20,21,52,53,54,58,59,60]`
4	$\left[\frac{2}{3},\ \frac{1}{3},\ \frac{5}{6}\right]$	`[16,17,18,22,23,24,49,50,51,55,56,57]`
5	$\left[\frac{1}{3},\ \frac{2}{3},\ \frac{2}{3}\right]$	`[25,26,27,31,32,33,64,65,66,70,71,72]`
6	$\left[\frac{1}{3},\ \frac{2}{3},\ \frac{1}{6}\right]$	`[28,29,30,34,35,36,61,62,63,67,68,69]`

Table 2: Wyckoff site: `6b`, site symmetry: `-3'm'`.

No.	position	mapping
1	$\left[0,\ 0,\ \frac{1}{4}\right]$	`[1,2,3,4,5,6,43,44,45,46,47,48]`
2	$\left[0,\ 0,\ \frac{3}{4}\right]$	`[7,8,9,10,11,12,37,38,39,40,41,42]`
3	$\left[\frac{2}{3},\ \frac{1}{3},\ \frac{7}{12}\right]$	`[13,14,15,16,17,18,55,56,57,58,59,60]`
4	$\left[\frac{2}{3},\ \frac{1}{3},\ \frac{1}{12}\right]$	`[19,20,21,22,23,24,49,50,51,52,53,54]`
5	$\left[\frac{1}{3},\ \frac{2}{3},\ \frac{11}{12}\right]$	`[25,26,27,28,29,30,67,68,69,70,71,72]`
6	$\left[\frac{1}{3},\ \frac{2}{3},\ \frac{5}{12}\right]$	`[31,32,33,34,35,36,61,62,63,64,65,66]`

Table 3: Wyckoff site: `12c`, site symmetry: `3m'`.

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

Table 4: Wyckoff site: `18d`, site symmetry: `.2/m'.`

No.	position	mapping
1	$\left[\frac{1}{2}, 0, \frac{1}{4}\right]$	`[1,4,43,46]`
2	$\left[0, \frac{1}{2}, \frac{1}{4}\right]$	`[2,5,44,47]`
3	$\left[\frac{1}{2}, \frac{1}{2}, \frac{1}{4}\right]$	`[3,6,45,48]`
4	$\left[\frac{1}{2}, 0, \frac{3}{4}\right]$	`[7,10,37,40]`
5	$\left[0, \frac{1}{2}, \frac{3}{4}\right]$	`[8,11,38,41]`
6	$\left[\frac{1}{2}, \frac{1}{2}, \frac{3}{4}\right]$	`[9,12,39,42]`
7	$\left[\frac{1}{6}, \frac{1}{3}, \frac{7}{12}\right]$	`[13,16,55,58]`
8	$\left[\frac{2}{3}, \frac{5}{6}, \frac{7}{12}\right]$	`[14,17,56,59]`
9	$\left[\frac{1}{6}, \frac{5}{6}, \frac{7}{12}\right]$	`[15,18,57,60]`
10	$\left[\frac{1}{6}, \frac{1}{3}, \frac{1}{12}\right]$	`[19,22,49,52]`
11	$\left[\frac{2}{3}, \frac{5}{6}, \frac{1}{12}\right]$	`[20,23,50,53]`
12	$\left[\frac{1}{6}, \frac{5}{6}, \frac{1}{12}\right]$	`[21,24,51,54]`
13	$\left[\frac{5}{6}, \frac{2}{3}, \frac{11}{12}\right]$	`[25,28,67,70]`
14	$\left[\frac{1}{3}, \frac{1}{6}, \frac{11}{12}\right]$	`[26,29,68,71]`
15	$\left[\frac{5}{6}, \frac{1}{6}, \frac{11}{12}\right]$	`[27,30,69,72]`
16	$\left[\frac{5}{6}, \frac{2}{3}, \frac{5}{12}\right]$	`[31,34,61,64]`
17	$\left[\frac{1}{3}, \frac{1}{6}, \frac{5}{12}\right]$	`[32,35,62,65]`
18	$\left[\frac{5}{6}, \frac{1}{6}, \frac{5}{12}\right]$	`[33,36,63,66]`

