SG No. 227 O_{h}^{7} $Fd\bar{3}m$ [cubic]

* plus set: $+[0,\,0,\,0]$, $+\left[0,\,\frac{1}{2},\,\frac{1}{2}\right]$, $+\left[\frac{1}{2},\,0,\,\frac{1}{2}\right]$, $+\left[\frac{1}{2},\,\frac{1}{2},\,0\right]$
* Wyckoff site: `8a`, site symmetry: `-43m`

Table 1: Wyckoff bond: `24a@8a`

No.	vector	center	mapping
1	$[X,\,0,\,0]$	$\left[\frac{1}{8},\,\frac{1}{8},\,\frac{1}{8}\right]$	`[1,-2,-3,4,-41,42,43,-44]`
2	$[0,\,X,\,0]$	$\left[\frac{1}{8},\,\frac{1}{8},\,\frac{1}{8}\right]$	`[5,-6,-7,8,-37,38,39,-40]`
3	$[0,\,0,\,X]$	$\left[\frac{1}{8},\,\frac{1}{8},\,\frac{1}{8}\right]$	`[9,-10,-11,12,45,-46,-47,48]`
4	$[0,\,X,\,0]$	$\left[\frac{7}{8},\,\frac{3}{8},\,\frac{3}{8}\right]$	`[13,-14,-15,16,-29,30,31,-32]`
5	$[X,\,0,\,0]$	$\left[\frac{7}{8},\,\frac{3}{8},\,\frac{3}{8}\right]$	`[17,-18,-19,20,-25,26,27,-28]`
6	$[0,\,0,\,-X]$	$\left[\frac{7}{8},\,\frac{3}{8},\,\frac{3}{8}\right]$	`[21,-22,-23,24,33,-34,-35,36]`

Table 2: Wyckoff bond: `32b@8a`

No.	vector	center	mapping
1	$[X,\,X,\,X]$	$\left[\frac{1}{8},\,\frac{1}{8},\,\frac{1}{8}\right]$	`[1,5,9,38,43,48]`
2	$[-X,\,-X,\,X]$	$\left[\frac{1}{8},\,\frac{1}{8},\,\frac{1}{8}\right]$	`[2,7,12,37,41,45]`
3	$[-X,\,X,\,-X]$	$\left[\frac{1}{8},\,\frac{1}{8},\,\frac{1}{8}\right]$	`[3,8,10,39,44,46]`
4	$[X,\,-X,\,-X]$	$\left[\frac{1}{8},\,\frac{1}{8},\,\frac{1}{8}\right]$	`[4,6,11,40,42,47]`
5	$[X,\,X,\,-X]$	$\left[\frac{7}{8},\,\frac{3}{8},\,\frac{3}{8}\right]$	`[13,17,21,26,31,36]`
6	$[-X,\,-X,\,-X]$	$\left[\frac{7}{8},\,\frac{3}{8},\,\frac{3}{8}\right]$	`[14,19,24,25,29,33]`
7	$[X,\,-X,\,X]$	$\left[\frac{7}{8},\,\frac{3}{8},\,\frac{3}{8}\right]$	`[15,20,22,27,32,34]`
8	$[-X,\,X,\,X]$	$\left[\frac{7}{8},\,\frac{3}{8},\,\frac{3}{8}\right]$	`[16,18,23,28,30,35]`

Table 3: Wyckoff bond: `48c@8a`

No.	vector	center	mapping
1	$[X,\,X,\,0]$	$\left[\frac{1}{8},\,\frac{1}{8},\,\frac{1}{8}\right]$	`[1,-2,-37,38]`
2	$[-X,\,X,\,0]$	$\left[\frac{1}{8},\,\frac{1}{8},\,\frac{1}{8}\right]$	`[3,-4,39,-40]`
3	$[0,\,X,\,X]$	$\left[\frac{1}{8},\,\frac{1}{8},\,\frac{1}{8}\right]$	`[5,-6,-47,48]`
4	$[0,\,-X,\,X]$	$\left[\frac{1}{8},\,\frac{1}{8},\,\frac{1}{8}\right]$	`[7,-8,45,-46]`
5	$[X,\,0,\,X]$	$\left[\frac{1}{8},\,\frac{1}{8},\,\frac{1}{8}\right]$	`[9,-10,43,-44]`
6	$[X,\,0,\,-X]$	$\left[\frac{1}{8},\,\frac{1}{8},\,\frac{1}{8}\right]$	`[11,-12,-41,42]`
7	$[X,\,X,\,0]$	$\left[\frac{7}{8},\,\frac{3}{8},\,\frac{3}{8}\right]$	`[13,-14,-25,26]`
8	$[X,\,-X,\,0]$	$\left[\frac{7}{8},\,\frac{3}{8},\,\frac{3}{8}\right]$	`[15,-16,27,-28]`
9	$[X,\,0,\,-X]$	$\left[\frac{7}{8},\,\frac{3}{8},\,\frac{3}{8}\right]$	`[17,-18,-35,36]`
10	$[-X,\,0,\,-X]$	$\left[\frac{7}{8},\,\frac{3}{8},\,\frac{3}{8}\right]$	`[19,-20,33,-34]`
11	$[0,\,X,\,-X]$	$\left[\frac{7}{8},\,\frac{3}{8},\,\frac{3}{8}\right]$	`[21,-22,31,-32]`
12	$[0,\,X,\,X]$	$\left[\frac{7}{8},\,\frac{3}{8},\,\frac{3}{8}\right]$	`[23,-24,-29,30]`

Table 4: Wyckoff bond: `96d@8a`

No.	vector	center	mapping
1	$[X, X, Y]$	$\left[\frac{1}{8}, \frac{1}{8}, \frac{1}{8}\right]$	`[1,38]`
2	$[-X, -X, Y]$	$\left[\frac{1}{8}, \frac{1}{8}, \frac{1}{8}\right]$	`[2,37]`
3	$[-X, X, -Y]$	$\left[\frac{1}{8}, \frac{1}{8}, \frac{1}{8}\right]$	`[3,39]`
4	$[X, -X, -Y]$	$\left[\frac{1}{8}, \frac{1}{8}, \frac{1}{8}\right]$	`[4,40]`
5	$[Y, X, X]$	$\left[\frac{1}{8}, \frac{1}{8}, \frac{1}{8}\right]$	`[5,48]`
6	$[Y, -X, -X]$	$\left[\frac{1}{8}, \frac{1}{8}, \frac{1}{8}\right]$	`[6,47]`
7	$[-Y, -X, X]$	$\left[\frac{1}{8}, \frac{1}{8}, \frac{1}{8}\right]$	`[7,45]`
8	$[-Y, X, -X]$	$\left[\frac{1}{8}, \frac{1}{8}, \frac{1}{8}\right]$	`[8,46]`
9	$[X, Y, X]$	$\left[\frac{1}{8}, \frac{1}{8}, \frac{1}{8}\right]$	`[9,43]`
10	$[-X, Y, -X]$	$\left[\frac{1}{8}, \frac{1}{8}, \frac{1}{8}\right]$	`[10,44]`
11	$[X, -Y, -X]$	$\left[\frac{1}{8}, \frac{1}{8}, \frac{1}{8}\right]$	`[11,42]`
12	$[-X, -Y, X]$	$\left[\frac{1}{8}, \frac{1}{8}, \frac{1}{8}\right]$	`[12,41]`
13	$[X, X, -Y]$	$\left[\frac{7}{8}, \frac{3}{8}, \frac{3}{8}\right]$	`[13,26]`
14	$[-X, -X, -Y]$	$\left[\frac{7}{8}, \frac{3}{8}, \frac{3}{8}\right]$	`[14,25]`
15	$[X, -X, Y]$	$\left[\frac{7}{8}, \frac{3}{8}, \frac{3}{8}\right]$	`[15,27]`
16	$[-X, X, Y]$	$\left[\frac{7}{8}, \frac{3}{8}, \frac{3}{8}\right]$	`[16,28]`
17	$[X, Y, -X]$	$\left[\frac{7}{8}, \frac{3}{8}, \frac{3}{8}\right]$	`[17,36]`
18	$[-X, Y, X]$	$\left[\frac{7}{8}, \frac{3}{8}, \frac{3}{8}\right]$	`[18,35]`
19	$[-X, -Y, -X]$	$\left[\frac{7}{8}, \frac{3}{8}, \frac{3}{8}\right]$	`[19,33]`
20	$[X, -Y, X]$	$\left[\frac{7}{8}, \frac{3}{8}, \frac{3}{8}\right]$	`[20,34]`
21	$[Y, X, -X]$	$\left[\frac{7}{8}, \frac{3}{8}, \frac{3}{8}\right]$	`[21,31]`
22	$[Y, -X, X]$	$\left[\frac{7}{8}, \frac{3}{8}, \frac{3}{8}\right]$	`[22,32]`
23	$[-Y, X, X]$	$\left[\frac{7}{8}, \frac{3}{8}, \frac{3}{8}\right]$	`[23,30]`
24	$[-Y, -X, -X]$	$\left[\frac{7}{8}, \frac{3}{8}, \frac{3}{8}\right]$	`[24,29]`

Table 5: Wyckoff bond: `96e@8a`

No.	vector	center	mapping
1	$[X, Y, 0]$	$\left[\frac{1}{8}, \frac{1}{8}, \frac{1}{8}\right]$	`[1,-2]`
2	$[-X, Y, 0]$	$\left[\frac{1}{8}, \frac{1}{8}, \frac{1}{8}\right]$	`[3,-4]`
3	$[0, X, Y]$	$\left[\frac{1}{8}, \frac{1}{8}, \frac{1}{8}\right]$	`[5,-6]`
4	$[0, -X, Y]$	$\left[\frac{1}{8}, \frac{1}{8}, \frac{1}{8}\right]$	`[7,-8]`
5	$[Y, 0, X]$	$\left[\frac{1}{8}, \frac{1}{8}, \frac{1}{8}\right]$	`[9,-10]`
6	$[Y, 0, -X]$	$\left[\frac{1}{8}, \frac{1}{8}, \frac{1}{8}\right]$	`[11,-12]`
7	$[Y, X, 0]$	$\left[\frac{7}{8}, \frac{3}{8}, \frac{3}{8}\right]$	`[13,-14]`
8	$[Y, -X, 0]$	$\left[\frac{7}{8}, \frac{3}{8}, \frac{3}{8}\right]$	`[15,-16]`
9	$[X, 0, -Y]$	$\left[\frac{7}{8}, \frac{3}{8}, \frac{3}{8}\right]$	`[17,-18]`
10	$[-X, 0, -Y]$	$\left[\frac{7}{8}, \frac{3}{8}, \frac{3}{8}\right]$	`[19,-20]`
11	$[0, Y, -X]$	$\left[\frac{7}{8}, \frac{3}{8}, \frac{3}{8}\right]$	`[21,-22]`
12	$[0, Y, X]$	$\left[\frac{7}{8}, \frac{3}{8}, \frac{3}{8}\right]$	`[23,-24]`
13	$[-X, -Y, 0]$	$\left[\frac{7}{8}, \frac{3}{8}, \frac{3}{8}\right]$	`[25,-26]`
14	$[X, -Y, 0]$	$\left[\frac{7}{8}, \frac{3}{8}, \frac{3}{8}\right]$	`[27,-28]`
15	$[0, -X, -Y]$	$\left[\frac{7}{8}, \frac{3}{8}, \frac{3}{8}\right]$	`[29,-30]`

continued ...

Table 5

No.	vector	center	mapping
16	$[0, X, -Y]$	$[\frac{7}{8}, \frac{3}{8}, \frac{3}{8}]$	`[31,-32]`
17	$[-Y, 0, -X]$	$[\frac{7}{8}, \frac{3}{8}, \frac{3}{8}]$	`[33,-34]`
18	$[-Y, 0, X]$	$[\frac{7}{8}, \frac{3}{8}, \frac{3}{8}]$	`[35,-36]`
19	$[-Y, -X, 0]$	$[\frac{1}{8}, \frac{1}{8}, \frac{1}{8}]$	`[37,-38]`
20	$[-Y, X, 0]$	$[\frac{1}{8}, \frac{1}{8}, \frac{1}{8}]$	`[39,-40]`
21	$[-X, 0, Y]$	$[\frac{1}{8}, \frac{1}{8}, \frac{1}{8}]$	`[41,-42]`
22	$[X, 0, Y]$	$[\frac{1}{8}, \frac{1}{8}, \frac{1}{8}]$	`[43,-44]`
23	$[0, -Y, X]$	$[\frac{1}{8}, \frac{1}{8}, \frac{1}{8}]$	`[45,-46]`
24	$[0, -Y, -X]$	$[\frac{1}{8}, \frac{1}{8}, \frac{1}{8}]$	`[47,-48]`

Table 6: Wyckoff bond: `192f@8a`

No.	vector	center	mapping
1	$[X, Y, Z]$	$[\frac{1}{8}, \frac{1}{8}, \frac{1}{8}]$	`[1]`
2	$[-X, -Y, Z]$	$[\frac{1}{8}, \frac{1}{8}, \frac{1}{8}]$	`[2]`
3	$[-X, Y, -Z]$	$[\frac{1}{8}, \frac{1}{8}, \frac{1}{8}]$	`[3]`
4	$[X, -Y, -Z]$	$[\frac{1}{8}, \frac{1}{8}, \frac{1}{8}]$	`[4]`
5	$[Z, X, Y]$	$[\frac{1}{8}, \frac{1}{8}, \frac{1}{8}]$	`[5]`
6	$[Z, -X, -Y]$	$[\frac{1}{8}, \frac{1}{8}, \frac{1}{8}]$	`[6]`
7	$[-Z, -X, Y]$	$[\frac{1}{8}, \frac{1}{8}, \frac{1}{8}]$	`[7]`
8	$[-Z, X, -Y]$	$[\frac{1}{8}, \frac{1}{8}, \frac{1}{8}]$	`[8]`
9	$[Y, Z, X]$	$[\frac{1}{8}, \frac{1}{8}, \frac{1}{8}]$	`[9]`
10	$[-Y, Z, -X]$	$[\frac{1}{8}, \frac{1}{8}, \frac{1}{8}]$	`[10]`
11	$[Y, -Z, -X]$	$[\frac{1}{8}, \frac{1}{8}, \frac{1}{8}]$	`[11]`
12	$[-Y, -Z, X]$	$[\frac{1}{8}, \frac{1}{8}, \frac{1}{8}]$	`[12]`
13	$[Y, X, -Z]$	$[\frac{7}{8}, \frac{3}{8}, \frac{3}{8}]$	`[13]`
14	$[-Y, -X, -Z]$	$[\frac{7}{8}, \frac{3}{8}, \frac{3}{8}]$	`[14]`
15	$[Y, -X, Z]$	$[\frac{7}{8}, \frac{3}{8}, \frac{3}{8}]$	`[15]`
16	$[-Y, X, Z]$	$[\frac{7}{8}, \frac{3}{8}, \frac{3}{8}]$	`[16]`
17	$[X, Z, -Y]$	$[\frac{7}{8}, \frac{3}{8}, \frac{3}{8}]$	`[17]`
18	$[-X, Z, Y]$	$[\frac{7}{8}, \frac{3}{8}, \frac{3}{8}]$	`[18]`
19	$[-X, -Z, -Y]$	$[\frac{7}{8}, \frac{3}{8}, \frac{3}{8}]$	`[19]`
20	$[X, -Z, Y]$	$[\frac{7}{8}, \frac{3}{8}, \frac{3}{8}]$	`[20]`
21	$[Z, Y, -X]$	$[\frac{7}{8}, \frac{3}{8}, \frac{3}{8}]$	`[21]`
22	$[Z, -Y, X]$	$[\frac{7}{8}, \frac{3}{8}, \frac{3}{8}]$	`[22]`
23	$[-Z, Y, X]$	$[\frac{7}{8}, \frac{3}{8}, \frac{3}{8}]$	`[23]`
24	$[-Z, -Y, -X]$	$[\frac{7}{8}, \frac{3}{8}, \frac{3}{8}]$	`[24]`
25	$[-X, -Y, -Z]$	$[\frac{7}{8}, \frac{3}{8}, \frac{3}{8}]$	`[25]`
26	$[X, Y, -Z]$	$[\frac{7}{8}, \frac{3}{8}, \frac{3}{8}]$	`[26]`
27	$[X, -Y, Z]$	$[\frac{7}{8}, \frac{3}{8}, \frac{3}{8}]$	`[27]`
28	$[-X, Y, Z]$	$[\frac{7}{8}, \frac{3}{8}, \frac{3}{8}]$	`[28]`
29	$[-Z, -X, -Y]$	$[\frac{7}{8}, \frac{3}{8}, \frac{3}{8}]$	`[29]`
30	$[-Z, X, Y]$	$[\frac{7}{8}, \frac{3}{8}, \frac{3}{8}]$	`[30]`
31	$[Z, X, -Y]$	$[\frac{7}{8}, \frac{3}{8}, \frac{3}{8}]$	`[31]`

continued ...

