

SG No. 16  $D_2^1$   $P222$  [ orthorhombic ]

\* plus set: + [0, 0, 0]

\* Wyckoff site: 1a, site symmetry: 222

Table 1: Wyckoff bond: 1a@1a

No.	vector	center	mapping
1	[0, 0, Z]	[0, 0, 0]	[1, 2, -3, -4]

Table 2: Wyckoff bond: 1b@1a

No.	vector	center	mapping
1	[0, Y, 0]	[0, 0, 0]	[1, -2, 3, -4]

Table 3: Wyckoff bond: 1c@1a

No.	vector	center	mapping
1	[X, 0, 0]	[0, 0, 0]	[1, -2, -3, 4]

Table 4: Wyckoff bond: 2d@1a

No.	vector	center	mapping
1	[X, Y, 0]	[0, 0, 0]	[1, -2]
2	[-X, Y, 0]	[0, 0, 0]	[3, -4]

Table 5: Wyckoff bond: 2e@1a

No.	vector	center	mapping
1	[X, 0, Z]	[0, 0, 0]	[1, -3]
2	[-X, 0, Z]	[0, 0, 0]	[2, -4]

Table 6: Wyckoff bond: 2f@1a

No.	vector	center	mapping
1	[0, Y, Z]	[0, 0, 0]	[1, -4]
2	[0, -Y, Z]	[0, 0, 0]	[2, -3]

Table 7: Wyckoff bond: **4g@1a**

No.	vector	center	mapping
1	$[X, Y, Z]$	$[0, 0, 0]$	[1]
2	$[-X, -Y, Z]$	$[0, 0, 0]$	[2]
3	$[-X, Y, -Z]$	$[0, 0, 0]$	[3]
4	$[X, -Y, -Z]$	$[0, 0, 0]$	[4]

\* Wyckoff site: **1b**, site symmetry: **222**

Table 8: Wyckoff bond: **1a@1b**

No.	vector	center	mapping
1	$[0, 0, Z]$	$[\frac{1}{2}, 0, 0]$	[1, 2, -3, -4]

Table 9: Wyckoff bond: **1b@1b**

No.	vector	center	mapping
1	$[0, Y, 0]$	$[\frac{1}{2}, 0, 0]$	[1, -2, 3, -4]

Table 10: Wyckoff bond: **1c@1b**

No.	vector	center	mapping
1	$[X, 0, 0]$	$[\frac{1}{2}, 0, 0]$	[1, -2, -3, 4]

Table 11: Wyckoff bond: **2d@1b**

No.	vector	center	mapping
1	$[X, Y, 0]$	$[\frac{1}{2}, 0, 0]$	[1, -2]
2	$[-X, Y, 0]$	$[\frac{1}{2}, 0, 0]$	[3, -4]

Table 12: Wyckoff bond: **2e@1b**

No.	vector	center	mapping
1	$[X, 0, Z]$	$[\frac{1}{2}, 0, 0]$	[1, -3]
2	$[-X, 0, Z]$	$[\frac{1}{2}, 0, 0]$	[2, -4]

Table 13: Wyckoff bond: **2f@1b**

No.	vector	center	mapping
1	$[0, Y, Z]$	$[\frac{1}{2}, 0, 0]$	$[1, -4]$
2	$[0, -Y, Z]$	$[\frac{1}{2}, 0, 0]$	$[2, -3]$

Table 14: Wyckoff bond: **4g@1b**

No.	vector	center	mapping
1	$[X, Y, Z]$	$[\frac{1}{2}, 0, 0]$	$[1]$
2	$[-X, -Y, Z]$	$[\frac{1}{2}, 0, 0]$	$[2]$
3	$[-X, Y, -Z]$	$[\frac{1}{2}, 0, 0]$	$[3]$
4	$[X, -Y, -Z]$	$[\frac{1}{2}, 0, 0]$	$[4]$