Table 5: Wyckoff site: `18e`, site symmetry: `.2'/m'.`

No.	position	mapping
1	$\left[\frac{1}{2}, 0, 0\right]$	`[1,7,40,46]`
2	$\left[0, \frac{1}{2}, 0\right]$	`[2,8,41,47]`
3	$\left[\frac{1}{2}, \frac{1}{2}, 0\right]$	`[3,9,42,48]`
4	$\left[\frac{1}{2}, 0, \frac{1}{2}\right]$	`[4,10,37,43]`
5	$\left[0, \frac{1}{2}, \frac{1}{2}\right]$	`[5,11,38,44]`
6	$\left[\frac{1}{2}, \frac{1}{2}, \frac{1}{2}\right]$	`[6,12,39,45]`
7	$\left[\frac{1}{6}, \frac{1}{3}, \frac{1}{3}\right]$	`[13,19,52,58]`
8	$\left[\frac{2}{3}, \frac{5}{6}, \frac{1}{3}\right]$	`[14,20,53,59]`
9	$\left[\frac{1}{6}, \frac{5}{6}, \frac{1}{3}\right]$	`[15,21,54,60]`
10	$\left[\frac{1}{6}, \frac{1}{3}, \frac{5}{6}\right]$	`[16,22,49,55]`
11	$\left[\frac{2}{3}, \frac{5}{6}, \frac{5}{6}\right]$	`[17,23,50,56]`
12	$\left[\frac{1}{6}, \frac{5}{6}, \frac{5}{6}\right]$	`[18,24,51,57]`
13	$\left[\frac{5}{6}, \frac{2}{3}, \frac{2}{3}\right]$	`[25,31,64,70]`
14	$\left[\frac{1}{3}, \frac{1}{6}, \frac{2}{3}\right]$	`[26,32,65,71]`
15	$\left[\frac{5}{6}, \frac{1}{6}, \frac{2}{3}\right]$	`[27,33,66,72]`
16	$\left[\frac{5}{6}, \frac{2}{3}, \frac{1}{6}\right]$	`[28,34,61,67]`
17	$\left[\frac{1}{3}, \frac{1}{6}, \frac{1}{6}\right]$	`[29,35,62,68]`
18	$\left[\frac{5}{6}, \frac{1}{6}, \frac{1}{6}\right]$	`[30,36,63,69]`