Table 6

No.	vector	center	mapping
32	$[Z, -X, Y]$	$[\frac{7}{8}, \frac{3}{8}, \frac{3}{8}]$	[32]
33	$[-Y, -Z, -X]$	$[\frac{7}{8}, \frac{3}{8}, \frac{3}{8}]$	[33]
34	$[Y, -Z, X]$	$[\frac{7}{8}, \frac{3}{8}, \frac{3}{8}]$	[34]
35	$[-Y, Z, X]$	$[\frac{7}{8}, \frac{3}{8}, \frac{3}{8}]$	[35]
36	$[Y, Z, -X]$	$[\frac{7}{8}, \frac{3}{8}, \frac{3}{8}]$	[36]
37	$[-Y, -X, Z]$	$[\frac{1}{8}, \frac{1}{8}, \frac{1}{8}]$	[37]
38	$[Y, X, Z]$	$[\frac{1}{8}, \frac{1}{8}, \frac{1}{8}]$	[38]
39	$[-Y, X, -Z]$	$[\frac{1}{8}, \frac{1}{8}, \frac{1}{8}]$	[39]
40	$[Y, -X, -Z]$	$[\frac{1}{8}, \frac{1}{8}, \frac{1}{8}]$	[40]
41	$[-X, -Z, Y]$	$[\frac{1}{8}, \frac{1}{8}, \frac{1}{8}]$	[41]
42	$[X, -Z, -Y]$	$[\frac{1}{8}, \frac{1}{8}, \frac{1}{8}]$	[42]
43	$[X, Z, Y]$	$[\frac{1}{8}, \frac{1}{8}, \frac{1}{8}]$	[43]
44	$[-X, Z, -Y]$	$[\frac{1}{8}, \frac{1}{8}, \frac{1}{8}]$	[44]
45	$[-Z, -Y, X]$	$[\frac{1}{8}, \frac{1}{8}, \frac{1}{8}]$	[45]
46	$[-Z, Y, -X]$	$[\frac{1}{8}, \frac{1}{8}, \frac{1}{8}]$	[46]
47	$[Z, -Y, -X]$	$[\frac{1}{8}, \frac{1}{8}, \frac{1}{8}]$	[47]
48	$[Z, Y, X]$	$[\frac{1}{8}, \frac{1}{8}, \frac{1}{8}]$	[48]

* Wyckoff site: 8b, site symmetry: -43m

Table 7: Wyckoff bond: 24a@8b

No.	vector	center	mapping
1	$[X, 0, 0]$	$[\frac{3}{8}, \frac{3}{8}, \frac{3}{8}]$	[1,-2,-3,4,-41,42,43,-44]
2	$[0, X, 0]$	$[\frac{3}{8}, \frac{3}{8}, \frac{3}{8}]$	[5,-6,-7,8,-37,38,39,-40]
3	$[0, 0, X]$	$[\frac{3}{8}, \frac{3}{8}, \frac{3}{8}]$	[9,-10,-11,12,45,-46,-47,48]
4	$[0, X, 0]$	$[\frac{1}{8}, \frac{5}{8}, \frac{1}{8}]$	[13,-14,-15,16,-29,30,31,-32]
5	$[X, 0, 0]$	$[\frac{1}{8}, \frac{5}{8}, \frac{1}{8}]$	[17,-18,-19,20,-25,26,27,-28]
6	$[0, 0, -X]$	$[\frac{1}{8}, \frac{5}{8}, \frac{1}{8}]$	[21,-22,-23,24,33,-34,-35,36]

Table 8: Wyckoff bond: 32b@8b

No.	vector	center	mapping
1	$[X, X, X]$	$[\frac{3}{8}, \frac{3}{8}, \frac{3}{8}]$	[1,5,9,38,43,48]
2	$[-X, -X, X]$	$[\frac{3}{8}, \frac{3}{8}, \frac{3}{8}]$	[2,7,12,37,41,45]
3	$[-X, X, -X]$	$[\frac{3}{8}, \frac{3}{8}, \frac{3}{8}]$	[3,8,10,39,44,46]
4	$[X, -X, -X]$	$[\frac{3}{8}, \frac{3}{8}, \frac{3}{8}]$	[4,6,11,40,42,47]
5	$[X, X, -X]$	$[\frac{1}{8}, \frac{5}{8}, \frac{1}{8}]$	[13,17,21,26,31,36]
6	$[-X, -X, -X]$	$[\frac{1}{8}, \frac{5}{8}, \frac{1}{8}]$	[14,19,24,25,29,33]
7	$[X, -X, X]$	$[\frac{1}{8}, \frac{5}{8}, \frac{1}{8}]$	[15,20,22,27,32,34]
8	$[-X, X, X]$	$[\frac{1}{8}, \frac{5}{8}, \frac{1}{8}]$	[16,18,23,28,30,35]

Table 9: Wyckoff bond: `48c@8b`

No.	vector	center	mapping
1	$[X, X, 0]$	$[\frac{3}{8}, \frac{3}{8}, \frac{3}{8}]$	`[1,-2,-37,38]`
2	$[-X, X, 0]$	$[\frac{3}{8}, \frac{3}{8}, \frac{3}{8}]$	`[3,-4,39,-40]`
3	$[0, X, X]$	$[\frac{3}{8}, \frac{3}{8}, \frac{3}{8}]$	`[5,-6,-47,48]`
4	$[0, -X, X]$	$[\frac{3}{8}, \frac{3}{8}, \frac{3}{8}]$	`[7,-8,45,-46]`
5	$[X, 0, X]$	$[\frac{3}{8}, \frac{3}{8}, \frac{3}{8}]$	`[9,-10,43,-44]`
6	$[X, 0, -X]$	$[\frac{3}{8}, \frac{3}{8}, \frac{3}{8}]$	`[11,-12,-41,42]`
7	$[X, X, 0]$	$[\frac{1}{8}, \frac{5}{8}, \frac{1}{8}]$	`[13,-14,-25,26]`
8	$[X, -X, 0]$	$[\frac{1}{8}, \frac{5}{8}, \frac{1}{8}]$	`[15,-16,27,-28]`
9	$[X, 0, -X]$	$[\frac{1}{8}, \frac{5}{8}, \frac{1}{8}]$	`[17,-18,-35,36]`
10	$[-X, 0, -X]$	$[\frac{1}{8}, \frac{5}{8}, \frac{1}{8}]$	`[19,-20,33,-34]`
11	$[0, X, -X]$	$[\frac{1}{8}, \frac{5}{8}, \frac{1}{8}]$	`[21,-22,31,-32]`
12	$[0, X, X]$	$[\frac{1}{8}, \frac{5}{8}, \frac{1}{8}]$	`[23,-24,-29,30]`

Table 10: Wyckoff bond: `96d@8b`

No.	vector	center	mapping
1	$[X, X, Y]$	$[\frac{3}{8}, \frac{3}{8}, \frac{3}{8}]$	`[1,38]`
2	$[-X, -X, Y]$	$[\frac{3}{8}, \frac{3}{8}, \frac{3}{8}]$	`[2,37]`
3	$[-X, X, -Y]$	$[\frac{3}{8}, \frac{3}{8}, \frac{3}{8}]$	`[3,39]`
4	$[X, -X, -Y]$	$[\frac{3}{8}, \frac{3}{8}, \frac{3}{8}]$	`[4,40]`
5	$[Y, X, X]$	$[\frac{3}{8}, \frac{3}{8}, \frac{3}{8}]$	`[5,48]`
6	$[Y, -X, -X]$	$[\frac{3}{8}, \frac{3}{8}, \frac{3}{8}]$	`[6,47]`
7	$[-Y, -X, X]$	$[\frac{3}{8}, \frac{3}{8}, \frac{3}{8}]$	`[7,45]`
8	$[-Y, X, -X]$	$[\frac{3}{8}, \frac{3}{8}, \frac{3}{8}]$	`[8,46]`
9	$[X, Y, X]$	$[\frac{3}{8}, \frac{3}{8}, \frac{3}{8}]$	`[9,43]`
10	$[-X, Y, -X]$	$[\frac{3}{8}, \frac{3}{8}, \frac{3}{8}]$	`[10,44]`
11	$[X, -Y, -X]$	$[\frac{3}{8}, \frac{3}{8}, \frac{3}{8}]$	`[11,42]`
12	$[-X, -Y, X]$	$[\frac{3}{8}, \frac{3}{8}, \frac{3}{8}]$	`[12,41]`
13	$[X, X, -Y]$	$[\frac{1}{8}, \frac{5}{8}, \frac{1}{8}]$	`[13,26]`
14	$[-X, -X, -Y]$	$[\frac{1}{8}, \frac{5}{8}, \frac{1}{8}]$	`[14,25]`
15	$[X, -X, Y]$	$[\frac{1}{8}, \frac{5}{8}, \frac{1}{8}]$	`[15,27]`
16	$[-X, X, Y]$	$[\frac{1}{8}, \frac{5}{8}, \frac{1}{8}]$	`[16,28]`
17	$[X, Y, -X]$	$[\frac{1}{8}, \frac{5}{8}, \frac{1}{8}]$	`[17,36]`
18	$[-X, Y, X]$	$[\frac{1}{8}, \frac{5}{8}, \frac{1}{8}]$	`[18,35]`
19	$[-X, -Y, -X]$	$[\frac{1}{8}, \frac{5}{8}, \frac{1}{8}]$	`[19,33]`
20	$[X, -Y, X]$	$[\frac{1}{8}, \frac{5}{8}, \frac{1}{8}]$	`[20,34]`
21	$[Y, X, -X]$	$[\frac{1}{8}, \frac{5}{8}, \frac{1}{8}]$	`[21,31]`
22	$[Y, -X, X]$	$[\frac{1}{8}, \frac{5}{8}, \frac{1}{8}]$	`[22,32]`
23	$[-Y, X, X]$	$[\frac{1}{8}, \frac{5}{8}, \frac{1}{8}]$	`[23,30]`
24	$[-Y, -X, -X]$	$[\frac{1}{8}, \frac{5}{8}, \frac{1}{8}]$	`[24,29]`

Table 11: Wyckoff bond: `96e@8b`

No.	vector	center	mapping
1	$[X, Y, 0]$	$[\frac{3}{8}, \frac{3}{8}, \frac{3}{8}]$	`[1,-2]`
2	$[-X, Y, 0]$	$[\frac{3}{8}, \frac{3}{8}, \frac{3}{8}]$	`[3,-4]`
3	$[0, X, Y]$	$[\frac{3}{8}, \frac{3}{8}, \frac{3}{8}]$	`[5,-6]`
4	$[0, -X, Y]$	$[\frac{3}{8}, \frac{3}{8}, \frac{3}{8}]$	`[7,-8]`
5	$[Y, 0, X]$	$[\frac{3}{8}, \frac{3}{8}, \frac{3}{8}]$	`[9,-10]`
6	$[Y, 0, -X]$	$[\frac{3}{8}, \frac{3}{8}, \frac{3}{8}]$	`[11,-12]`
7	$[Y, X, 0]$	$[\frac{1}{8}, \frac{5}{8}, \frac{1}{8}]$	`[13,-14]`
8	$[Y, -X, 0]$	$[\frac{1}{8}, \frac{5}{8}, \frac{1}{8}]$	`[15,-16]`
9	$[X, 0, -Y]$	$[\frac{1}{8}, \frac{5}{8}, \frac{1}{8}]$	`[17,-18]`
10	$[-X, 0, -Y]$	$[\frac{1}{8}, \frac{5}{8}, \frac{1}{8}]$	`[19,-20]`
11	$[0, Y, -X]$	$[\frac{1}{8}, \frac{5}{8}, \frac{1}{8}]$	`[21,-22]`
12	$[0, Y, X]$	$[\frac{1}{8}, \frac{5}{8}, \frac{1}{8}]$	`[23,-24]`
13	$[-X, -Y, 0]$	$[\frac{1}{8}, \frac{5}{8}, \frac{1}{8}]$	`[25,-26]`
14	$[X, -Y, 0]$	$[\frac{1}{8}, \frac{5}{8}, \frac{1}{8}]$	`[27,-28]`
15	$[0, -X, -Y]$	$[\frac{1}{8}, \frac{5}{8}, \frac{1}{8}]$	`[29,-30]`
16	$[0, X, -Y]$	$[\frac{1}{8}, \frac{5}{8}, \frac{1}{8}]$	`[31,-32]`
17	$[-Y, 0, -X]$	$[\frac{1}{8}, \frac{5}{8}, \frac{1}{8}]$	`[33,-34]`
18	$[-Y, 0, X]$	$[\frac{1}{8}, \frac{5}{8}, \frac{1}{8}]$	`[35,-36]`
19	$[-Y, -X, 0]$	$[\frac{3}{8}, \frac{3}{8}, \frac{3}{8}]$	`[37,-38]`
20	$[-Y, X, 0]$	$[\frac{3}{8}, \frac{3}{8}, \frac{3}{8}]$	`[39,-40]`
21	$[-X, 0, Y]$	$[\frac{3}{8}, \frac{3}{8}, \frac{3}{8}]$	`[41,-42]`
22	$[X, 0, Y]$	$[\frac{3}{8}, \frac{3}{8}, \frac{3}{8}]$	`[43,-44]`
23	$[0, -Y, X]$	$[\frac{3}{8}, \frac{3}{8}, \frac{3}{8}]$	`[45,-46]`
24	$[0, -Y, -X]$	$[\frac{3}{8}, \frac{3}{8}, \frac{3}{8}]$	`[47,-48]`

Table 12: Wyckoff bond: `192f@8b`

No.	vector	center	mapping
1	$[X, Y, Z]$	$[\frac{3}{8}, \frac{3}{8}, \frac{3}{8}]$	`[1]`
2	$[-X, -Y, Z]$	$[\frac{3}{8}, \frac{3}{8}, \frac{3}{8}]$	`[2]`
3	$[-X, Y, -Z]$	$[\frac{3}{8}, \frac{3}{8}, \frac{3}{8}]$	`[3]`
4	$[X, -Y, -Z]$	$[\frac{3}{8}, \frac{3}{8}, \frac{3}{8}]$	`[4]`
5	$[Z, X, Y]$	$[\frac{3}{8}, \frac{3}{8}, \frac{3}{8}]$	`[5]`
6	$[Z, -X, -Y]$	$[\frac{3}{8}, \frac{3}{8}, \frac{3}{8}]$	`[6]`
7	$[-Z, -X, Y]$	$[\frac{3}{8}, \frac{3}{8}, \frac{3}{8}]$	`[7]`
8	$[-Z, X, -Y]$	$[\frac{3}{8}, \frac{3}{8}, \frac{3}{8}]$	`[8]`
9	$[Y, Z, X]$	$[\frac{3}{8}, \frac{3}{8}, \frac{3}{8}]$	`[9]`
10	$[-Y, Z, -X]$	$[\frac{3}{8}, \frac{3}{8}, \frac{3}{8}]$	`[10]`
11	$[Y, -Z, -X]$	$[\frac{3}{8}, \frac{3}{8}, \frac{3}{8}]$	`[11]`
12	$[-Y, -Z, X]$	$[\frac{3}{8}, \frac{3}{8}, \frac{3}{8}]$	`[12]`
13	$[Y, X, -Z]$	$[\frac{1}{8}, \frac{5}{8}, \frac{1}{8}]$	`[13]`
14	$[-Y, -X, -Z]$	$[\frac{1}{8}, \frac{5}{8}, \frac{1}{8}]$	`[14]`
15	$[Y, -X, Z]$	$[\frac{1}{8}, \frac{5}{8}, \frac{1}{8}]$	`[15]`

continued ...