\* Wyckoff site: **1c**, site symmetry: **222**

Table 15: Wyckoff bond: **1a@1c**

No.	vector	center	mapping
1	$[0, 0, Z]$	$[0, \frac{1}{2}, 0]$	$[1, 2, -3, -4]$

Table 16: Wyckoff bond: **1b@1c**

No.	vector	center	mapping
1	$[0, Y, 0]$	$[0, \frac{1}{2}, 0]$	$[1, -2, 3, -4]$

Table 17: Wyckoff bond: **1c@1c**

No.	vector	center	mapping
1	$[X, 0, 0]$	$[0, \frac{1}{2}, 0]$	$[1, -2, -3, 4]$

Table 18: Wyckoff bond: **2d@1c**

No.	vector	center	mapping
1	$[X, Y, 0]$	$[0, \frac{1}{2}, 0]$	$[1, -2]$
2	$[-X, Y, 0]$	$[0, \frac{1}{2}, 0]$	$[3, -4]$

Table 19: Wyckoff bond: **2e@1c**

No.	vector	center	mapping
1	$[X, 0, Z]$	$[0, \frac{1}{2}, 0]$	$[1, -3]$
2	$[-X, 0, Z]$	$[0, \frac{1}{2}, 0]$	$[2, -4]$

Table 20: Wyckoff bond: **2f@1c**

No.	vector	center	mapping
1	$[0, Y, Z]$	$[0, \frac{1}{2}, 0]$	$[1, -4]$
2	$[0, -Y, Z]$	$[0, \frac{1}{2}, 0]$	$[2, -3]$

Table 21: Wyckoff bond: **4g@1c**

No.	vector	center	mapping
1	$[X, Y, Z]$	$[0, \frac{1}{2}, 0]$	$[1]$
2	$[-X, -Y, Z]$	$[0, \frac{1}{2}, 0]$	$[2]$
3	$[-X, Y, -Z]$	$[0, \frac{1}{2}, 0]$	$[3]$
4	$[X, -Y, -Z]$	$[0, \frac{1}{2}, 0]$	$[4]$

\* Wyckoff site: **1d**, site symmetry: **222**

Table 22: Wyckoff bond: **1a@1d**

No.	vector	center	mapping
1	$[0, 0, Z]$	$[0, 0, \frac{1}{2}]$	$[1, 2, -3, -4]$

Table 23: Wyckoff bond: **1b@1d**

No.	vector	center	mapping
1	$[0, Y, 0]$	$[0, 0, \frac{1}{2}]$	$[1, -2, 3, -4]$

Table 24: Wyckoff bond: **1c@1d**

No.	vector	center	mapping
1	$[X, 0, 0]$	$[0, 0, \frac{1}{2}]$	$[1, -2, -3, 4]$

Table 25: Wyckoff bond: 2d@1d

No.	vector	center	mapping
1	$[X, Y, 0]$	$[0, 0, \frac{1}{2}]$	$[1, -2]$
2	$[-X, Y, 0]$	$[0, 0, \frac{1}{2}]$	$[3, -4]$

Table 26: Wyckoff bond: 2e@1d

No.	vector	center	mapping
1	$[X, 0, Z]$	$[0, 0, \frac{1}{2}]$	$[1, -3]$
2	$[-X, 0, Z]$	$[0, 0, \frac{1}{2}]$	$[2, -4]$

Table 27: Wyckoff bond: 2f@1d

No.	vector	center	mapping
1	$[0, Y, Z]$	$[0, 0, \frac{1}{2}]$	$[1, -4]$
2	$[0, -Y, Z]$	$[0, 0, \frac{1}{2}]$	$[2, -3]$

Table 28: Wyckoff bond: 4g@1d

No.	vector	center	mapping
1	$[X, Y, Z]$	$[0, 0, \frac{1}{2}]$	$[1]$
2	$[-X, -Y, Z]$	$[0, 0, \frac{1}{2}]$	$[2]$
3	$[-X, Y, -Z]$	$[0, 0, \frac{1}{2}]$	$[3]$
4	$[X, -Y, -Z]$	$[0, 0, \frac{1}{2}]$	$[4]$