Table 6: Wyckoff site: `36f`, site symmetry: `.2'.`

No.	position	mapping
1	$[x,\ 0,\ 0]$	`[1,40]`
2	$[0,\ x,\ 0]$	`[2,41]`
3	$[-x,\ -x,\ 0]$	`[3,42]`
4	$\left[x,\ 0,\ \frac{1}{2}\right]$	`[4,37]`
5	$\left[0,\ x,\ \frac{1}{2}\right]$	`[5,38]`
6	$\left[-x,\ -x,\ \frac{1}{2}\right]$	`[6,39]`
7	$[-x,\ 0,\ 0]$	`[7,46]`
8	$[0,\ -x,\ 0]$	`[8,47]`
9	$[x,\ x,\ 0]$	`[9,48]`
10	$\left[-x,\ 0,\ \frac{1}{2}\right]$	`[10,43]`
11	$\left[0,\ -x,\ \frac{1}{2}\right]$	`[11,44]`
12	$\left[x,\ x,\ \frac{1}{2}\right]$	`[12,45]`
13	$\left[x+\frac{2}{3},\ \frac{1}{3},\ \frac{1}{3}\right]$	`[13,52]`
14	$\left[\frac{2}{3},\ x+\frac{1}{3},\ \frac{1}{3}\right]$	`[14,53]`
15	$\left[\frac{2}{3}-x,\ \frac{1}{3}-x,\ \frac{1}{3}\right]$	`[15,54]`
16	$\left[x+\frac{2}{3},\ \frac{1}{3},\ \frac{5}{6}\right]$	`[16,49]`
17	$\left[\frac{2}{3},\ x+\frac{1}{3},\ \frac{5}{6}\right]$	`[17,50]`
18	$\left[\frac{2}{3}-x,\ \frac{1}{3}-x,\ \frac{5}{6}\right]$	`[18,51]`
19	$\left[\frac{2}{3}-x,\ \frac{1}{3},\ \frac{1}{3}\right]$	`[19,58]`
20	$\left[\frac{2}{3},\ \frac{1}{3}-x,\ \frac{1}{3}\right]$	`[20,59]`
21	$\left[x+\frac{2}{3},\ x+\frac{1}{3},\ \frac{1}{3}\right]$	`[21,60]`
22	$\left[\frac{2}{3}-x,\ \frac{1}{3},\ \frac{5}{6}\right]$	`[22,55]`
23	$\left[\frac{2}{3},\ \frac{1}{3}-x,\ \frac{5}{6}\right]$	`[23,56]`
24	$\left[x+\frac{2}{3},\ x+\frac{1}{3},\ \frac{5}{6}\right]$	`[24,57]`
25	$\left[x+\frac{1}{3},\ \frac{2}{3},\ \frac{2}{3}\right]$	`[25,64]`
26	$\left[\frac{1}{3},\ x+\frac{2}{3},\ \frac{2}{3}\right]$	`[26,65]`
27	$\left[\frac{1}{3}-x,\ \frac{2}{3}-x,\ \frac{2}{3}\right]$	`[27,66]`
28	$\left[x+\frac{1}{3},\ \frac{2}{3},\ \frac{1}{6}\right]$	`[28,61]`
29	$\left[\frac{1}{3},\ x+\frac{2}{3},\ \frac{1}{6}\right]$	`[29,62]`
30	$\left[\frac{1}{3}-x,\ \frac{2}{3}-x,\ \frac{1}{6}\right]$	`[30,63]`
31	$\left[\frac{1}{3}-x,\ \frac{2}{3},\ \frac{2}{3}\right]$	`[31,70]`
32	$\left[\frac{1}{3},\ \frac{2}{3}-x,\ \frac{2}{3}\right]$	`[32,71]`
33	$\left[x+\frac{1}{3},\ x+\frac{2}{3},\ \frac{2}{3}\right]$	`[33,72]`
34	$\left[\frac{1}{3}-x,\ \frac{2}{3},\ \frac{1}{6}\right]$	`[34,67]`
35	$\left[\frac{1}{3},\ \frac{2}{3}-x,\ \frac{1}{6}\right]$	`[35,68]`
36	$\left[x+\frac{1}{3},\ x+\frac{2}{3},\ \frac{1}{6}\right]$	`[36,69]`

Table 7: Wyckoff site: `36g`, site symmetry: `.2.`

No.	position	mapping
1	$\left[x,\ 0,\ \frac{1}{4}\right]$	`[1,4]`
2	$\left[0,\ x,\ \frac{1}{4}\right]$	`[2,5]`
3	$\left[-x,\ -x,\ \frac{1}{4}\right]$	`[3,6]`

continued ...