Table 12

No.	vector	center	mapping
16	$[-Y, X, Z]$	$[\frac{1}{8}, \frac{5}{8}, \frac{1}{8}]$	[16]
17	$[X, Z, -Y]$	$[\frac{1}{8}, \frac{5}{8}, \frac{1}{8}]$	[17]
18	$[-X, Z, Y]$	$[\frac{1}{8}, \frac{5}{8}, \frac{1}{8}]$	[18]
19	$[-X, -Z, -Y]$	$[\frac{1}{8}, \frac{5}{8}, \frac{1}{8}]$	[19]
20	$[X, -Z, Y]$	$[\frac{1}{8}, \frac{5}{8}, \frac{1}{8}]$	[20]
21	$[Z, Y, -X]$	$[\frac{1}{8}, \frac{5}{8}, \frac{1}{8}]$	[21]
22	$[Z, -Y, X]$	$[\frac{1}{8}, \frac{5}{8}, \frac{1}{8}]$	[22]
23	$[-Z, Y, X]$	$[\frac{1}{8}, \frac{5}{8}, \frac{1}{8}]$	[23]
24	$[-Z, -Y, -X]$	$[\frac{1}{8}, \frac{5}{8}, \frac{1}{8}]$	[24]
25	$[-X, -Y, -Z]$	$[\frac{1}{8}, \frac{5}{8}, \frac{1}{8}]$	[25]
26	$[X, Y, -Z]$	$[\frac{1}{8}, \frac{5}{8}, \frac{1}{8}]$	[26]
27	$[X, -Y, Z]$	$[\frac{1}{8}, \frac{5}{8}, \frac{1}{8}]$	[27]
28	$[-X, Y, Z]$	$[\frac{1}{8}, \frac{5}{8}, \frac{1}{8}]$	[28]
29	$[-Z, -X, -Y]$	$[\frac{1}{8}, \frac{5}{8}, \frac{1}{8}]$	[29]
30	$[-Z, X, Y]$	$[\frac{1}{8}, \frac{5}{8}, \frac{1}{8}]$	[30]
31	$[Z, X, -Y]$	$[\frac{1}{8}, \frac{5}{8}, \frac{1}{8}]$	[31]
32	$[Z, -X, Y]$	$[\frac{1}{8}, \frac{5}{8}, \frac{1}{8}]$	[32]
33	$[-Y, -Z, -X]$	$[\frac{1}{8}, \frac{5}{8}, \frac{1}{8}]$	[33]
34	$[Y, -Z, X]$	$[\frac{1}{8}, \frac{5}{8}, \frac{1}{8}]$	[34]
35	$[-Y, Z, X]$	$[\frac{1}{8}, \frac{5}{8}, \frac{1}{8}]$	[35]
36	$[Y, Z, -X]$	$[\frac{1}{8}, \frac{5}{8}, \frac{1}{8}]$	[36]
37	$[-Y, -X, Z]$	$[\frac{3}{8}, \frac{3}{8}, \frac{3}{8}]$	[37]
38	$[Y, X, Z]$	$[\frac{3}{8}, \frac{3}{8}, \frac{3}{8}]$	[38]
39	$[-Y, X, -Z]$	$[\frac{3}{8}, \frac{3}{8}, \frac{3}{8}]$	[39]
40	$[Y, -X, -Z]$	$[\frac{3}{8}, \frac{3}{8}, \frac{3}{8}]$	[40]
41	$[-X, -Z, Y]$	$[\frac{3}{8}, \frac{3}{8}, \frac{3}{8}]$	[41]
42	$[X, -Z, -Y]$	$[\frac{3}{8}, \frac{3}{8}, \frac{3}{8}]$	[42]
43	$[X, Z, Y]$	$[\frac{3}{8}, \frac{3}{8}, \frac{3}{8}]$	[43]
44	$[-X, Z, -Y]$	$[\frac{3}{8}, \frac{3}{8}, \frac{3}{8}]$	[44]
45	$[-Z, -Y, X]$	$[\frac{3}{8}, \frac{3}{8}, \frac{3}{8}]$	[45]
46	$[-Z, Y, -X]$	$[\frac{3}{8}, \frac{3}{8}, \frac{3}{8}]$	[46]
47	$[Z, -Y, -X]$	$[\frac{3}{8}, \frac{3}{8}, \frac{3}{8}]$	[47]
48	$[Z, Y, X]$	$[\frac{3}{8}, \frac{3}{8}, \frac{3}{8}]$	[48]

* Wyckoff site: 16c, site symmetry: .-3m

Table 13: Wyckoff bond: 16a@16c

No.	vector	center	mapping
1	$[X, X, X]$	[0, 0, 0]	[1,5,9,-14,-19,-24,-25,-29,-33,38,43,48]
2	$[-X, -X, X]$	$[\frac{3}{4}, \frac{1}{4}, \frac{1}{2}]$	[2,7,12,-13,-17,-21,-26,-31,-36,37,41,45]
3	$[-X, X, -X]$	$[\frac{1}{4}, \frac{1}{2}, \frac{3}{4}]$	[3,8,10,-15,-20,-22,-27,-32,-34,39,44,46]
4	$[X, -X, -X]$	$[\frac{1}{2}, \frac{3}{4}, \frac{1}{4}]$	[4,6,11,-16,-18,-23,-28,-30,-35,40,42,47]

Table 14: Wyckoff bond: `48b@16c`

No.	vector	center	mapping
1	$[X, X, Y]$	$[0, 0, 0]$	`[1,-14,-25,38]`
2	$[-X, -X, Y]$	$[\frac{3}{4}, \frac{1}{4}, \frac{1}{2}]$	`[2,-13,-26,37]`
3	$[-X, X, -Y]$	$[\frac{1}{4}, \frac{1}{2}, \frac{3}{4}]$	`[3,-15,-27,39]`
4	$[X, -X, -Y]$	$[\frac{1}{2}, \frac{3}{4}, \frac{1}{4}]$	`[4,-16,-28,40]`
5	$[Y, X, X]$	$[0, 0, 0]$	`[5,-24,-29,48]`
6	$[Y, -X, -X]$	$[\frac{1}{2}, \frac{3}{4}, \frac{1}{4}]$	`[6,-23,-30,47]`
7	$[-Y, -X, X]$	$[\frac{3}{4}, \frac{1}{4}, \frac{1}{2}]$	`[7,-21,-31,45]`
8	$[-Y, X, -X]$	$[\frac{1}{4}, \frac{1}{2}, \frac{3}{4}]$	`[8,-22,-32,46]`
9	$[X, Y, X]$	$[0, 0, 0]$	`[9,-19,-33,43]`
10	$[-X, Y, -X]$	$[\frac{1}{4}, \frac{1}{2}, \frac{3}{4}]$	`[10,-20,-34,44]`
11	$[X, -Y, -X]$	$[\frac{1}{2}, \frac{3}{4}, \frac{1}{4}]$	`[11,-18,-35,42]`
12	$[-X, -Y, X]$	$[\frac{3}{4}, \frac{1}{4}, \frac{1}{2}]$	`[12,-17,-36,41]`

Table 15: Wyckoff bond: `48c@16c`

No.	vector	center	mapping
1	$[X, -X, 0]$	$[0, 0, 0]$	`[1,14,-25,-38]`
2	$[-X, X, 0]$	$[\frac{3}{4}, \frac{1}{4}, \frac{1}{2}]$	`[2,13,-26,-37]`
3	$[-X, -X, 0]$	$[\frac{1}{4}, \frac{1}{2}, \frac{3}{4}]$	`[3,15,-27,-39]`
4	$[X, X, 0]$	$[\frac{1}{2}, \frac{3}{4}, \frac{1}{4}]$	`[4,16,-28,-40]`
5	$[0, X, -X]$	$[0, 0, 0]$	`[5,24,-29,-48]`
6	$[0, -X, X]$	$[\frac{1}{2}, \frac{3}{4}, \frac{1}{4}]$	`[6,23,-30,-47]`
7	$[0, -X, -X]$	$[\frac{3}{4}, \frac{1}{4}, \frac{1}{2}]$	`[7,21,-31,-45]`
8	$[0, X, X]$	$[\frac{1}{4}, \frac{1}{2}, \frac{3}{4}]$	`[8,22,-32,-46]`
9	$[-X, 0, X]$	$[0, 0, 0]$	`[9,19,-33,-43]`
10	$[X, 0, -X]$	$[\frac{1}{4}, \frac{1}{2}, \frac{3}{4}]$	`[10,20,-34,-44]`
11	$[-X, 0, -X]$	$[\frac{1}{2}, \frac{3}{4}, \frac{1}{4}]$	`[11,18,-35,-42]`
12	$[X, 0, X]$	$[\frac{3}{4}, \frac{1}{4}, \frac{1}{2}]$	`[12,17,-36,-41]`

Table 16: Wyckoff bond: `96d@16c`

No.	vector	center	mapping
1	$[X, Y, Z]$	$[0, 0, 0]$	`[1,-25]`
2	$[-X, -Y, Z]$	$[\frac{3}{4}, \frac{1}{4}, \frac{1}{2}]$	`[2,-26]`
3	$[-X, Y, -Z]$	$[\frac{1}{4}, \frac{1}{2}, \frac{3}{4}]$	`[3,-27]`
4	$[X, -Y, -Z]$	$[\frac{1}{2}, \frac{3}{4}, \frac{1}{4}]$	`[4,-28]`
5	$[Z, X, Y]$	$[0, 0, 0]$	`[5,-29]`
6	$[Z, -X, -Y]$	$[\frac{1}{2}, \frac{3}{4}, \frac{1}{4}]$	`[6,-30]`
7	$[-Z, -X, Y]$	$[\frac{3}{4}, \frac{1}{4}, \frac{1}{2}]$	`[7,-31]`
8	$[-Z, X, -Y]$	$[\frac{1}{4}, \frac{1}{2}, \frac{3}{4}]$	`[8,-32]`
9	$[Y, Z, X]$	$[0, 0, 0]$	`[9,-33]`

continued ...

Table 16

No.	vector	center	mapping
10	$[-Y, Z, -X]$	$\left[\frac{1}{4}, \frac{1}{2}, \frac{3}{4}\right]$	`[10,-34]`
11	$[Y, -Z, -X]$	$\left[\frac{1}{2}, \frac{3}{4}, \frac{1}{4}\right]$	`[11,-35]`
12	$[-Y, -Z, X]$	$\left[\frac{3}{4}, \frac{1}{4}, \frac{1}{2}\right]$	`[12,-36]`
13	$[Y, X, -Z]$	$\left[\frac{3}{4}, \frac{1}{4}, \frac{1}{2}\right]$	`[13,-37]`
14	$[-Y, -X, -Z]$	$[0, 0, 0]$	`[14,-38]`
15	$[Y, -X, Z]$	$\left[\frac{1}{4}, \frac{1}{2}, \frac{3}{4}\right]$	`[15,-39]`
16	$[-Y, X, Z]$	$\left[\frac{1}{2}, \frac{3}{4}, \frac{1}{4}\right]$	`[16,-40]`
17	$[X, Z, -Y]$	$\left[\frac{3}{4}, \frac{1}{4}, \frac{1}{2}\right]$	`[17,-41]`
18	$[-X, Z, Y]$	$\left[\frac{1}{2}, \frac{3}{4}, \frac{1}{4}\right]$	`[18,-42]`
19	$[-X, -Z, -Y]$	$[0, 0, 0]$	`[19,-43]`
20	$[X, -Z, Y]$	$\left[\frac{1}{4}, \frac{1}{2}, \frac{3}{4}\right]$	`[20,-44]`
21	$[Z, Y, -X]$	$\left[\frac{3}{4}, \frac{1}{4}, \frac{1}{2}\right]$	`[21,-45]`
22	$[Z, -Y, X]$	$\left[\frac{1}{4}, \frac{1}{2}, \frac{3}{4}\right]$	`[22,-46]`
23	$[-Z, Y, X]$	$\left[\frac{1}{2}, \frac{3}{4}, \frac{1}{4}\right]$	`[23,-47]`
24	$[-Z, -Y, -X]$	$[0, 0, 0]$	`[24,-48]`

* Wyckoff site: `16d`, site symmetry: `.-3m`

Table 17: Wyckoff bond: `16a@16d`

No.	vector	center	mapping
1	$[X, X, X]$	$\left[\frac{1}{2}, \frac{1}{2}, \frac{1}{2}\right]$	`[1,5,9,-14,-19,-24,-25,-29,-33,38,43,48]`
2	$[-X, -X, X]$	$\left[\frac{1}{4}, \frac{3}{4}, 0\right]$	`[2,7,12,-13,-17,-21,-26,-31,-36,37,41,45]`
3	$[-X, X, -X]$	$\left[\frac{3}{4}, 0, \frac{1}{4}\right]$	`[3,8,10,-15,-20,-22,-27,-32,-34,39,44,46]`
4	$[X, -X, -X]$	$\left[0, \frac{1}{4}, \frac{3}{4}\right]$	`[4,6,11,-16,-18,-23,-28,-30,-35,40,42,47]`

Table 18: Wyckoff bond: `48b@16d`

No.	vector	center	mapping
1	$[X, X, Y]$	$\left[\frac{1}{2}, \frac{1}{2}, \frac{1}{2}\right]$	`[1,-14,-25,38]`
2	$[-X, -X, Y]$	$\left[\frac{1}{4}, \frac{3}{4}, 0\right]$	`[2,-13,-26,37]`
3	$[-X, X, -Y]$	$\left[\frac{3}{4}, 0, \frac{1}{4}\right]$	`[3,-15,-27,39]`
4	$[X, -X, -Y]$	$\left[0, \frac{1}{4}, \frac{3}{4}\right]$	`[4,-16,-28,40]`
5	$[Y, X, X]$	$\left[\frac{1}{2}, \frac{1}{2}, \frac{1}{2}\right]$	`[5,-24,-29,48]`
6	$[Y, -X, -X]$	$\left[0, \frac{1}{4}, \frac{3}{4}\right]$	`[6,-23,-30,47]`
7	$[-Y, -X, X]$	$\left[\frac{1}{4}, \frac{3}{4}, 0\right]$	`[7,-21,-31,45]`
8	$[-Y, X, -X]$	$\left[\frac{3}{4}, 0, \frac{1}{4}\right]$	`[8,-22,-32,46]`
9	$[X, Y, X]$	$\left[\frac{1}{2}, \frac{1}{2}, \frac{1}{2}\right]$	`[9,-19,-33,43]`
10	$[-X, Y, -X]$	$\left[\frac{3}{4}, 0, \frac{1}{4}\right]$	`[10,-20,-34,44]`
11	$[X, -Y, -X]$	$\left[0, \frac{1}{4}, \frac{3}{4}\right]$	`[11,-18,-35,42]`
12	$[-X, -Y, X]$	$\left[\frac{1}{4}, \frac{3}{4}, 0\right]$	`[12,-17,-36,41]`