\* Wyckoff site: 1e, site symmetry: 222

Table 29: Wyckoff bond: 1a@1e

No.	vector	center	mapping
1	$[0, 0, Z]$	$[\frac{1}{2}, \frac{1}{2}, 0]$	$[1, 2, -3, -4]$

Table 30: Wyckoff bond: 1b@1e

No.	vector	center	mapping
1	$[0, Y, 0]$	$[\frac{1}{2}, \frac{1}{2}, 0]$	$[1, -2, 3, -4]$

Table 31: Wyckoff bond:  $1c@1e$ 

No.	vector	center	mapping
1	$[X, 0, 0]$	$[\frac{1}{2}, \frac{1}{2}, 0]$	$[1, -2, -3, 4]$

Table 32: Wyckoff bond:  $2d@1e$ 

No.	vector	center	mapping
1	$[X, Y, 0]$	$[\frac{1}{2}, \frac{1}{2}, 0]$	$[1, -2]$
2	$[-X, Y, 0]$	$[\frac{1}{2}, \frac{1}{2}, 0]$	$[3, -4]$

Table 33: Wyckoff bond:  $2e@1e$ 

No.	vector	center	mapping
1	$[X, 0, Z]$	$[\frac{1}{2}, \frac{1}{2}, 0]$	$[1, -3]$
2	$[-X, 0, Z]$	$[\frac{1}{2}, \frac{1}{2}, 0]$	$[2, -4]$

Table 34: Wyckoff bond:  $2f@1e$ 

No.	vector	center	mapping
1	$[0, Y, Z]$	$[\frac{1}{2}, \frac{1}{2}, 0]$	$[1, -4]$
2	$[0, -Y, Z]$	$[\frac{1}{2}, \frac{1}{2}, 0]$	$[2, -3]$

Table 35: Wyckoff bond:  $4g@1e$ 

No.	vector	center	mapping
1	$[X, Y, Z]$	$[\frac{1}{2}, \frac{1}{2}, 0]$	$[1]$
2	$[-X, -Y, Z]$	$[\frac{1}{2}, \frac{1}{2}, 0]$	$[2]$
3	$[-X, Y, -Z]$	$[\frac{1}{2}, \frac{1}{2}, 0]$	$[3]$
4	$[X, -Y, -Z]$	$[\frac{1}{2}, \frac{1}{2}, 0]$	$[4]$

\* Wyckoff site:  $1f$ , site symmetry:  $222$

Table 36: Wyckoff bond:  $1a@1f$ 

No.	vector	center	mapping
1	$[0, 0, Z]$	$[\frac{1}{2}, 0, \frac{1}{2}]$	$[1, 2, -3, -4]$

Table 37: Wyckoff bond: **1b@1f**

No.	vector	center	mapping
1	$[0, Y, 0]$	$[\frac{1}{2}, 0, \frac{1}{2}]$	$[1, -2, 3, -4]$

Table 38: Wyckoff bond: **1c@1f**

No.	vector	center	mapping
1	$[X, 0, 0]$	$[\frac{1}{2}, 0, \frac{1}{2}]$	$[1, -2, -3, 4]$

Table 39: Wyckoff bond: **2d@1f**

No.	vector	center	mapping
1	$[X, Y, 0]$	$[\frac{1}{2}, 0, \frac{1}{2}]$	$[1, -2]$
2	$[-X, Y, 0]$	$[\frac{1}{2}, 0, \frac{1}{2}]$	$[3, -4]$

Table 40: Wyckoff bond: **2e@1f**

No.	vector	center	mapping
1	$[X, 0, Z]$	$[\frac{1}{2}, 0, \frac{1}{2}]$	$[1, -3]$
2	$[-X, 0, Z]$	$[\frac{1}{2}, 0, \frac{1}{2}]$	$[2, -4]$

Table 41: Wyckoff bond: **2f@1f**

No.	vector	center	mapping
1	$[0, Y, Z]$	$[\frac{1}{2}, 0, \frac{1}{2}]$	$[1, -4]$
2	$[0, -Y, Z]$	$[\frac{1}{2}, 0, \frac{1}{2}]$	$[2, -3]$