Table 7

No.	position	mapping
4	$\left[-x,\ 0,\ \frac{3}{4}\right]$	[7,10]
5	$\left[0,\ -x,\ \frac{3}{4}\right]$	[8,11]
6	$\left[x,\ x,\ \frac{3}{4}\right]$	[9,12]
7	$\left[x+\frac{2}{3},\ \frac{1}{3},\ \frac{7}{12}\right]$	[13,16]
8	$\left[\frac{2}{3},\ x+\frac{1}{3},\ \frac{7}{12}\right]$	[14,17]
9	$\left[\frac{2}{3}-x,\ \frac{1}{3}-x,\ \frac{7}{12}\right]$	[15,18]
10	$\left[\frac{2}{3}-x,\ \frac{1}{3},\ \frac{1}{12}\right]$	[19,22]
11	$\left[\frac{2}{3},\ \frac{1}{3}-x,\ \frac{1}{12}\right]$	[20,23]
12	$\left[x+\frac{2}{3},\ x+\frac{1}{3},\ \frac{1}{12}\right]$	[21,24]
13	$\left[x+\frac{1}{3},\ \frac{2}{3},\ \frac{11}{12}\right]$	[25,28]
14	$\left[\frac{1}{3},\ x+\frac{2}{3},\ \frac{11}{12}\right]$	[26,29]
15	$\left[\frac{1}{3}-x,\ \frac{2}{3}-x,\ \frac{11}{12}\right]$	[27,30]
16	$\left[\frac{1}{3}-x,\ \frac{2}{3},\ \frac{5}{12}\right]$	[31,34]
17	$\left[\frac{1}{3},\ \frac{2}{3}-x,\ \frac{5}{12}\right]$	[32,35]
18	$\left[x+\frac{1}{3},\ x+\frac{2}{3},\ \frac{5}{12}\right]$	[33,36]
19	$\left[x,\ 0,\ \frac{3}{4}\right]$	[37,40]
20	$\left[0,\ x,\ \frac{3}{4}\right]$	[38,41]
21	$\left[-x,\ -x,\ \frac{3}{4}\right]$	[39,42]
22	$\left[-x,\ 0,\ \frac{1}{4}\right]$	[43,46]
23	$\left[0,\ -x,\ \frac{1}{4}\right]$	[44,47]
24	$\left[x,\ x,\ \frac{1}{4}\right]$	[45,48]
25	$\left[x+\frac{2}{3},\ \frac{1}{3},\ \frac{1}{12}\right]$	[49,52]
26	$\left[\frac{2}{3},\ x+\frac{1}{3},\ \frac{1}{12}\right]$	[50,53]
27	$\left[\frac{2}{3}-x,\ \frac{1}{3}-x,\ \frac{1}{12}\right]$	[51,54]
28	$\left[\frac{2}{3}-x,\ \frac{1}{3},\ \frac{7}{12}\right]$	[55,58]
29	$\left[\frac{2}{3},\ \frac{1}{3}-x,\ \frac{7}{12}\right]$	[56,59]
30	$\left[x+\frac{2}{3},\ x+\frac{1}{3},\ \frac{7}{12}\right]$	[57,60]
31	$\left[x+\frac{1}{3},\ \frac{2}{3},\ \frac{5}{12}\right]$	[61,64]
32	$\left[\frac{1}{3},\ x+\frac{2}{3},\ \frac{5}{12}\right]$	[62,65]
33	$\left[\frac{1}{3}-x,\ \frac{2}{3}-x,\ \frac{5}{12}\right]$	[63,66]
34	$\left[\frac{1}{3}-x,\ \frac{2}{3},\ \frac{11}{12}\right]$	[67,70]
35	$\left[\frac{1}{3},\ \frac{2}{3}-x,\ \frac{11}{12}\right]$	[68,71]
36	$\left[x+\frac{1}{3},\ x+\frac{2}{3},\ \frac{11}{12}\right]$	[69,72]

Table 8: Wyckoff site: 36h, site symmetry: .m'.

No.	position	mapping
1	$[x,\ -x,\ z]$	[1,47]
2	$[x,\ 2x,\ z]$	[2,48]
3	$[-2x,\ -x,\ z]$	[3,46]
4	$\left[2x,\ x,\ \frac{1}{2}-z\right]$	[4,45]
5	$\left[-x,\ x,\ \frac{1}{2}-z\right]$	[5,43]
6	$\left[-x,\ -2x,\ \frac{1}{2}-z\right]$	[6,44]
7	$[-x,\ x,\ -z]$	[7,41]

continued ...