Table 19: Wyckoff bond: `48c@16d`

No.	vector	center	mapping
1	$[X, -X, 0]$	$\left[\frac{1}{2}, \frac{1}{2}, \frac{1}{2}\right]$	`[1,14,-25,-38]`
2	$[-X, X, 0]$	$\left[\frac{1}{4}, \frac{3}{4}, 0\right]$	`[2,13,-26,-37]`
3	$[-X, -X, 0]$	$\left[\frac{3}{4}, 0, \frac{1}{4}\right]$	`[3,15,-27,-39]`
4	$[X, X, 0]$	$\left[0, \frac{1}{4}, \frac{3}{4}\right]$	`[4,16,-28,-40]`
5	$[0, X, -X]$	$\left[\frac{1}{2}, \frac{1}{2}, \frac{1}{2}\right]$	`[5,24,-29,-48]`
6	$[0, -X, X]$	$\left[0, \frac{1}{4}, \frac{3}{4}\right]$	`[6,23,-30,-47]`
7	$[0, -X, -X]$	$\left[\frac{1}{4}, \frac{3}{4}, 0\right]$	`[7,21,-31,-45]`
8	$[0, X, X]$	$\left[\frac{3}{4}, 0, \frac{1}{4}\right]$	`[8,22,-32,-46]`
9	$[-X, 0, X]$	$\left[\frac{1}{2}, \frac{1}{2}, \frac{1}{2}\right]$	`[9,19,-33,-43]`
10	$[X, 0, -X]$	$\left[\frac{3}{4}, 0, \frac{1}{4}\right]$	`[10,20,-34,-44]`
11	$[-X, 0, -X]$	$\left[0, \frac{1}{4}, \frac{3}{4}\right]$	`[11,18,-35,-42]`
12	$[X, 0, X]$	$\left[\frac{1}{4}, \frac{3}{4}, 0\right]$	`[12,17,-36,-41]`

Table 20: Wyckoff bond: `96d@16d`

No.	vector	center	mapping
1	$[X, Y, Z]$	$\left[\frac{1}{2}, \frac{1}{2}, \frac{1}{2}\right]$	`[1,-25]`
2	$[-X, -Y, Z]$	$\left[\frac{1}{4}, \frac{3}{4}, 0\right]$	`[2,-26]`
3	$[-X, Y, -Z]$	$\left[\frac{3}{4}, 0, \frac{1}{4}\right]$	`[3,-27]`
4	$[X, -Y, -Z]$	$\left[0, \frac{1}{4}, \frac{3}{4}\right]$	`[4,-28]`
5	$[Z, X, Y]$	$\left[\frac{1}{2}, \frac{1}{2}, \frac{1}{2}\right]$	`[5,-29]`
6	$[Z, -X, -Y]$	$\left[0, \frac{1}{4}, \frac{3}{4}\right]$	`[6,-30]`
7	$[-Z, -X, Y]$	$\left[\frac{1}{4}, \frac{3}{4}, 0\right]$	`[7,-31]`
8	$[-Z, X, -Y]$	$\left[\frac{3}{4}, 0, \frac{1}{4}\right]$	`[8,-32]`
9	$[Y, Z, X]$	$\left[\frac{1}{2}, \frac{1}{2}, \frac{1}{2}\right]$	`[9,-33]`
10	$[-Y, Z, -X]$	$\left[\frac{3}{4}, 0, \frac{1}{4}\right]$	`[10,-34]`
11	$[Y, -Z, -X]$	$\left[0, \frac{1}{4}, \frac{3}{4}\right]$	`[11,-35]`
12	$[-Y, -Z, X]$	$\left[\frac{1}{4}, \frac{3}{4}, 0\right]$	`[12,-36]`
13	$[Y, X, -Z]$	$\left[\frac{1}{4}, \frac{3}{4}, 0\right]$	`[13,-37]`
14	$[-Y, -X, -Z]$	$\left[\frac{1}{2}, \frac{1}{2}, \frac{1}{2}\right]$	`[14,-38]`
15	$[Y, -X, Z]$	$\left[\frac{3}{4}, 0, \frac{1}{4}\right]$	`[15,-39]`
16	$[-Y, X, Z]$	$\left[0, \frac{1}{4}, \frac{3}{4}\right]$	`[16,-40]`
17	$[X, Z, -Y]$	$\left[\frac{1}{4}, \frac{3}{4}, 0\right]$	`[17,-41]`
18	$[-X, Z, Y]$	$\left[0, \frac{1}{4}, \frac{3}{4}\right]$	`[18,-42]`
19	$[-X, -Z, -Y]$	$\left[\frac{1}{2}, \frac{1}{2}, \frac{1}{2}\right]$	`[19,-43]`
20	$[X, -Z, Y]$	$\left[\frac{3}{4}, 0, \frac{1}{4}\right]$	`[20,-44]`
21	$[Z, Y, -X]$	$\left[\frac{1}{4}, \frac{3}{4}, 0\right]$	`[21,-45]`
22	$[Z, -Y, X]$	$\left[\frac{3}{4}, 0, \frac{1}{4}\right]$	`[22,-46]`
23	$[-Z, Y, X]$	$\left[0, \frac{1}{4}, \frac{3}{4}\right]$	`[23,-47]`
24	$[-Z, -Y, -X]$	$\left[\frac{1}{2}, \frac{1}{2}, \frac{1}{2}\right]$	`[24,-48]`

* Wyckoff site: `32e`, site symmetry: `.3m`

Table 21: Wyckoff bond: `32a@32e`

No.	vector	center	mapping
1	$[X,\ X,\ X]$	$[x,\ x,\ x]$	`[1,5,9,38,43,48]`
2	$[-X,\ -X,\ X]$	$\left[\frac{3}{4}-x,\ \frac{1}{4}-x,\ x+\frac{1}{2}\right]$	`[2,7,12,37,41,45]`
3	$[-X,\ X,\ -X]$	$\left[\frac{1}{4}-x,\ x+\frac{1}{2},\ \frac{3}{4}-x\right]$	`[3,8,10,39,44,46]`
4	$[X,\ -X,\ -X]$	$\left[x+\frac{1}{2},\ \frac{3}{4}-x,\ \frac{1}{4}-x\right]$	`[4,6,11,40,42,47]`
5	$[X,\ X,\ -X]$	$\left[x+\frac{3}{4},\ x+\frac{1}{4},\ \frac{1}{2}-x\right]$	`[13,17,21,26,31,36]`
6	$[-X,\ -X,\ -X]$	$[-x,\ -x,\ -x]$	`[14,19,24,25,29,33]`
7	$[X,\ -X,\ X]$	$\left[x+\frac{1}{4},\ \frac{1}{2}-x,\ x+\frac{3}{4}\right]$	`[15,20,22,27,32,34]`
8	$[-X,\ X,\ X]$	$\left[\frac{1}{2}-x,\ x+\frac{3}{4},\ x+\frac{1}{4}\right]$	`[16,18,23,28,30,35]`

Table 22: Wyckoff bond: `96b@32e`

No.	vector	center	mapping
1	$[X,\ X,\ Y]$	$[x,\ x,\ x]$	`[1,38]`
2	$[-X,\ -X,\ Y]$	$\left[\frac{3}{4}-x,\ \frac{1}{4}-x,\ x+\frac{1}{2}\right]$	`[2,37]`
3	$[-X,\ X,\ -Y]$	$\left[\frac{1}{4}-x,\ x+\frac{1}{2},\ \frac{3}{4}-x\right]$	`[3,39]`
4	$[X,\ -X,\ -Y]$	$\left[x+\frac{1}{2},\ \frac{3}{4}-x,\ \frac{1}{4}-x\right]$	`[4,40]`
5	$[Y,\ X,\ X]$	$[x,\ x,\ x]$	`[5,48]`
6	$[Y,\ -X,\ -X]$	$\left[x+\frac{1}{2},\ \frac{3}{4}-x,\ \frac{1}{4}-x\right]$	`[6,47]`
7	$[-Y,\ -X,\ X]$	$\left[\frac{3}{4}-x,\ \frac{1}{4}-x,\ x+\frac{1}{2}\right]$	`[7,45]`
8	$[-Y,\ X,\ -X]$	$\left[\frac{1}{4}-x,\ x+\frac{1}{2},\ \frac{3}{4}-x\right]$	`[8,46]`
9	$[X,\ Y,\ X]$	$[x,\ x,\ x]$	`[9,43]`
10	$[-X,\ Y,\ -X]$	$\left[\frac{1}{4}-x,\ x+\frac{1}{2},\ \frac{3}{4}-x\right]$	`[10,44]`
11	$[X,\ -Y,\ -X]$	$\left[x+\frac{1}{2},\ \frac{3}{4}-x,\ \frac{1}{4}-x\right]$	`[11,42]`
12	$[-X,\ -Y,\ X]$	$\left[\frac{3}{4}-x,\ \frac{1}{4}-x,\ x+\frac{1}{2}\right]$	`[12,41]`
13	$[X,\ X,\ -Y]$	$\left[x+\frac{3}{4},\ x+\frac{1}{4},\ \frac{1}{2}-x\right]$	`[13,26]`
14	$[-X,\ -X,\ -Y]$	$[-x,\ -x,\ -x]$	`[14,25]`
15	$[X,\ -X,\ Y]$	$\left[x+\frac{1}{4},\ \frac{1}{2}-x,\ x+\frac{3}{4}\right]$	`[15,27]`
16	$[-X,\ X,\ Y]$	$\left[\frac{1}{2}-x,\ x+\frac{3}{4},\ x+\frac{1}{4}\right]$	`[16,28]`
17	$[X,\ Y,\ -X]$	$\left[x+\frac{3}{4},\ x+\frac{1}{4},\ \frac{1}{2}-x\right]$	`[17,36]`
18	$[-X,\ Y,\ X]$	$\left[\frac{1}{2}-x,\ x+\frac{3}{4},\ x+\frac{1}{4}\right]$	`[18,35]`
19	$[-X,\ -Y,\ -X]$	$[-x,\ -x,\ -x]$	`[19,33]`
20	$[X,\ -Y,\ X]$	$\left[x+\frac{1}{4},\ \frac{1}{2}-x,\ x+\frac{3}{4}\right]$	`[20,34]`
21	$[Y,\ X,\ -X]$	$\left[x+\frac{3}{4},\ x+\frac{1}{4},\ \frac{1}{2}-x\right]$	`[21,31]`
22	$[Y,\ -X,\ X]$	$\left[x+\frac{1}{4},\ \frac{1}{2}-x,\ x+\frac{3}{4}\right]$	`[22,32]`
23	$[-Y,\ X,\ X]$	$\left[\frac{1}{2}-x,\ x+\frac{3}{4},\ x+\frac{1}{4}\right]$	`[23,30]`
24	$[-Y,\ -X,\ -X]$	$[-x,\ -x,\ -x]$	`[24,29]`

Table 23: Wyckoff bond: `96c@32e`

No.	vector	center	mapping
1	$[X,\ -X,\ 0]$	$[x,\ x,\ x]$	`[1,-38]`

continued ...

Table 23

No.	vector	center	mapping
2	$[-X,\ X,\ 0]$	$\left[\frac{3}{4}-x,\ \frac{1}{4}-x,\ x+\frac{1}{2}\right]$	`[2,-37]`
3	$[-X,\ -X,\ 0]$	$\left[\frac{1}{4}-x,\ x+\frac{1}{2},\ \frac{3}{4}-x\right]$	`[3,-39]`
4	$[X,\ X,\ 0]$	$\left[x+\frac{1}{2},\ \frac{3}{4}-x,\ \frac{1}{4}-x\right]$	`[4,-40]`
5	$[0,\ X,\ -X]$	$[x,\ x,\ x]$	`[5,-48]`
6	$[0,\ -X,\ X]$	$\left[x+\frac{1}{2},\ \frac{3}{4}-x,\ \frac{1}{4}-x\right]$	`[6,-47]`
7	$[0,\ -X,\ -X]$	$\left[\frac{3}{4}-x,\ \frac{1}{4}-x,\ x+\frac{1}{2}\right]$	`[7,-45]`
8	$[0,\ X,\ X]$	$\left[\frac{1}{4}-x,\ x+\frac{1}{2},\ \frac{3}{4}-x\right]$	`[8,-46]`
9	$[-X,\ 0,\ X]$	$[x,\ x,\ x]$	`[9,-43]`
10	$[X,\ 0,\ -X]$	$\left[\frac{1}{4}-x,\ x+\frac{1}{2},\ \frac{3}{4}-x\right]$	`[10,-44]`
11	$[-X,\ 0,\ -X]$	$\left[x+\frac{1}{2},\ \frac{3}{4}-x,\ \frac{1}{4}-x\right]$	`[11,-42]`
12	$[X,\ 0,\ X]$	$\left[\frac{3}{4}-x,\ \frac{1}{4}-x,\ x+\frac{1}{2}\right]$	`[12,-41]`
13	$[-X,\ X,\ 0]$	$\left[x+\frac{3}{4},\ x+\frac{1}{4},\ \frac{1}{2}-x\right]$	`[13,-26]`
14	$[X,\ -X,\ 0]$	$[-x,\ -x,\ -x]$	`[14,-25]`
15	$[-X,\ -X,\ 0]$	$\left[x+\frac{1}{4},\ \frac{1}{2}-x,\ x+\frac{3}{4}\right]$	`[15,-27]`
16	$[X,\ X,\ 0]$	$\left[\frac{1}{2}-x,\ x+\frac{3}{4},\ x+\frac{1}{4}\right]$	`[16,-28]`
17	$[X,\ 0,\ X]$	$\left[x+\frac{3}{4},\ x+\frac{1}{4},\ \frac{1}{2}-x\right]$	`[17,-36]`
18	$[-X,\ 0,\ -X]$	$\left[\frac{1}{2}-x,\ x+\frac{3}{4},\ x+\frac{1}{4}\right]$	`[18,-35]`
19	$[-X,\ 0,\ X]$	$[-x,\ -x,\ -x]$	`[19,-33]`
20	$[X,\ 0,\ -X]$	$\left[x+\frac{1}{4},\ \frac{1}{2}-x,\ x+\frac{3}{4}\right]$	`[20,-34]`
21	$[0,\ -X,\ -X]$	$\left[x+\frac{3}{4},\ x+\frac{1}{4},\ \frac{1}{2}-x\right]$	`[21,-31]`
22	$[0,\ X,\ X]$	$\left[x+\frac{1}{4},\ \frac{1}{2}-x,\ x+\frac{3}{4}\right]$	`[22,-32]`
23	$[0,\ -X,\ X]$	$\left[\frac{1}{2}-x,\ x+\frac{3}{4},\ x+\frac{1}{4}\right]$	`[23,-30]`
24	$[0,\ X,\ -X]$	$[-x,\ -x,\ -x]$	`[24,-29]`

Table 24: Wyckoff bond: `192d@32e`

No.	vector	center	mapping
1	$[X,\ Y,\ Z]$	$[x,\ x,\ x]$	`[1]`
2	$[-X,\ -Y,\ Z]$	$\left[\frac{3}{4}-x,\ \frac{1}{4}-x,\ x+\frac{1}{2}\right]$	`[2]`
3	$[-X,\ Y,\ -Z]$	$\left[\frac{1}{4}-x,\ x+\frac{1}{2},\ \frac{3}{4}-x\right]$	`[3]`
4	$[X,\ -Y,\ -Z]$	$\left[x+\frac{1}{2},\ \frac{3}{4}-x,\ \frac{1}{4}-x\right]$	`[4]`
5	$[Z,\ X,\ Y]$	$[x,\ x,\ x]$	`[5]`
6	$[Z,\ -X,\ -Y]$	$\left[x+\frac{1}{2},\ \frac{3}{4}-x,\ \frac{1}{4}-x\right]$	`[6]`
7	$[-Z,\ -X,\ Y]$	$\left[\frac{3}{4}-x,\ \frac{1}{4}-x,\ x+\frac{1}{2}\right]$	`[7]`
8	$[-Z,\ X,\ -Y]$	$\left[\frac{1}{4}-x,\ x+\frac{1}{2},\ \frac{3}{4}-x\right]$	`[8]`
9	$[Y,\ Z,\ X]$	$[x,\ x,\ x]$	`[9]`
10	$[-Y,\ Z,\ -X]$	$\left[\frac{1}{4}-x,\ x+\frac{1}{2},\ \frac{3}{4}-x\right]$	`[10]`
11	$[Y,\ -Z,\ -X]$	$\left[x+\frac{1}{2},\ \frac{3}{4}-x,\ \frac{1}{4}-x\right]$	`[11]`
12	$[-Y,\ -Z,\ X]$	$\left[\frac{3}{4}-x,\ \frac{1}{4}-x,\ x+\frac{1}{2}\right]$	`[12]`
13	$[Y,\ X,\ -Z]$	$\left[x+\frac{3}{4},\ x+\frac{1}{4},\ \frac{1}{2}-x\right]$	`[13]`
14	$[-Y,\ -X,\ -Z]$	$[-x,\ -x,\ -x]$	`[14]`
15	$[Y,\ -X,\ Z]$	$\left[x+\frac{1}{4},\ \frac{1}{2}-x,\ x+\frac{3}{4}\right]$	`[15]`
16	$[-Y,\ X,\ Z]$	$\left[\frac{1}{2}-x,\ x+\frac{3}{4},\ x+\frac{1}{4}\right]$	`[16]`
17	$[X,\ Z,\ -Y]$	$\left[x+\frac{3}{4},\ x+\frac{1}{4},\ \frac{1}{2}-x\right]$	`[17]`

continued ...