Table 42: Wyckoff bond: **4g@1f**

No.	vector	center	mapping
1	$[X, Y, Z]$	$[\frac{1}{2}, 0, \frac{1}{2}]$	$[1]$
2	$[-X, -Y, Z]$	$[\frac{1}{2}, 0, \frac{1}{2}]$	$[2]$
3	$[-X, Y, -Z]$	$[\frac{1}{2}, 0, \frac{1}{2}]$	$[3]$
4	$[X, -Y, -Z]$	$[\frac{1}{2}, 0, \frac{1}{2}]$	$[4]$

\* Wyckoff site: **1g**, site symmetry: **222**

Table 43: Wyckoff bond:  $1a@1g$ 

No.	vector	center	mapping
1	$[0, 0, Z]$	$[0, \frac{1}{2}, \frac{1}{2}]$	$[1, 2, -3, -4]$

Table 44: Wyckoff bond:  $1b@1g$ 

No.	vector	center	mapping
1	$[0, Y, 0]$	$[0, \frac{1}{2}, \frac{1}{2}]$	$[1, -2, 3, -4]$

Table 45: Wyckoff bond:  $1c@1g$ 

No.	vector	center	mapping
1	$[X, 0, 0]$	$[0, \frac{1}{2}, \frac{1}{2}]$	$[1, -2, -3, 4]$

Table 46: Wyckoff bond:  $2d@1g$ 

No.	vector	center	mapping
1	$[X, Y, 0]$	$[0, \frac{1}{2}, \frac{1}{2}]$	$[1, -2]$
2	$[-X, Y, 0]$	$[0, \frac{1}{2}, \frac{1}{2}]$	$[3, -4]$

Table 47: Wyckoff bond:  $2e@1g$ 

No.	vector	center	mapping
1	$[X, 0, Z]$	$[0, \frac{1}{2}, \frac{1}{2}]$	$[1, -3]$
2	$[-X, 0, Z]$	$[0, \frac{1}{2}, \frac{1}{2}]$	$[2, -4]$

Table 48: Wyckoff bond:  $2f@1g$ 

No.	vector	center	mapping
1	$[0, Y, Z]$	$[0, \frac{1}{2}, \frac{1}{2}]$	$[1, -4]$
2	$[0, -Y, Z]$	$[0, \frac{1}{2}, \frac{1}{2}]$	$[2, -3]$

Table 49: Wyckoff bond: **4g@1g**

No.	vector	center	mapping
1	$[X, Y, Z]$	$[0, \frac{1}{2}, \frac{1}{2}]$	[1]
2	$[-X, -Y, Z]$	$[0, \frac{1}{2}, \frac{1}{2}]$	[2]
3	$[-X, Y, -Z]$	$[0, \frac{1}{2}, \frac{1}{2}]$	[3]
4	$[X, -Y, -Z]$	$[0, \frac{1}{2}, \frac{1}{2}]$	[4]

\* Wyckoff site: **1h**, site symmetry: **222**

Table 50: Wyckoff bond: **1a@1h**

No.	vector	center	mapping
1	$[0, 0, Z]$	$[\frac{1}{2}, \frac{1}{2}, \frac{1}{2}]$	[1, 2, -3, -4]

Table 51: Wyckoff bond: **1b@1h**

No.	vector	center	mapping
1	$[0, Y, 0]$	$[\frac{1}{2}, \frac{1}{2}, \frac{1}{2}]$	[1, -2, 3, -4]

Table 52: Wyckoff bond: **1c@1h**

No.	vector	center	mapping
1	$[X, 0, 0]$	$[\frac{1}{2}, \frac{1}{2}, \frac{1}{2}]$	[1, -2, -3, 4]

Table 53: Wyckoff bond: **2d@1h**

No.	vector	center	mapping
1	$[X, Y, 0]$	$[\frac{1}{2}, \frac{1}{2}, \frac{1}{2}]$	[1, -2]
2	$[-X, Y, 0]$	$[\frac{1}{2}, \frac{1}{2}, \frac{1}{2}]$	[3, -4]