Table 8

No.	position	mapping
8	$[-x, -2x, -z]$	[8,42]
9	$[2x, x, -z]$	[9,40]
10	$\left[-2x, -x, z+\frac{1}{2}\right]$	[10,39]
11	$\left[x, -x, z+\frac{1}{2}\right]$	[11,37]
12	$\left[x, 2x, z+\frac{1}{2}\right]$	[12,38]
13	$\left[x+\frac{2}{3}, \frac{1}{3}-x, z+\frac{1}{3}\right]$	[13,59]
14	$\left[x+\frac{2}{3}, 2x+\frac{1}{3}, z+\frac{1}{3}\right]$	[14,60]
15	$\left[\frac{2}{3}-2x, \frac{1}{3}-x, z+\frac{1}{3}\right]$	[15,58]
16	$\left[2x+\frac{2}{3}, x+\frac{1}{3}, \frac{5}{6}-z\right]$	[16,57]
17	$\left[\frac{2}{3}-x, x+\frac{1}{3}, \frac{5}{6}-z\right]$	[17,55]
18	$\left[\frac{2}{3}-x, \frac{1}{3}-2x, \frac{5}{6}-z\right]$	[18,56]
19	$\left[\frac{2}{3}-x, x+\frac{1}{3}, \frac{1}{3}-z\right]$	[19,53]
20	$\left[\frac{2}{3}-x, \frac{1}{3}-2x, \frac{1}{3}-z\right]$	[20,54]
21	$\left[2x+\frac{2}{3}, x+\frac{1}{3}, \frac{1}{3}-z\right]$	[21,52]
22	$\left[\frac{2}{3}-2x, \frac{1}{3}-x, z+\frac{5}{6}\right]$	[22,51]
23	$\left[x+\frac{2}{3}, \frac{1}{3}-x, z+\frac{5}{6}\right]$	[23,49]
24	$\left[x+\frac{2}{3}, 2x+\frac{1}{3}, z+\frac{5}{6}\right]$	[24,50]
25	$\left[x+\frac{1}{3}, \frac{2}{3}-x, z+\frac{2}{3}\right]$	[25,71]
26	$\left[x+\frac{1}{3}, 2x+\frac{2}{3}, z+\frac{2}{3}\right]$	[26,72]
27	$\left[\frac{1}{3}-2x, \frac{2}{3}-x, z+\frac{2}{3}\right]$	[27,70]
28	$\left[2x+\frac{1}{3}, x+\frac{2}{3}, \frac{1}{6}-z\right]$	[28,69]
29	$\left[\frac{1}{3}-x, x+\frac{2}{3}, \frac{1}{6}-z\right]$	[29,67]
30	$\left[\frac{1}{3}-x, \frac{2}{3}-2x, \frac{1}{6}-z\right]$	[30,68]
31	$\left[\frac{1}{3}-x, x+\frac{2}{3}, \frac{2}{3}-z\right]$	[31,65]
32	$\left[\frac{1}{3}-x, \frac{2}{3}-2x, \frac{2}{3}-z\right]$	[32,66]
33	$\left[2x+\frac{1}{3}, x+\frac{2}{3}, \frac{2}{3}-z\right]$	[33,64]
34	$\left[\frac{1}{3}-2x, \frac{2}{3}-x, z+\frac{1}{6}\right]$	[34,63]
35	$\left[x+\frac{1}{3}, \frac{2}{3}-x, z+\frac{1}{6}\right]$	[35,61]
36	$\left[x+\frac{1}{3}, 2x+\frac{2}{3}, z+\frac{1}{6}\right]$	[36,62]

Table 9: Wyckoff site: 72i, site symmetry: 1

No.	position	mapping
1	$[x, y, z]$	[1]
2	$[-y, x-y, z]$	[2]
3	$[-x+y, -x, z]$	[3]
4	$\left[x-y, -y, \frac{1}{2}-z\right]$	[4]
5	$\left[y, x, \frac{1}{2}-z\right]$	[5]
6	$\left[-x, -x+y, \frac{1}{2}-z\right]$	[6]
7	$[-x, -y, -z]$	[7]
8	$[y, -x+y, -z]$	[8]
9	$[x-y, x, -z]$	[9]
10	$\left[-x+y, y, z+\frac{1}{2}\right]$	[10]
11	$\left[-y, -x, z+\frac{1}{2}\right]$	[11]

continued ...