Table 24

No.	vector	center	mapping
18	$[-X,\ Z,\ Y]$	$\left[\frac{1}{2}-x,\ x+\frac{3}{4},\ x+\frac{1}{4}\right]$	[18]
19	$[-X,\ -Z,\ -Y]$	$[-x,\ -x,\ -x]$	[19]
20	$[X,\ -Z,\ Y]$	$\left[x+\frac{1}{4},\ \frac{1}{2}-x,\ x+\frac{3}{4}\right]$	[20]
21	$[Z,\ Y,\ -X]$	$\left[x+\frac{3}{4},\ x+\frac{1}{4},\ \frac{1}{2}-x\right]$	[21]
22	$[Z,\ -Y,\ X]$	$\left[x+\frac{1}{4},\ \frac{1}{2}-x,\ x+\frac{3}{4}\right]$	[22]
23	$[-Z,\ Y,\ X]$	$\left[\frac{1}{2}-x,\ x+\frac{3}{4},\ x+\frac{1}{4}\right]$	[23]
24	$[-Z,\ -Y,\ -X]$	$[-x,\ -x,\ -x]$	[24]
25	$[-X,\ -Y,\ -Z]$	$[-x,\ -x,\ -x]$	[25]
26	$[X,\ Y,\ -Z]$	$\left[x+\frac{3}{4},\ x+\frac{1}{4},\ \frac{1}{2}-x\right]$	[26]
27	$[X,\ -Y,\ Z]$	$\left[x+\frac{1}{4},\ \frac{1}{2}-x,\ x+\frac{3}{4}\right]$	[27]
28	$[-X,\ Y,\ Z]$	$\left[\frac{1}{2}-x,\ x+\frac{3}{4},\ x+\frac{1}{4}\right]$	[28]
29	$[-Z,\ -X,\ -Y]$	$[-x,\ -x,\ -x]$	[29]
30	$[-Z,\ X,\ Y]$	$\left[\frac{1}{2}-x,\ x+\frac{3}{4},\ x+\frac{1}{4}\right]$	[30]
31	$[Z,\ X,\ -Y]$	$\left[x+\frac{3}{4},\ x+\frac{1}{4},\ \frac{1}{2}-x\right]$	[31]
32	$[Z,\ -X,\ Y]$	$\left[x+\frac{1}{4},\ \frac{1}{2}-x,\ x+\frac{3}{4}\right]$	[32]
33	$[-Y,\ -Z,\ -X]$	$[-x,\ -x,\ -x]$	[33]
34	$[Y,\ -Z,\ X]$	$\left[x+\frac{1}{4},\ \frac{1}{2}-x,\ x+\frac{3}{4}\right]$	[34]
35	$[-Y,\ Z,\ X]$	$\left[\frac{1}{2}-x,\ x+\frac{3}{4},\ x+\frac{1}{4}\right]$	[35]
36	$[Y,\ Z,\ -X]$	$\left[x+\frac{3}{4},\ x+\frac{1}{4},\ \frac{1}{2}-x\right]$	[36]
37	$[-Y,\ -X,\ Z]$	$\left[\frac{3}{4}-x,\ \frac{1}{4}-x,\ x+\frac{1}{2}\right]$	[37]
38	$[Y,\ X,\ Z]$	$[x,\ x,\ x]$	[38]
39	$[-Y,\ X,\ -Z]$	$\left[\frac{1}{4}-x,\ x+\frac{1}{2},\ \frac{3}{4}-x\right]$	[39]
40	$[Y,\ -X,\ -Z]$	$\left[x+\frac{1}{2},\ \frac{3}{4}-x,\ \frac{1}{4}-x\right]$	[40]
41	$[-X,\ -Z,\ Y]$	$\left[\frac{3}{4}-x,\ \frac{1}{4}-x,\ x+\frac{1}{2}\right]$	[41]
42	$[X,\ -Z,\ -Y]$	$\left[x+\frac{1}{2},\ \frac{3}{4}-x,\ \frac{1}{4}-x\right]$	[42]
43	$[X,\ Z,\ Y]$	$[x,\ x,\ x]$	[43]
44	$[-X,\ Z,\ -Y]$	$\left[\frac{1}{4}-x,\ x+\frac{1}{2},\ \frac{3}{4}-x\right]$	[44]
45	$[-Z,\ -Y,\ X]$	$\left[\frac{3}{4}-x,\ \frac{1}{4}-x,\ x+\frac{1}{2}\right]$	[45]
46	$[-Z,\ Y,\ -X]$	$\left[\frac{1}{4}-x,\ x+\frac{1}{2},\ \frac{3}{4}-x\right]$	[46]
47	$[Z,\ -Y,\ -X]$	$\left[x+\frac{1}{2},\ \frac{3}{4}-x,\ \frac{1}{4}-x\right]$	[47]
48	$[Z,\ Y,\ X]$	$[x,\ x,\ x]$	[48]

* Wyckoff site: 48f, site symmetry: 2.mm

Table 25: Wyckoff bond: 48a@48f

No.	vector	center	mapping
1	$[0,\ X,\ X]$	$\left[x,\ \frac{1}{8},\ \frac{1}{8}\right]$	[1,-4,-42,43]
2	$[0,\ -X,\ X]$	$\left[\frac{3}{4}-x,\ \frac{1}{8},\ \frac{5}{8}\right]$	[2,-3,41,-44]
3	$[X,\ 0,\ X]$	$\left[\frac{1}{8},\ x,\ \frac{1}{8}\right]$	[5,-8,38,-39]
4	$[X,\ 0,\ -X]$	$\left[\frac{5}{8},\ \frac{3}{4}-x,\ \frac{1}{8}\right]$	[6,-7,-37,40]
5	$[X,\ X,\ 0]$	$\left[\frac{1}{8},\ \frac{1}{8},\ x\right]$	[9,-12,-45,48]
6	$[-X,\ X,\ 0]$	$\left[\frac{1}{8},\ \frac{5}{8},\ \frac{3}{4}-x\right]$	[10,-11,46,-47]
7	$[X,\ 0,\ -X]$	$\left[\frac{7}{8},\ x+\frac{1}{4},\ \frac{3}{8}\right]$	[13,-16,-30,31]
8	$[-X,\ 0,\ -X]$	$\left[\frac{7}{8},\ -x,\ \frac{7}{8}\right]$	[14,-15,29,-32]

continued ...

Table 25

No.	vector	center	mapping
9	$[0,\ X,\ -X]$	$\left[x+\frac{3}{4},\ \frac{3}{8},\ \frac{3}{8}\right]$	`[17,-20,26,-27]`
10	$[0,\ X,\ X]$	$\left[\frac{1}{2}-x,\ \frac{7}{8},\ \frac{3}{8}\right]$	`[18,-19,-25,28]`
11	$[X,\ X,\ 0]$	$\left[\frac{7}{8},\ \frac{3}{8},\ \frac{1}{2}-x\right]$	`[21,-24,-33,36]`
12	$[X,\ -X,\ 0]$	$\left[\frac{3}{8},\ \frac{3}{8},\ x+\frac{3}{4}\right]$	`[22,-23,34,-35]`

Table 26: Wyckoff bond: `48b@48f`

No.	vector	center	mapping
1	$[X,\ 0,\ 0]$	$\left[x,\ \frac{1}{8},\ \frac{1}{8}\right]$	`[1,4,42,43]`
2	$[-X,\ 0,\ 0]$	$\left[\frac{3}{4}-x,\ \frac{1}{8},\ \frac{5}{8}\right]$	`[2,3,41,44]`
3	$[0,\ X,\ 0]$	$\left[\frac{1}{8},\ x,\ \frac{1}{8}\right]$	`[5,8,38,39]`
4	$[0,\ -X,\ 0]$	$\left[\frac{5}{8},\ \frac{3}{4}-x,\ \frac{1}{8}\right]$	`[6,7,37,40]`
5	$[0,\ 0,\ X]$	$\left[\frac{1}{8},\ \frac{1}{8},\ x\right]$	`[9,12,45,48]`
6	$[0,\ 0,\ -X]$	$\left[\frac{1}{8},\ \frac{5}{8},\ \frac{3}{4}-x\right]$	`[10,11,46,47]`
7	$[0,\ X,\ 0]$	$\left[\frac{7}{8},\ x+\frac{1}{4},\ \frac{3}{8}\right]$	`[13,16,30,31]`
8	$[0,\ -X,\ 0]$	$\left[\frac{7}{8},\ -x,\ \frac{7}{8}\right]$	`[14,15,29,32]`
9	$[X,\ 0,\ 0]$	$\left[x+\frac{3}{4},\ \frac{3}{8},\ \frac{3}{8}\right]$	`[17,20,26,27]`
10	$[-X,\ 0,\ 0]$	$\left[\frac{1}{2}-x,\ \frac{7}{8},\ \frac{3}{8}\right]$	`[18,19,25,28]`
11	$[0,\ 0,\ -X]$	$\left[\frac{7}{8},\ \frac{3}{8},\ \frac{1}{2}-x\right]$	`[21,24,33,36]`
12	$[0,\ 0,\ X]$	$\left[\frac{3}{8},\ \frac{3}{8},\ x+\frac{3}{4}\right]$	`[22,23,34,35]`

Table 27: Wyckoff bond: `96c@48f`

No.	vector	center	mapping
1	$[Y,\ X,\ X]$	$\left[x,\ \frac{1}{8},\ \frac{1}{8}\right]$	`[1,43]`
2	$[-Y,\ -X,\ X]$	$\left[\frac{3}{4}-x,\ \frac{1}{8},\ \frac{5}{8}\right]$	`[2,41]`
3	$[-Y,\ X,\ -X]$	$\left[\frac{3}{4}-x,\ \frac{1}{8},\ \frac{5}{8}\right]$	`[3,44]`
4	$[Y,\ -X,\ -X]$	$\left[x,\ \frac{1}{8},\ \frac{1}{8}\right]$	`[4,42]`
5	$[X,\ Y,\ X]$	$\left[\frac{1}{8},\ x,\ \frac{1}{8}\right]$	`[5,38]`
6	$[X,\ -Y,\ -X]$	$\left[\frac{5}{8},\ \frac{3}{4}-x,\ \frac{1}{8}\right]$	`[6,40]`
7	$[-X,\ -Y,\ X]$	$\left[\frac{5}{8},\ \frac{3}{4}-x,\ \frac{1}{8}\right]$	`[7,37]`
8	$[-X,\ Y,\ -X]$	$\left[\frac{1}{8},\ x,\ \frac{1}{8}\right]$	`[8,39]`
9	$[X,\ X,\ Y]$	$\left[\frac{1}{8},\ \frac{1}{8},\ x\right]$	`[9,48]`
10	$[-X,\ X,\ -Y]$	$\left[\frac{1}{8},\ \frac{5}{8},\ \frac{3}{4}-x\right]$	`[10,46]`
11	$[X,\ -X,\ -Y]$	$\left[\frac{1}{8},\ \frac{5}{8},\ \frac{3}{4}-x\right]$	`[11,47]`
12	$[-X,\ -X,\ Y]$	$\left[\frac{1}{8},\ \frac{1}{8},\ x\right]$	`[12,45]`
13	$[X,\ Y,\ -X]$	$\left[\frac{7}{8},\ x+\frac{1}{4},\ \frac{3}{8}\right]$	`[13,31]`
14	$[-X,\ -Y,\ -X]$	$\left[\frac{7}{8},\ -x,\ \frac{7}{8}\right]$	`[14,29]`
15	$[X,\ -Y,\ X]$	$\left[\frac{7}{8},\ -x,\ \frac{7}{8}\right]$	`[15,32]`
16	$[-X,\ Y,\ X]$	$\left[\frac{7}{8},\ x+\frac{1}{4},\ \frac{3}{8}\right]$	`[16,30]`
17	$[Y,\ X,\ -X]$	$\left[x+\frac{3}{4},\ \frac{3}{8},\ \frac{3}{8}\right]$	`[17,26]`
18	$[-Y,\ X,\ X]$	$\left[\frac{1}{2}-x,\ \frac{7}{8},\ \frac{3}{8}\right]$	`[18,28]`

continued ...

Table 27

No.	vector	center	mapping
19	$[-Y, -X, -X]$	$\left[\frac{1}{2} - x, \frac{7}{8}, \frac{3}{8}\right]$	`[19,25]`
20	$[Y, -X, X]$	$\left[x + \frac{3}{4}, \frac{3}{8}, \frac{3}{8}\right]$	`[20,27]`
21	$[X, X, -Y]$	$\left[\frac{7}{8}, \frac{3}{8}, \frac{1}{2} - x\right]$	`[21,36]`
22	$[X, -X, Y]$	$\left[\frac{3}{8}, \frac{3}{8}, x + \frac{3}{4}\right]$	`[22,34]`
23	$[-X, X, Y]$	$\left[\frac{3}{8}, \frac{3}{8}, x + \frac{3}{4}\right]$	`[23,35]`
24	$[-X, -X, -Y]$	$\left[\frac{7}{8}, \frac{3}{8}, \frac{1}{2} - x\right]$	`[24,33]`

