MSG No. 166.102 $R_I\bar{3}m$ [Type IV, trigonal]

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

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

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

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

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

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

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

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

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

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

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

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

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

No.	position	mapping
1	$\left[x,\ 0,\ \frac{1}{4}\right]$	`[1,40]`
2	$\left[0,\ x,\ \frac{1}{4}\right]$	`[2,41]`
3	$\left[-x,\ -x,\ \frac{1}{4}\right]$	`[3,42]`

continued ...

Table 7

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

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

No.	position	mapping
1	$[x,\ -x,\ z]$	[1,11]
2	$[x,\ 2x,\ z]$	[2,12]
3	$[-2x,\ -x,\ z]$	[3,10]
4	$[2x,\ x,\ -z]$	[4,9]
5	$[-x,\ x,\ -z]$	[5,7]
6	$[-x,\ -2x,\ -z]$	[6,8]
7	$\left[x+\frac{2}{3},\ \frac{1}{3}-x,\ z+\frac{1}{3}\right]$	[13,23]

continued ...

Table 8

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

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	$[x-y,\, -y,\, -z]$	[4]
5	$[y,\, x,\, -z]$	[5]
6	$[-x,\, -x+y,\, -z]$	[6]
7	$[-x,\, -y,\, -z]$	[7]
8	$[y,\, -x+y,\, -z]$	[8]
9	$[x-y,\, x,\, -z]$	[9]
10	$[-x+y,\, y,\, z]$	[10]
11	$[-y,\, -x,\, z]$	[11]

continued ...

Table 9

No.	position	mapping
12	$[x,\, x-y,\, z]$	[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	$\left[x-y+\frac{2}{3},\, \frac{1}{3}-y,\, \frac{1}{3}-z\right]$	[16]
17	$\left[y+\frac{2}{3},\, x+\frac{1}{3},\, \frac{1}{3}-z\right]$	[17]
18	$\left[\frac{2}{3}-x,\, -x+y+\frac{1}{3},\, \frac{1}{3}-z\right]$	[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	$\left[-x+y+\frac{2}{3},\, y+\frac{1}{3},\, z+\frac{1}{3}\right]$	[22]
23	$\left[\frac{2}{3}-y,\, \frac{1}{3}-x,\, z+\frac{1}{3}\right]$	[23]
24	$\left[x+\frac{2}{3},\, x-y+\frac{1}{3},\, z+\frac{1}{3}\right]$	[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	$\left[x-y+\frac{1}{3},\, \frac{2}{3}-y,\, \frac{2}{3}-z\right]$	[28]
29	$\left[y+\frac{1}{3},\, x+\frac{2}{3},\, \frac{2}{3}-z\right]$	[29]
30	$\left[\frac{1}{3}-x,\, -x+y+\frac{2}{3},\, \frac{2}{3}-z\right]$	[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	$\left[-x+y+\frac{1}{3},\, y+\frac{2}{3},\, z+\frac{2}{3}\right]$	[34]
35	$\left[\frac{1}{3}-y,\, \frac{2}{3}-x,\, z+\frac{2}{3}\right]$	[35]
36	$\left[x+\frac{1}{3},\, x-y+\frac{2}{3},\, z+\frac{2}{3}\right]$	[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	$\left[x-y,\, -y,\, \frac{1}{2}-z\right]$	[40]
41	$\left[y,\, x,\, \frac{1}{2}-z\right]$	[41]
42	$\left[-x,\, -x+y,\, \frac{1}{2}-z\right]$	[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	$\left[-x+y,\, y,\, z+\frac{1}{2}\right]$	[46]
47	$\left[-y,\, -x,\, z+\frac{1}{2}\right]$	[47]
48	$\left[x,\, x-y,\, z+\frac{1}{2}\right]$	[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	$\left[x-y+\frac{2}{3},\, \frac{1}{3}-y,\, \frac{5}{6}-z\right]$	[52]
53	$\left[y+\frac{2}{3},\, x+\frac{1}{3},\, \frac{5}{6}-z\right]$	[53]
54	$\left[\frac{2}{3}-x,\, -x+y+\frac{1}{3},\, \frac{5}{6}-z\right]$	[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	$\left[-x+y+\frac{2}{3},\, y+\frac{1}{3},\, z+\frac{5}{6}\right]$	[58]

continued ...

Table 9

No.	position	mapping
59	$\left[\frac{2}{3}-y,\ \frac{1}{3}-x,\ z+\frac{5}{6}\right]$	[59]
60	$\left[x+\frac{2}{3},\ x-y+\frac{1}{3},\ z+\frac{5}{6}\right]$	[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	$\left[x-y+\frac{1}{3},\ \frac{2}{3}-y,\ \frac{1}{6}-z\right]$	[64]
65	$\left[y+\frac{1}{3},\ x+\frac{2}{3},\ \frac{1}{6}-z\right]$	[65]
66	$\left[\frac{1}{3}-x,\ -x+y+\frac{2}{3},\ \frac{1}{6}-z\right]$	[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	$\left[-x+y+\frac{1}{3},\ y+\frac{2}{3},\ z+\frac{1}{6}\right]$	[70]
71	$\left[\frac{1}{3}-y,\ \frac{2}{3}-x,\ z+\frac{1}{6}\right]$	[71]
72	$\left[x+\frac{1}{3},\ x-y+\frac{2}{3},\ z+\frac{1}{6}\right]$	[72]