Table 9

No.	position	mapping
12	$\left[x,\, x-y,\, z+\frac{1}{2}\right]$	[12]
13	$\left[x+\frac{2}{3},\, y+\frac{1}{3},\, z+\frac{1}{3}\right]$	[13]
14	$\left[\frac{2}{3}-y,\, x-y+\frac{1}{3},\, z+\frac{1}{3}\right]$	[14]
15	$\left[-x+y+\frac{2}{3},\, \frac{1}{3}-x,\, z+\frac{1}{3}\right]$	[15]
16	$\left[x-y+\frac{2}{3},\, \frac{1}{3}-y,\, \frac{5}{6}-z\right]$	[16]
17	$\left[y+\frac{2}{3},\, x+\frac{1}{3},\, \frac{5}{6}-z\right]$	[17]
18	$\left[\frac{2}{3}-x,\, -x+y+\frac{1}{3},\, \frac{5}{6}-z\right]$	[18]
19	$\left[\frac{2}{3}-x,\, \frac{1}{3}-y,\, \frac{1}{3}-z\right]$	[19]
20	$\left[y+\frac{2}{3},\, -x+y+\frac{1}{3},\, \frac{1}{3}-z\right]$	[20]
21	$\left[x-y+\frac{2}{3},\, x+\frac{1}{3},\, \frac{1}{3}-z\right]$	[21]
22	$\left[-x+y+\frac{2}{3},\, y+\frac{1}{3},\, z+\frac{5}{6}\right]$	[22]
23	$\left[\frac{2}{3}-y,\, \frac{1}{3}-x,\, z+\frac{5}{6}\right]$	[23]
24	$\left[x+\frac{2}{3},\, x-y+\frac{1}{3},\, z+\frac{5}{6}\right]$	[24]
25	$\left[x+\frac{1}{3},\, y+\frac{2}{3},\, z+\frac{2}{3}\right]$	[25]
26	$\left[\frac{1}{3}-y,\, x-y+\frac{2}{3},\, z+\frac{2}{3}\right]$	[26]
27	$\left[-x+y+\frac{1}{3},\, \frac{2}{3}-x,\, z+\frac{2}{3}\right]$	[27]
28	$\left[x-y+\frac{1}{3},\, \frac{2}{3}-y,\, \frac{1}{6}-z\right]$	[28]
29	$\left[y+\frac{1}{3},\, x+\frac{2}{3},\, \frac{1}{6}-z\right]$	[29]
30	$\left[\frac{1}{3}-x,\, -x+y+\frac{2}{3},\, \frac{1}{6}-z\right]$	[30]
31	$\left[\frac{1}{3}-x,\, \frac{2}{3}-y,\, \frac{2}{3}-z\right]$	[31]
32	$\left[y+\frac{1}{3},\, -x+y+\frac{2}{3},\, \frac{2}{3}-z\right]$	[32]
33	$\left[x-y+\frac{1}{3},\, x+\frac{2}{3},\, \frac{2}{3}-z\right]$	[33]
34	$\left[-x+y+\frac{1}{3},\, y+\frac{2}{3},\, z+\frac{1}{6}\right]$	[34]
35	$\left[\frac{1}{3}-y,\, \frac{2}{3}-x,\, z+\frac{1}{6}\right]$	[35]
36	$\left[x+\frac{1}{3},\, x-y+\frac{2}{3},\, z+\frac{1}{6}\right]$	[36]
37	$\left[x,\, y,\, z+\frac{1}{2}\right]$	[37]
38	$\left[-y,\, x-y,\, z+\frac{1}{2}\right]$	[38]
39	$\left[-x+y,\, -x,\, z+\frac{1}{2}\right]$	[39]
40	$[x-y,\, -y,\, -z]$	[40]
41	$[y,\, x,\, -z]$	[41]
42	$[-x,\, -x+y,\, -z]$	[42]
43	$\left[-x,\, -y,\, \frac{1}{2}-z\right]$	[43]
44	$\left[y,\, -x+y,\, \frac{1}{2}-z\right]$	[44]
45	$\left[x-y,\, x,\, \frac{1}{2}-z\right]$	[45]
46	$[-x+y,\, y,\, z]$	[46]
47	$[-y,\, -x,\, z]$	[47]
48	$[x,\, x-y,\, z]$	[48]
49	$\left[x+\frac{2}{3},\, y+\frac{1}{3},\, z+\frac{5}{6}\right]$	[49]
50	$\left[\frac{2}{3}-y,\, x-y+\frac{1}{3},\, z+\frac{5}{6}\right]$	[50]
51	$\left[-x+y+\frac{2}{3},\, \frac{1}{3}-x,\, z+\frac{5}{6}\right]$	[51]
52	$\left[x-y+\frac{2}{3},\, \frac{1}{3}-y,\, \frac{1}{3}-z\right]$	[52]
53	$\left[y+\frac{2}{3},\, x+\frac{1}{3},\, \frac{1}{3}-z\right]$	[53]
54	$\left[\frac{2}{3}-x,\, -x+y+\frac{1}{3},\, \frac{1}{3}-z\right]$	[54]
55	$\left[\frac{2}{3}-x,\, \frac{1}{3}-y,\, \frac{5}{6}-z\right]$	[55]
56	$\left[y+\frac{2}{3},\, -x+y+\frac{1}{3},\, \frac{5}{6}-z\right]$	[56]
57	$\left[x-y+\frac{2}{3},\, x+\frac{1}{3},\, \frac{5}{6}-z\right]$	[57]
58	$\left[-x+y+\frac{2}{3},\, y+\frac{1}{3},\, z+\frac{1}{3}\right]$	[58]