Table 28: Wyckoff bond: `96d@48f`

No.	vector	center	mapping
1	$[0, X, Y]$	$\left[x, \frac{1}{8}, \frac{1}{8}\right]$	`[1,-4]`
2	$[0, -X, Y]$	$\left[\frac{3}{4} - x, \frac{1}{8}, \frac{5}{8}\right]$	`[2,-3]`
3	$[Y, 0, X]$	$\left[\frac{1}{8}, x, \frac{1}{8}\right]$	`[5,-8]`
4	$[Y, 0, -X]$	$\left[\frac{5}{8}, \frac{3}{4} - x, \frac{1}{8}\right]$	`[6,-7]`
5	$[X, Y, 0]$	$\left[\frac{1}{8}, \frac{1}{8}, x\right]$	`[9,-12]`
6	$[-X, Y, 0]$	$\left[\frac{1}{8}, \frac{5}{8}, \frac{3}{4} - x\right]$	`[10,-11]`
7	$[X, 0, -Y]$	$\left[\frac{7}{8}, x + \frac{1}{4}, \frac{3}{8}\right]$	`[13,-16]`
8	$[-X, 0, -Y]$	$\left[\frac{7}{8}, -x, \frac{7}{8}\right]$	`[14,-15]`
9	$[0, Y, -X]$	$\left[x + \frac{3}{4}, \frac{3}{8}, \frac{3}{8}\right]$	`[17,-20]`
10	$[0, Y, X]$	$\left[\frac{1}{2} - x, \frac{7}{8}, \frac{3}{8}\right]$	`[18,-19]`
11	$[Y, X, 0]$	$\left[\frac{7}{8}, \frac{3}{8}, \frac{1}{2} - x\right]$	`[21,-24]`
12	$[Y, -X, 0]$	$\left[\frac{3}{8}, \frac{3}{8}, x + \frac{3}{4}\right]$	`[22,-23]`
13	$[0, -X, -Y]$	$\left[\frac{1}{2} - x, \frac{7}{8}, \frac{3}{8}\right]$	`[25,-28]`
14	$[0, X, -Y]$	$\left[x + \frac{3}{4}, \frac{3}{8}, \frac{3}{8}\right]$	`[26,-27]`
15	$[-Y, 0, -X]$	$\left[\frac{7}{8}, -x, \frac{7}{8}\right]$	`[29,-32]`
16	$[-Y, 0, X]$	$\left[\frac{7}{8}, x + \frac{1}{4}, \frac{3}{8}\right]$	`[30,-31]`
17	$[-X, -Y, 0]$	$\left[\frac{7}{8}, \frac{3}{8}, \frac{1}{2} - x\right]$	`[33,-36]`
18	$[X, -Y, 0]$	$\left[\frac{3}{8}, \frac{3}{8}, x + \frac{3}{4}\right]$	`[34,-35]`
19	$[-X, 0, Y]$	$\left[\frac{5}{8}, \frac{3}{4} - x, \frac{1}{8}\right]$	`[37,-40]`
20	$[X, 0, Y]$	$\left[\frac{1}{8}, x, \frac{1}{8}\right]$	`[38,-39]`
21	$[0, -Y, X]$	$\left[\frac{3}{4} - x, \frac{1}{8}, \frac{5}{8}\right]$	`[41,-44]`
22	$[0, -Y, -X]$	$\left[x, \frac{1}{8}, \frac{1}{8}\right]$	`[42,-43]`
23	$[-Y, -X, 0]$	$\left[\frac{1}{8}, \frac{1}{8}, x\right]$	`[45,-48]`
24	$[-Y, X, 0]$	$\left[\frac{1}{8}, \frac{5}{8}, \frac{3}{4} - x\right]$	`[46,-47]`

Table 29: Wyckoff bond: `192e@48f`

No.	vector	center	mapping
1	$[X, Y, Z]$	$\left[x, \frac{1}{8}, \frac{1}{8}\right]$	`[1]`
2	$[-X, -Y, Z]$	$\left[\frac{3}{4} - x, \frac{1}{8}, \frac{5}{8}\right]$	`[2]`
3	$[-X, Y, -Z]$	$\left[\frac{3}{4} - x, \frac{1}{8}, \frac{5}{8}\right]$	`[3]`
4	$[X, -Y, -Z]$	$\left[x, \frac{1}{8}, \frac{1}{8}\right]$	`[4]`

continued ...

Table 29

No.	vector	center	mapping
5	$[Z,\ X,\ Y]$	$\left[\frac{1}{8},\ x,\ \frac{1}{8}\right]$	[5]
6	$[Z,\ -X,\ -Y]$	$\left[\frac{5}{8},\ \frac{3}{4}-x,\ \frac{1}{8}\right]$	[6]
7	$[-Z,\ -X,\ Y]$	$\left[\frac{5}{8},\ \frac{3}{4}-x,\ \frac{1}{8}\right]$	[7]
8	$[-Z,\ X,\ -Y]$	$\left[\frac{1}{8},\ x,\ \frac{1}{8}\right]$	[8]
9	$[Y,\ Z,\ X]$	$\left[\frac{1}{8},\ \frac{1}{8},\ x\right]$	[9]
10	$[-Y,\ Z,\ -X]$	$\left[\frac{1}{8},\ \frac{5}{8},\ \frac{3}{4}-x\right]$	[10]
11	$[Y,\ -Z,\ -X]$	$\left[\frac{1}{8},\ \frac{5}{8},\ \frac{3}{4}-x\right]$	[11]
12	$[-Y,\ -Z,\ X]$	$\left[\frac{1}{8},\ \frac{1}{8},\ x\right]$	[12]
13	$[Y,\ X,\ -Z]$	$\left[\frac{7}{8},\ x+\frac{1}{4},\ \frac{3}{8}\right]$	[13]
14	$[-Y,\ -X,\ -Z]$	$\left[\frac{7}{8},\ -x,\ \frac{7}{8}\right]$	[14]
15	$[Y,\ -X,\ Z]$	$\left[\frac{7}{8},\ -x,\ \frac{7}{8}\right]$	[15]
16	$[-Y,\ X,\ Z]$	$\left[\frac{7}{8},\ x+\frac{1}{4},\ \frac{3}{8}\right]$	[16]
17	$[X,\ Z,\ -Y]$	$\left[x+\frac{3}{4},\ \frac{3}{8},\ \frac{3}{8}\right]$	[17]
18	$[-X,\ Z,\ Y]$	$\left[\frac{1}{2}-x,\ \frac{7}{8},\ \frac{3}{8}\right]$	[18]
19	$[-X,\ -Z,\ -Y]$	$\left[\frac{1}{2}-x,\ \frac{7}{8},\ \frac{3}{8}\right]$	[19]
20	$[X,\ -Z,\ Y]$	$\left[x+\frac{3}{4},\ \frac{3}{8},\ \frac{3}{8}\right]$	[20]
21	$[Z,\ Y,\ -X]$	$\left[\frac{7}{8},\ \frac{3}{8},\ \frac{1}{2}-x\right]$	[21]
22	$[Z,\ -Y,\ X]$	$\left[\frac{3}{8},\ \frac{3}{8},\ x+\frac{3}{4}\right]$	[22]
23	$[-Z,\ Y,\ X]$	$\left[\frac{3}{8},\ \frac{3}{8},\ x+\frac{3}{4}\right]$	[23]
24	$[-Z,\ -Y,\ -X]$	$\left[\frac{7}{8},\ \frac{3}{8},\ \frac{1}{2}-x\right]$	[24]
25	$[-X,\ -Y,\ -Z]$	$\left[\frac{1}{2}-x,\ \frac{7}{8},\ \frac{3}{8}\right]$	[25]
26	$[X,\ Y,\ -Z]$	$\left[x+\frac{3}{4},\ \frac{3}{8},\ \frac{3}{8}\right]$	[26]
27	$[X,\ -Y,\ Z]$	$\left[x+\frac{3}{4},\ \frac{3}{8},\ \frac{3}{8}\right]$	[27]
28	$[-X,\ Y,\ Z]$	$\left[\frac{1}{2}-x,\ \frac{7}{8},\ \frac{3}{8}\right]$	[28]
29	$[-Z,\ -X,\ -Y]$	$\left[\frac{7}{8},\ -x,\ \frac{7}{8}\right]$	[29]
30	$[-Z,\ X,\ Y]$	$\left[\frac{7}{8},\ x+\frac{1}{4},\ \frac{3}{8}\right]$	[30]
31	$[Z,\ X,\ -Y]$	$\left[\frac{7}{8},\ x+\frac{1}{4},\ \frac{3}{8}\right]$	[31]
32	$[Z,\ -X,\ Y]$	$\left[\frac{7}{8},\ -x,\ \frac{7}{8}\right]$	[32]
33	$[-Y,\ -Z,\ -X]$	$\left[\frac{7}{8},\ \frac{3}{8},\ \frac{1}{2}-x\right]$	[33]
34	$[Y,\ -Z,\ X]$	$\left[\frac{3}{8},\ \frac{3}{8},\ x+\frac{3}{4}\right]$	[34]
35	$[-Y,\ Z,\ X]$	$\left[\frac{3}{8},\ \frac{3}{8},\ x+\frac{3}{4}\right]$	[35]
36	$[Y,\ Z,\ -X]$	$\left[\frac{7}{8},\ \frac{3}{8},\ \frac{1}{2}-x\right]$	[36]
37	$[-Y,\ -X,\ Z]$	$\left[\frac{5}{8},\ \frac{3}{4}-x,\ \frac{1}{8}\right]$	[37]
38	$[Y,\ X,\ Z]$	$\left[\frac{1}{8},\ x,\ \frac{1}{8}\right]$	[38]
39	$[-Y,\ X,\ -Z]$	$\left[\frac{1}{8},\ x,\ \frac{1}{8}\right]$	[39]
40	$[Y,\ -X,\ -Z]$	$\left[\frac{5}{8},\ \frac{3}{4}-x,\ \frac{1}{8}\right]$	[40]
41	$[-X,\ -Z,\ Y]$	$\left[\frac{3}{4}-x,\ \frac{1}{8},\ \frac{5}{8}\right]$	[41]
42	$[X,\ -Z,\ -Y]$	$\left[x,\ \frac{1}{8},\ \frac{1}{8}\right]$	[42]
43	$[X,\ Z,\ Y]$	$\left[x,\ \frac{1}{8},\ \frac{1}{8}\right]$	[43]
44	$[-X,\ Z,\ -Y]$	$\left[\frac{3}{4}-x,\ \frac{1}{8},\ \frac{5}{8}\right]$	[44]
45	$[-Z,\ -Y,\ X]$	$\left[\frac{1}{8},\ \frac{1}{8},\ x\right]$	[45]
46	$[-Z,\ Y,\ -X]$	$\left[\frac{1}{8},\ \frac{5}{8},\ \frac{3}{4}-x\right]$	[46]
47	$[Z,\ -Y,\ -X]$	$\left[\frac{1}{8},\ \frac{5}{8},\ \frac{3}{4}-x\right]$	[47]
48	$[Z,\ Y,\ X]$	$\left[\frac{1}{8},\ \frac{1}{8},\ x\right]$	[48]

* Wyckoff site: 96g, site symmetry: ..m

Table 30: Wyckoff bond: `96a@96g`

No.	vector	center	mapping
1	$[X,\ X,\ Y]$	$[x,\ x,\ z]$	`[1,38]`
2	$[-X,\ -X,\ Y]$	$\left[\frac{3}{4}-x,\ \frac{1}{4}-x,\ z+\frac{1}{2}\right]$	`[2,37]`
3	$[-X,\ X,\ -Y]$	$\left[\frac{1}{4}-x,\ x+\frac{1}{2},\ \frac{3}{4}-z\right]$	`[3,39]`
4	$[X,\ -X,\ -Y]$	$\left[x+\frac{1}{2},\ \frac{3}{4}-x,\ \frac{1}{4}-z\right]$	`[4,40]`
5	$[Y,\ X,\ X]$	$[z,\ x,\ x]$	`[5,48]`
6	$[Y,\ -X,\ -X]$	$\left[z+\frac{1}{2},\ \frac{3}{4}-x,\ \frac{1}{4}-x\right]$	`[6,47]`
7	$[-Y,\ -X,\ X]$	$\left[\frac{3}{4}-z,\ \frac{1}{4}-x,\ x+\frac{1}{2}\right]$	`[7,45]`
8	$[-Y,\ X,\ -X]$	$\left[\frac{1}{4}-z,\ x+\frac{1}{2},\ \frac{3}{4}-x\right]$	`[8,46]`
9	$[X,\ Y,\ X]$	$[x,\ z,\ x]$	`[9,43]`
10	$[-X,\ Y,\ -X]$	$\left[\frac{1}{4}-x,\ z+\frac{1}{2},\ \frac{3}{4}-x\right]$	`[10,44]`
11	$[X,\ -Y,\ -X]$	$\left[x+\frac{1}{2},\ \frac{3}{4}-z,\ \frac{1}{4}-x\right]$	`[11,42]`
12	$[-X,\ -Y,\ X]$	$\left[\frac{3}{4}-x,\ \frac{1}{4}-z,\ x+\frac{1}{2}\right]$	`[12,41]`
13	$[X,\ X,\ -Y]$	$\left[x+\frac{3}{4},\ x+\frac{1}{4},\ \frac{1}{2}-z\right]$	`[13,26]`
14	$[-X,\ -X,\ -Y]$	$[-x,\ -x,\ -z]$	`[14,25]`
15	$[X,\ -X,\ Y]$	$\left[x+\frac{1}{4},\ \frac{1}{2}-x,\ z+\frac{3}{4}\right]$	`[15,27]`
16	$[-X,\ X,\ Y]$	$\left[\frac{1}{2}-x,\ x+\frac{3}{4},\ z+\frac{1}{4}\right]$	`[16,28]`
17	$[X,\ Y,\ -X]$	$\left[x+\frac{3}{4},\ z+\frac{1}{4},\ \frac{1}{2}-x\right]$	`[17,36]`
18	$[-X,\ Y,\ X]$	$\left[\frac{1}{2}-x,\ z+\frac{3}{4},\ x+\frac{1}{4}\right]$	`[18,35]`
19	$[-X,\ -Y,\ -X]$	$[-x,\ -z,\ -x]$	`[19,33]`
20	$[X,\ -Y,\ X]$	$\left[x+\frac{1}{4},\ \frac{1}{2}-z,\ x+\frac{3}{4}\right]$	`[20,34]`
21	$[Y,\ X,\ -X]$	$\left[z+\frac{3}{4},\ x+\frac{1}{4},\ \frac{1}{2}-x\right]$	`[21,31]`
22	$[Y,\ -X,\ X]$	$\left[z+\frac{1}{4},\ \frac{1}{2}-x,\ x+\frac{3}{4}\right]$	`[22,32]`
23	$[-Y,\ X,\ X]$	$\left[\frac{1}{2}-z,\ x+\frac{3}{4},\ x+\frac{1}{4}\right]$	`[23,30]`
24	$[-Y,\ -X,\ -X]$	$[-z,\ -x,\ -x]$	`[24,29]`

Table 31: Wyckoff bond: `96b@96g`

No.	vector	center	mapping
1	$[X,\ -X,\ 0]$	$[x,\ x,\ z]$	`[1,-38]`
2	$[-X,\ X,\ 0]$	$\left[\frac{3}{4}-x,\ \frac{1}{4}-x,\ z+\frac{1}{2}\right]$	`[2,-37]`
3	$[-X,\ -X,\ 0]$	$\left[\frac{1}{4}-x,\ x+\frac{1}{2},\ \frac{3}{4}-z\right]$	`[3,-39]`
4	$[X,\ X,\ 0]$	$\left[x+\frac{1}{2},\ \frac{3}{4}-x,\ \frac{1}{4}-z\right]$	`[4,-40]`
5	$[0,\ X,\ -X]$	$[z,\ x,\ x]$	`[5,-48]`
6	$[0,\ -X,\ X]$	$\left[z+\frac{1}{2},\ \frac{3}{4}-x,\ \frac{1}{4}-x\right]$	`[6,-47]`
7	$[0,\ -X,\ -X]$	$\left[\frac{3}{4}-z,\ \frac{1}{4}-x,\ x+\frac{1}{2}\right]$	`[7,-45]`
8	$[0,\ X,\ X]$	$\left[\frac{1}{4}-z,\ x+\frac{1}{2},\ \frac{3}{4}-x\right]$	`[8,-46]`
9	$[-X,\ 0,\ X]$	$[x,\ z,\ x]$	`[9,-43]`
10	$[X,\ 0,\ -X]$	$\left[\frac{1}{4}-x,\ z+\frac{1}{2},\ \frac{3}{4}-x\right]$	`[10,-44]`
11	$[-X,\ 0,\ -X]$	$\left[x+\frac{1}{2},\ \frac{3}{4}-z,\ \frac{1}{4}-x\right]$	`[11,-42]`
12	$[X,\ 0,\ X]$	$\left[\frac{3}{4}-x,\ \frac{1}{4}-z,\ x+\frac{1}{2}\right]$	`[12,-41]`
13	$[-X,\ X,\ 0]$	$\left[x+\frac{3}{4},\ x+\frac{1}{4},\ \frac{1}{2}-z\right]$	`[13,-26]`
14	$[X,\ -X,\ 0]$	$[-x,\ -x,\ -z]$	`[14,-25]`
15	$[-X,\ -X,\ 0]$	$\left[x+\frac{1}{4},\ \frac{1}{2}-x,\ z+\frac{3}{4}\right]$	`[15,-27]`

continued ...

Table 31

No.	vector	center	mapping
16	$[X,\ X,\ 0]$	$\left[\frac{1}{2}-x,\ x+\frac{3}{4},\ z+\frac{1}{4}\right]$	`[16,-28]`
17	$[X,\ 0,\ X]$	$\left[x+\frac{3}{4},\ z+\frac{1}{4},\ \frac{1}{2}-x\right]$	`[17,-36]`
18	$[-X,\ 0,\ -X]$	$\left[\frac{1}{2}-x,\ z+\frac{3}{4},\ x+\frac{1}{4}\right]$	`[18,-35]`
19	$[-X,\ 0,\ X]$	$[-x,\ -z,\ -x]$	`[19,-33]`
20	$[X,\ 0,\ -X]$	$\left[x+\frac{1}{4},\ \frac{1}{2}-z,\ x+\frac{3}{4}\right]$	`[20,-34]`
21	$[0,\ -X,\ -X]$	$\left[z+\frac{3}{4},\ x+\frac{1}{4},\ \frac{1}{2}-x\right]$	`[21,-31]`
22	$[0,\ X,\ X]$	$\left[z+\frac{1}{4},\ \frac{1}{2}-x,\ x+\frac{3}{4}\right]$	`[22,-32]`
23	$[0,\ -X,\ X]$	$\left[\frac{1}{2}-z,\ x+\frac{3}{4},\ x+\frac{1}{4}\right]$	`[23,-30]`
24	$[0,\ X,\ -X]$	$[-z,\ -x,\ -x]$	`[24,-29]`

Table 32: Wyckoff bond: `192c@96g`

No.	vector	center	mapping
1	$[X,\ Y,\ Z]$	$[x,\ x,\ z]$	`[1]`
2	$[-X,\ -Y,\ Z]$	$\left[\frac{3}{4}-x,\ \frac{1}{4}-x,\ z+\frac{1}{2}\right]$	`[2]`
3	$[-X,\ Y,\ -Z]$	$\left[\frac{1}{4}-x,\ x+\frac{1}{2},\ \frac{3}{4}-z\right]$	`[3]`
4	$[X,\ -Y,\ -Z]$	$\left[x+\frac{1}{2},\ \frac{3}{4}-x,\ \frac{1}{4}-z\right]$	`[4]`
5	$[Z,\ X,\ Y]$	$[z,\ x,\ x]$	`[5]`
6	$[Z,\ -X,\ -Y]$	$\left[z+\frac{1}{2},\ \frac{3}{4}-x,\ \frac{1}{4}-x\right]$	`[6]`
7	$[-Z,\ -X,\ Y]$	$\left[\frac{3}{4}-z,\ \frac{1}{4}-x,\ x+\frac{1}{2}\right]$	`[7]`
8	$[-Z,\ X,\ -Y]$	$\left[\frac{1}{4}-z,\ x+\frac{1}{2},\ \frac{3}{4}-x\right]$	`[8]`
9	$[Y,\ Z,\ X]$	$[x,\ z,\ x]$	`[9]`
10	$[-Y,\ Z,\ -X]$	$\left[\frac{1}{4}-x,\ z+\frac{1}{2},\ \frac{3}{4}-x\right]$	`[10]`
11	$[Y,\ -Z,\ -X]$	$\left[x+\frac{1}{2},\ \frac{3}{4}-z,\ \frac{1}{4}-x\right]$	`[11]`
12	$[-Y,\ -Z,\ X]$	$\left[\frac{3}{4}-x,\ \frac{1}{4}-z,\ x+\frac{1}{2}\right]$	`[12]`
13	$[Y,\ X,\ -Z]$	$\left[x+\frac{3}{4},\ x+\frac{1}{4},\ \frac{1}{2}-z\right]$	`[13]`
14	$[-Y,\ -X,\ -Z]$	$[-x,\ -x,\ -z]$	`[14]`
15	$[Y,\ -X,\ Z]$	$\left[x+\frac{1}{4},\ \frac{1}{2}-x,\ z+\frac{3}{4}\right]$	`[15]`
16	$[-Y,\ X,\ Z]$	$\left[\frac{1}{2}-x,\ x+\frac{3}{4},\ z+\frac{1}{4}\right]$	`[16]`
17	$[X,\ Z,\ -Y]$	$\left[x+\frac{3}{4},\ z+\frac{1}{4},\ \frac{1}{2}-x\right]$	`[17]`
18	$[-X,\ Z,\ Y]$	$\left[\frac{1}{2}-x,\ z+\frac{3}{4},\ x+\frac{1}{4}\right]$	`[18]`
19	$[-X,\ -Z,\ -Y]$	$[-x,\ -z,\ -x]$	`[19]`
20	$[X,\ -Z,\ Y]$	$\left[x+\frac{1}{4},\ \frac{1}{2}-z,\ x+\frac{3}{4}\right]$	`[20]`
21	$[Z,\ Y,\ -X]$	$\left[z+\frac{3}{4},\ x+\frac{1}{4},\ \frac{1}{2}-x\right]$	`[21]`
22	$[Z,\ -Y,\ X]$	$\left[z+\frac{1}{4},\ \frac{1}{2}-x,\ x+\frac{3}{4}\right]$	`[22]`
23	$[-Z,\ Y,\ X]$	$\left[\frac{1}{2}-z,\ x+\frac{3}{4},\ x+\frac{1}{4}\right]$	`[23]`
24	$[-Z,\ -Y,\ -X]$	$[-z,\ -x,\ -x]$	`[24]`
25	$[-X,\ -Y,\ -Z]$	$[-x,\ -x,\ -z]$	`[25]`
26	$[X,\ Y,\ -Z]$	$\left[x+\frac{3}{4},\ x+\frac{1}{4},\ \frac{1}{2}-z\right]$	`[26]`
27	$[X,\ -Y,\ Z]$	$\left[x+\frac{1}{4},\ \frac{1}{2}-x,\ z+\frac{3}{4}\right]$	`[27]`
28	$[-X,\ Y,\ Z]$	$\left[\frac{1}{2}-x,\ x+\frac{3}{4},\ z+\frac{1}{4}\right]$	`[28]`
29	$[-Z,\ -X,\ -Y]$	$[-z,\ -x,\ -x]$	`[29]`
30	$[-Z,\ X,\ Y]$	$\left[\frac{1}{2}-z,\ x+\frac{3}{4},\ x+\frac{1}{4}\right]$	`[30]`
31	$[Z,\ X,\ -Y]$	$\left[z+\frac{3}{4},\ x+\frac{1}{4},\ \frac{1}{2}-x\right]$	`[31]`

continued ...

Table 32

No.	vector	center	mapping
32	$[Z,\,-X,\,Y]$	$\left[z+\frac{1}{4},\,\frac{1}{2}-x,\,x+\frac{3}{4}\right]$	[32]
33	$[-Y,\,-Z,\,-X]$	$[-x,\,-z,\,-x]$	[33]
34	$[Y,\,-Z,\,X]$	$\left[x+\frac{1}{4},\,\frac{1}{2}-z,\,x+\frac{3}{4}\right]$	[34]
35	$[-Y,\,Z,\,X]$	$\left[\frac{1}{2}-x,\,z+\frac{3}{4},\,x+\frac{1}{4}\right]$	[35]
36	$[Y,\,Z,\,-X]$	$\left[x+\frac{3}{4},\,z+\frac{1}{4},\,\frac{1}{2}-x\right]$	[36]
37	$[-Y,\,-X,\,Z]$	$\left[\frac{3}{4}-x,\,\frac{1}{4}-x,\,z+\frac{1}{2}\right]$	[37]
38	$[Y,\,X,\,Z]$	$[x,\,x,\,z]$	[38]
39	$[-Y,\,X,\,-Z]$	$\left[\frac{1}{4}-x,\,x+\frac{1}{2},\,\frac{3}{4}-z\right]$	[39]
40	$[Y,\,-X,\,-Z]$	$\left[x+\frac{1}{2},\,\frac{3}{4}-x,\,\frac{1}{4}-z\right]$	[40]
41	$[-X,\,-Z,\,Y]$	$\left[\frac{3}{4}-x,\,\frac{1}{4}-z,\,x+\frac{1}{2}\right]$	[41]
42	$[X,\,-Z,\,-Y]$	$\left[x+\frac{1}{2},\,\frac{3}{4}-z,\,\frac{1}{4}-x\right]$	[42]
43	$[X,\,Z,\,Y]$	$[x,\,z,\,x]$	[43]
44	$[-X,\,Z,\,-Y]$	$\left[\frac{1}{4}-x,\,z+\frac{1}{2},\,\frac{3}{4}-x\right]$	[44]
45	$[-Z,\,-Y,\,X]$	$\left[\frac{3}{4}-z,\,\frac{1}{4}-x,\,x+\frac{1}{2}\right]$	[45]
46	$[-Z,\,Y,\,-X]$	$\left[\frac{1}{4}-z,\,x+\frac{1}{2},\,\frac{3}{4}-x\right]$	[46]
47	$[Z,\,-Y,\,-X]$	$\left[z+\frac{1}{2},\,\frac{3}{4}-x,\,\frac{1}{4}-x\right]$	[47]
48	$[Z,\,Y,\,X]$	$[z,\,x,\,x]$	[48]

* Wyckoff site: 96h, site symmetry: ..2

Table 33: Wyckoff bond: 96a@96h

No.	vector	center	mapping
1	$[Y,\,X,\,X]$	$[0,\,y,\,-y]$	[1,-19]
2	$[-Y,\,-X,\,X]$	$\left[\frac{3}{4},\,\frac{1}{4}-y,\,\frac{1}{2}-y\right]$	[2,-17]
3	$[-Y,\,X,\,-X]$	$\left[\frac{1}{4},\,y+\frac{1}{2},\,y+\frac{3}{4}\right]$	[3,-20]
4	$[Y,\,-X,\,-X]$	$\left[\frac{1}{2},\,\frac{3}{4}-y,\,y+\frac{1}{4}\right]$	[4,-18]
5	$[X,\,Y,\,X]$	$[-y,\,0,\,y]$	[5,-14]
6	$[X,\,-Y,\,-X]$	$\left[\frac{1}{2}-y,\,\frac{3}{4},\,\frac{1}{4}-y\right]$	[6,-16]
7	$[-X,\,-Y,\,X]$	$\left[y+\frac{3}{4},\,\frac{1}{4},\,y+\frac{1}{2}\right]$	[7,-13]
8	$[-X,\,Y,\,-X]$	$\left[y+\frac{1}{4},\,\frac{1}{2},\,\frac{3}{4}-y\right]$	[8,-15]
9	$[X,\,X,\,Y]$	$[y,\,-y,\,0]$	[9,-24]
10	$[-X,\,X,\,-Y]$	$\left[\frac{1}{4}-y,\,\frac{1}{2}-y,\,\frac{3}{4}\right]$	[10,-22]
11	$[X,\,-X,\,-Y]$	$\left[y+\frac{1}{2},\,y+\frac{3}{4},\,\frac{1}{4}\right]$	[11,-23]
12	$[-X,\,-X,\,Y]$	$\left[\frac{3}{4}-y,\,y+\frac{1}{4},\,\frac{1}{2}\right]$	[12,-21]
13	$[-Y,\,-X,\,-X]$	$[0,\,-y,\,y]$	[25,-43]
14	$[Y,\,X,\,-X]$	$\left[\frac{1}{4},\,y+\frac{3}{4},\,y+\frac{1}{2}\right]$	[26,-41]
15	$[Y,\,-X,\,X]$	$\left[\frac{3}{4},\,\frac{1}{2}-y,\,\frac{1}{4}-y\right]$	[27,-44]
16	$[-Y,\,X,\,X]$	$\left[\frac{1}{2},\,y+\frac{1}{4},\,\frac{3}{4}-y\right]$	[28,-42]
17	$[-X,\,-Y,\,-X]$	$[y,\,0,\,-y]$	[29,-38]
18	$[-X,\,Y,\,X]$	$\left[y+\frac{1}{2},\,\frac{1}{4},\,y+\frac{3}{4}\right]$	[30,-40]
19	$[X,\,Y,\,-X]$	$\left[\frac{1}{4}-y,\,\frac{3}{4},\,\frac{1}{2}-y\right]$	[31,-37]
20	$[X,\,-Y,\,X]$	$\left[\frac{3}{4}-y,\,\frac{1}{2},\,y+\frac{1}{4}\right]$	[32,-39]
21	$[-X,\,-X,\,-Y]$	$[-y,\,y,\,0]$	[33,-48]
22	$[X,\,-X,\,Y]$	$\left[y+\frac{3}{4},\,y+\frac{1}{2},\,\frac{1}{4}\right]$	[34,-46]

continued ...

Table 33

No.	vector	center	mapping
23	$[-X,\ X,\ Y]$	$\left[\frac{1}{2}-y,\ \frac{1}{4}-y,\ \frac{3}{4}\right]$	`[35,-47]`
24	$[X,\ X,\ -Y]$	$\left[y+\frac{1}{4},\ \frac{3}{4}-y,\ \frac{1}{2}\right]$	`[36,-45]`

Table 34: Wyckoff bond: `96b@96h`

No.	vector	center	mapping
1	$[0,\ X,\ -X]$	$[0,\ y,\ -y]$	`[1,19]`
2	$[0,\ -X,\ -X]$	$\left[\frac{3}{4},\ \frac{1}{4}-y,\ \frac{1}{2}-y\right]$	`[2,17]`
3	$[0,\ X,\ X]$	$\left[\frac{1}{4},\ y+\frac{1}{2},\ y+\frac{3}{4}\right]$	`[3,20]`
4	$[0,\ -X,\ X]$	$\left[\frac{1}{2},\ \frac{3}{4}-y,\ y+\frac{1}{4}\right]$	`[4,18]`
5	$[-X,\ 0,\ X]$	$[-y,\ 0,\ y]$	`[5,14]`
6	$[-X,\ 0,\ -X]$	$\left[\frac{1}{2}-y,\ \frac{3}{4},\ \frac{1}{4}-y\right]$	`[6,16]`
7	$[X,\ 0,\ X]$	$\left[y+\frac{3}{4},\ \frac{1}{4},\ y+\frac{1}{2}\right]$	`[7,13]`
8	$[X,\ 0,\ -X]$	$\left[y+\frac{1}{4},\ \frac{1}{2},\ \frac{3}{4}-y\right]$	`[8,15]`
9	$[X,\ -X,\ 0]$	$[y,\ -y,\ 0]$	`[9,24]`
10	$[-X,\ -X,\ 0]$	$\left[\frac{1}{4}-y,\ \frac{1}{2}-y,\ \frac{3}{4}\right]$	`[10,22]`
11	$[X,\ X,\ 0]$	$\left[y+\frac{1}{2},\ y+\frac{3}{4},\ \frac{1}{4}\right]$	`[11,23]`
12	$[-X,\ X,\ 0]$	$\left[\frac{3}{4}-y,\ y+\frac{1}{4},\ \frac{1}{2}\right]$	`[12,21]`
13	$[0,\ -X,\ X]$	$[0,\ -y,\ y]$	`[25,43]`
14	$[0,\ X,\ X]$	$\left[\frac{1}{4},\ y+\frac{3}{4},\ y+\frac{1}{2}\right]$	`[26,41]`
15	$[0,\ -X,\ -X]$	$\left[\frac{3}{4},\ \frac{1}{2}-y,\ \frac{1}{4}-y\right]$	`[27,44]`
16	$[0,\ X,\ -X]$	$\left[\frac{1}{2},\ y+\frac{1}{4},\ \frac{3}{4}-y\right]$	`[28,42]`
17	$[X,\ 0,\ -X]$	$[y,\ 0,\ -y]$	`[29,38]`
18	$[X,\ 0,\ X]$	$\left[y+\frac{1}{2},\ \frac{1}{4},\ y+\frac{3}{4}\right]$	`[30,40]`
19	$[-X,\ 0,\ -X]$	$\left[\frac{1}{4}-y,\ \frac{3}{4},\ \frac{1}{2}-y\right]$	`[31,37]`
20	$[-X,\ 0,\ X]$	$\left[\frac{3}{4}-y,\ \frac{1}{2},\ y+\frac{1}{4}\right]$	`[32,39]`
21	$[-X,\ X,\ 0]$	$[-y,\ y,\ 0]$	`[33,48]`
22	$[X,\ X,\ 0]$	$\left[y+\frac{3}{4},\ y+\frac{1}{2},\ \frac{1}{4}\right]$	`[34,46]`
23	$[-X,\ -X,\ 0]$	$\left[\frac{1}{2}-y,\ \frac{1}{4}-y,\ \frac{3}{4}\right]$	`[35,47]`
24	$[X,\ -X,\ 0]$	$\left[y+\frac{1}{4},\ \frac{3}{4}-y,\ \frac{1}{2}\right]$	`[36,45]`

Table 35: Wyckoff bond: `192c@96h`

No.	vector	center	mapping
1	$[X,\ Y,\ Z]$	$[0,\ y,\ -y]$	`[1]`
2	$[-X,\ -Y,\ Z]$	$\left[\frac{3}{4},\ \frac{1}{4}-y,\ \frac{1}{2}-y\right]$	`[2]`
3	$[-X,\ Y,\ -Z]$	$\left[\frac{1}{4},\ y+\frac{1}{2},\ y+\frac{3}{4}\right]$	`[3]`
4	$[X,\ -Y,\ -Z]$	$\left[\frac{1}{2},\ \frac{3}{4}-y,\ y+\frac{1}{4}\right]$	`[4]`
5	$[Z,\ X,\ Y]$	$[-y,\ 0,\ y]$	`[5]`
6	$[Z,\ -X,\ -Y]$	$\left[\frac{1}{2}-y,\ \frac{3}{4},\ \frac{1}{4}-y\right]$	`[6]`
7	$[-Z,\ -X,\ Y]$	$\left[y+\frac{3}{4},\ \frac{1}{4},\ y+\frac{1}{2}\right]$	`[7]`
8	$[-Z,\ X,\ -Y]$	$\left[y+\frac{1}{4},\ \frac{1}{2},\ \frac{3}{4}-y\right]$	`[8]`

continued ...