continued ...

Table 9

No.	position	mapping
59	$\left[\frac{2}{3}-y,\ \frac{1}{3}-x,\ z+\frac{1}{3}\right]$	[59]
60	$\left[x+\frac{2}{3},\ x-y+\frac{1}{3},\ z+\frac{1}{3}\right]$	[60]
61	$\left[x+\frac{1}{3},\ y+\frac{2}{3},\ z+\frac{1}{6}\right]$	[61]
62	$\left[\frac{1}{3}-y,\ x-y+\frac{2}{3},\ z+\frac{1}{6}\right]$	[62]
63	$\left[-x+y+\frac{1}{3},\ \frac{2}{3}-x,\ z+\frac{1}{6}\right]$	[63]
64	$\left[x-y+\frac{1}{3},\ \frac{2}{3}-y,\ \frac{2}{3}-z\right]$	[64]
65	$\left[y+\frac{1}{3},\ x+\frac{2}{3},\ \frac{2}{3}-z\right]$	[65]
66	$\left[\frac{1}{3}-x,\ -x+y+\frac{2}{3},\ \frac{2}{3}-z\right]$	[66]
67	$\left[\frac{1}{3}-x,\ \frac{2}{3}-y,\ \frac{1}{6}-z\right]$	[67]
68	$\left[y+\frac{1}{3},\ -x+y+\frac{2}{3},\ \frac{1}{6}-z\right]$	[68]
69	$\left[x-y+\frac{1}{3},\ x+\frac{2}{3},\ \frac{1}{6}-z\right]$	[69]
70	$\left[-x+y+\frac{1}{3},\ y+\frac{2}{3},\ z+\frac{2}{3}\right]$	[70]
71	$\left[\frac{1}{3}-y,\ \frac{2}{3}-x,\ z+\frac{2}{3}\right]$	[71]
72	$\left[x+\frac{1}{3},\ x-y+\frac{2}{3},\ z+\frac{2}{3}\right]$	[72]