Table 35

No.	vector	center	mapping
9	$[Y,\ Z,\ X]$	$[y,\ -y,\ 0]$	[9]
10	$[-Y,\ Z,\ -X]$	$\left[\frac{1}{4}-y,\ \frac{1}{2}-y,\ \frac{3}{4}\right]$	[10]
11	$[Y,\ -Z,\ -X]$	$\left[y+\frac{1}{2},\ y+\frac{3}{4},\ \frac{1}{4}\right]$	[11]
12	$[-Y,\ -Z,\ X]$	$\left[\frac{3}{4}-y,\ y+\frac{1}{4},\ \frac{1}{2}\right]$	[12]
13	$[Y,\ X,\ -Z]$	$\left[y+\frac{3}{4},\ \frac{1}{4},\ y+\frac{1}{2}\right]$	[13]
14	$[-Y,\ -X,\ -Z]$	$[-y,\ 0,\ y]$	[14]
15	$[Y,\ -X,\ Z]$	$\left[y+\frac{1}{4},\ \frac{1}{2},\ \frac{3}{4}-y\right]$	[15]
16	$[-Y,\ X,\ Z]$	$\left[\frac{1}{2}-y,\ \frac{3}{4},\ \frac{1}{4}-y\right]$	[16]
17	$[X,\ Z,\ -Y]$	$\left[\frac{3}{4},\ \frac{1}{4}-y,\ \frac{1}{2}-y\right]$	[17]
18	$[-X,\ Z,\ Y]$	$\left[\frac{1}{2},\ \frac{3}{4}-y,\ y+\frac{1}{4}\right]$	[18]
19	$[-X,\ -Z,\ -Y]$	$[0,\ y,\ -y]$	[19]
20	$[X,\ -Z,\ Y]$	$\left[\frac{1}{4},\ y+\frac{1}{2},\ y+\frac{3}{4}\right]$	[20]
21	$[Z,\ Y,\ -X]$	$\left[\frac{3}{4}-y,\ y+\frac{1}{4},\ \frac{1}{2}\right]$	[21]
22	$[Z,\ -Y,\ X]$	$\left[\frac{1}{4}-y,\ \frac{1}{2}-y,\ \frac{3}{4}\right]$	[22]
23	$[-Z,\ Y,\ X]$	$\left[y+\frac{1}{2},\ y+\frac{3}{4},\ \frac{1}{4}\right]$	[23]
24	$[-Z,\ -Y,\ -X]$	$[y,\ -y,\ 0]$	[24]
25	$[-X,\ -Y,\ -Z]$	$[0,\ -y,\ y]$	[25]
26	$[X,\ Y,\ -Z]$	$\left[\frac{1}{4},\ y+\frac{3}{4},\ y+\frac{1}{2}\right]$	[26]
27	$[X,\ -Y,\ Z]$	$\left[\frac{3}{4},\ \frac{1}{2}-y,\ \frac{1}{4}-y\right]$	[27]
28	$[-X,\ Y,\ Z]$	$\left[\frac{1}{2},\ y+\frac{1}{4},\ \frac{3}{4}-y\right]$	[28]
29	$[-Z,\ -X,\ -Y]$	$[y,\ 0,\ -y]$	[29]
30	$[-Z,\ X,\ Y]$	$\left[y+\frac{1}{2},\ \frac{1}{4},\ y+\frac{3}{4}\right]$	[30]
31	$[Z,\ X,\ -Y]$	$\left[\frac{1}{4}-y,\ \frac{3}{4},\ \frac{1}{2}-y\right]$	[31]
32	$[Z,\ -X,\ Y]$	$\left[\frac{3}{4}-y,\ \frac{1}{2},\ y+\frac{1}{4}\right]$	[32]
33	$[-Y,\ -Z,\ -X]$	$[-y,\ y,\ 0]$	[33]
34	$[Y,\ -Z,\ X]$	$\left[y+\frac{3}{4},\ y+\frac{1}{2},\ \frac{1}{4}\right]$	[34]
35	$[-Y,\ Z,\ X]$	$\left[\frac{1}{2}-y,\ \frac{1}{4}-y,\ \frac{3}{4}\right]$	[35]
36	$[Y,\ Z,\ -X]$	$\left[y+\frac{1}{4},\ \frac{3}{4}-y,\ \frac{1}{2}\right]$	[36]
37	$[-Y,\ -X,\ Z]$	$\left[\frac{1}{4}-y,\ \frac{3}{4},\ \frac{1}{2}-y\right]$	[37]
38	$[Y,\ X,\ Z]$	$[y,\ 0,\ -y]$	[38]
39	$[-Y,\ X,\ -Z]$	$\left[\frac{3}{4}-y,\ \frac{1}{2},\ y+\frac{1}{4}\right]$	[39]
40	$[Y,\ -X,\ -Z]$	$\left[y+\frac{1}{2},\ \frac{1}{4},\ y+\frac{3}{4}\right]$	[40]
41	$[-X,\ -Z,\ Y]$	$\left[\frac{1}{4},\ y+\frac{3}{4},\ y+\frac{1}{2}\right]$	[41]
42	$[X,\ -Z,\ -Y]$	$\left[\frac{1}{2},\ y+\frac{1}{4},\ \frac{3}{4}-y\right]$	[42]
43	$[X,\ Z,\ Y]$	$[0,\ -y,\ y]$	[43]
44	$[-X,\ Z,\ -Y]$	$\left[\frac{3}{4},\ \frac{1}{2}-y,\ \frac{1}{4}-y\right]$	[44]
45	$[-Z,\ -Y,\ X]$	$\left[y+\frac{1}{4},\ \frac{3}{4}-y,\ \frac{1}{2}\right]$	[45]
46	$[-Z,\ Y,\ -X]$	$\left[y+\frac{3}{4},\ y+\frac{1}{2},\ \frac{1}{4}\right]$	[46]
47	$[Z,\ -Y,\ -X]$	$\left[\frac{1}{2}-y,\ \frac{1}{4}-y,\ \frac{3}{4}\right]$	[47]
48	$[Z,\ Y,\ X]$	$[-y,\ y,\ 0]$	[48]

* Wyckoff site: 192i, site symmetry: 1

Table 36: Wyckoff bond: `192a@192i`

No.	vector	center	mapping
1	$[X,\ Y,\ Z]$	$[x,\ y,\ z]$	`[1]`
2	$[-X,\ -Y,\ Z]$	$\left[\frac{3}{4}-x,\ \frac{1}{4}-y,\ z+\frac{1}{2}\right]$	`[2]`
3	$[-X,\ Y,\ -Z]$	$\left[\frac{1}{4}-x,\ y+\frac{1}{2},\ \frac{3}{4}-z\right]$	`[3]`
4	$[X,\ -Y,\ -Z]$	$\left[x+\frac{1}{2},\ \frac{3}{4}-y,\ \frac{1}{4}-z\right]$	`[4]`
5	$[Z,\ X,\ Y]$	$[z,\ x,\ y]$	`[5]`
6	$[Z,\ -X,\ -Y]$	$\left[z+\frac{1}{2},\ \frac{3}{4}-x,\ \frac{1}{4}-y\right]$	`[6]`
7	$[-Z,\ -X,\ Y]$	$\left[\frac{3}{4}-z,\ \frac{1}{4}-x,\ y+\frac{1}{2}\right]$	`[7]`
8	$[-Z,\ X,\ -Y]$	$\left[\frac{1}{4}-z,\ x+\frac{1}{2},\ \frac{3}{4}-y\right]$	`[8]`
9	$[Y,\ Z,\ X]$	$[y,\ z,\ x]$	`[9]`
10	$[-Y,\ Z,\ -X]$	$\left[\frac{1}{4}-y,\ z+\frac{1}{2},\ \frac{3}{4}-x\right]$	`[10]`
11	$[Y,\ -Z,\ -X]$	$\left[y+\frac{1}{2},\ \frac{3}{4}-z,\ \frac{1}{4}-x\right]$	`[11]`
12	$[-Y,\ -Z,\ X]$	$\left[\frac{3}{4}-y,\ \frac{1}{4}-z,\ x+\frac{1}{2}\right]$	`[12]`
13	$[Y,\ X,\ -Z]$	$\left[y+\frac{3}{4},\ x+\frac{1}{4},\ \frac{1}{2}-z\right]$	`[13]`
14	$[-Y,\ -X,\ -Z]$	$[-y,\ -x,\ -z]$	`[14]`
15	$[Y,\ -X,\ Z]$	$\left[y+\frac{1}{4},\ \frac{1}{2}-x,\ z+\frac{3}{4}\right]$	`[15]`
16	$[-Y,\ X,\ Z]$	$\left[\frac{1}{2}-y,\ x+\frac{3}{4},\ z+\frac{1}{4}\right]$	`[16]`
17	$[X,\ Z,\ -Y]$	$\left[x+\frac{3}{4},\ z+\frac{1}{4},\ \frac{1}{2}-y\right]$	`[17]`
18	$[-X,\ Z,\ Y]$	$\left[\frac{1}{2}-x,\ z+\frac{3}{4},\ y+\frac{1}{4}\right]$	`[18]`
19	$[-X,\ -Z,\ -Y]$	$[-x,\ -z,\ -y]$	`[19]`
20	$[X,\ -Z,\ Y]$	$\left[x+\frac{1}{4},\ \frac{1}{2}-z,\ y+\frac{3}{4}\right]$	`[20]`
21	$[Z,\ Y,\ -X]$	$\left[z+\frac{3}{4},\ y+\frac{1}{4},\ \frac{1}{2}-x\right]$	`[21]`
22	$[Z,\ -Y,\ X]$	$\left[z+\frac{1}{4},\ \frac{1}{2}-y,\ x+\frac{3}{4}\right]$	`[22]`
23	$[-Z,\ Y,\ X]$	$\left[\frac{1}{2}-z,\ y+\frac{3}{4},\ x+\frac{1}{4}\right]$	`[23]`
24	$[-Z,\ -Y,\ -X]$	$[-z,\ -y,\ -x]$	`[24]`
25	$[-X,\ -Y,\ -Z]$	$[-x,\ -y,\ -z]$	`[25]`
26	$[X,\ Y,\ -Z]$	$\left[x+\frac{1}{4},\ y+\frac{3}{4},\ \frac{1}{2}-z\right]$	`[26]`
27	$[X,\ -Y,\ Z]$	$\left[x+\frac{3}{4},\ \frac{1}{2}-y,\ z+\frac{1}{4}\right]$	`[27]`
28	$[-X,\ Y,\ Z]$	$\left[\frac{1}{2}-x,\ y+\frac{1}{4},\ z+\frac{3}{4}\right]$	`[28]`
29	$[-Z,\ -X,\ -Y]$	$[-z,\ -x,\ -y]$	`[29]`
30	$[-Z,\ X,\ Y]$	$\left[\frac{1}{2}-z,\ x+\frac{1}{4},\ y+\frac{3}{4}\right]$	`[30]`
31	$[Z,\ X,\ -Y]$	$\left[z+\frac{1}{4},\ x+\frac{3}{4},\ \frac{1}{2}-y\right]$	`[31]`
32	$[Z,\ -X,\ Y]$	$\left[z+\frac{3}{4},\ \frac{1}{2}-x,\ y+\frac{1}{4}\right]$	`[32]`
33	$[-Y,\ -Z,\ -X]$	$[-y,\ -z,\ -x]$	`[33]`
34	$[Y,\ -Z,\ X]$	$\left[y+\frac{3}{4},\ \frac{1}{2}-z,\ x+\frac{1}{4}\right]$	`[34]`
35	$[-Y,\ Z,\ X]$	$\left[\frac{1}{2}-y,\ z+\frac{1}{4},\ x+\frac{3}{4}\right]$	`[35]`
36	$[Y,\ Z,\ -X]$	$\left[y+\frac{1}{4},\ z+\frac{3}{4},\ \frac{1}{2}-x\right]$	`[36]`
37	$[-Y,\ -X,\ Z]$	$\left[\frac{1}{4}-y,\ \frac{3}{4}-x,\ z+\frac{1}{2}\right]$	`[37]`
38	$[Y,\ X,\ Z]$	$[y,\ x,\ z]$	`[38]`
39	$[-Y,\ X,\ -Z]$	$\left[\frac{3}{4}-y,\ x+\frac{1}{2},\ \frac{1}{4}-z\right]$	`[39]`
40	$[Y,\ -X,\ -Z]$	$\left[y+\frac{1}{2},\ \frac{1}{4}-x,\ \frac{3}{4}-z\right]$	`[40]`
41	$[-X,\ -Z,\ Y]$	$\left[\frac{1}{4}-x,\ \frac{3}{4}-z,\ y+\frac{1}{2}\right]$	`[41]`
42	$[X,\ -Z,\ -Y]$	$\left[x+\frac{1}{2},\ \frac{1}{4}-z,\ \frac{3}{4}-y\right]$	`[42]`
43	$[X,\ Z,\ Y]$	$[x,\ z,\ y]$	`[43]`
44	$[-X,\ Z,\ -Y]$	$\left[\frac{3}{4}-x,\ z+\frac{1}{2},\ \frac{1}{4}-y\right]$	`[44]`
45	$[-Z,\ -Y,\ X]$	$\left[\frac{1}{4}-z,\ \frac{3}{4}-y,\ x+\frac{1}{2}\right]$	`[45]`
46	$[-Z,\ Y,\ -X]$	$\left[\frac{3}{4}-z,\ y+\frac{1}{2},\ \frac{1}{4}-x\right]$	`[46]`

continued ...

Table 36

No.	vector	center	mapping
47	$[Z,\,-Y,\,-X]$	$\left[z+\frac{1}{2},\,\frac{1}{4}-y,\,\frac{3}{4}-x\right]$	[47]
48	$[Z,\,Y,\,X]$	$[z,\,y,\,x]$	[48]