Table 54: Wyckoff bond: **2e@1h**

No.	vector	center	mapping
1	$[X, 0, Z]$	$[\frac{1}{2}, \frac{1}{2}, \frac{1}{2}]$	[1, -3]
2	$[-X, 0, Z]$	$[\frac{1}{2}, \frac{1}{2}, \frac{1}{2}]$	[2, -4]

Table 55: Wyckoff bond: 2f@1h

No.	vector	center	mapping
1	$[0, Y, Z]$	$[\frac{1}{2}, \frac{1}{2}, \frac{1}{2}]$	$[1, -4]$
2	$[0, -Y, Z]$	$[\frac{1}{2}, \frac{1}{2}, \frac{1}{2}]$	$[2, -3]$

Table 56: Wyckoff bond: 4g@1h

No.	vector	center	mapping
1	$[X, Y, Z]$	$[\frac{1}{2}, \frac{1}{2}, \frac{1}{2}]$	$[1]$
2	$[-X, -Y, Z]$	$[\frac{1}{2}, \frac{1}{2}, \frac{1}{2}]$	$[2]$
3	$[-X, Y, -Z]$	$[\frac{1}{2}, \frac{1}{2}, \frac{1}{2}]$	$[3]$
4	$[X, -Y, -Z]$	$[\frac{1}{2}, \frac{1}{2}, \frac{1}{2}]$	$[4]$

\* Wyckoff site: 2i, site symmetry: 2..

Table 57: Wyckoff bond: 2a@2i

No.	vector	center	mapping
1	$[0, Y, Z]$	$[x, 0, 0]$	$[1, -4]$
2	$[0, -Y, Z]$	$[-x, 0, 0]$	$[2, -3]$

Table 58: Wyckoff bond: 2b@2i

No.	vector	center	mapping
1	$[X, 0, 0]$	$[x, 0, 0]$	$[1, 4]$
2	$[-X, 0, 0]$	$[-x, 0, 0]$	$[2, 3]$

Table 59: Wyckoff bond: 4c@2i

No.	vector	center	mapping
1	$[X, Y, Z]$	$[x, 0, 0]$	$[1]$
2	$[-X, -Y, Z]$	$[-x, 0, 0]$	$[2]$
3	$[-X, Y, -Z]$	$[-x, 0, 0]$	$[3]$
4	$[X, -Y, -Z]$	$[x, 0, 0]$	$[4]$

\* Wyckoff site: 2j, site symmetry: 2..

Table 60: Wyckoff bond: 2a@2j

No.	vector	center	mapping
1	$[0, Y, Z]$	$[x, 0, \frac{1}{2}]$	$[1, -4]$
2	$[0, -Y, Z]$	$[-x, 0, \frac{1}{2}]$	$[2, -3]$

Table 61: Wyckoff bond: 2b@2j

No.	vector	center	mapping
1	$[X, 0, 0]$	$[x, 0, \frac{1}{2}]$	$[1, 4]$
2	$[-X, 0, 0]$	$[-x, 0, \frac{1}{2}]$	$[2, 3]$

Table 62: Wyckoff bond: 4c@2j

No.	vector	center	mapping
1	$[X, Y, Z]$	$[x, 0, \frac{1}{2}]$	$[1]$
2	$[-X, -Y, Z]$	$[-x, 0, \frac{1}{2}]$	$[2]$
3	$[-X, Y, -Z]$	$[-x, 0, \frac{1}{2}]$	$[3]$
4	$[X, -Y, -Z]$	$[x, 0, \frac{1}{2}]$	$[4]$

\* Wyckoff site: 2k, site symmetry: 2..

Table 63: Wyckoff bond: 2a@2k

No.	vector	center	mapping
1	$[0, Y, Z]$	$[x, \frac{1}{2}, 0]$	$[1, -4]$
2	$[0, -Y, Z]$	$[-x, \frac{1}{2}, 0]$	$[2, -3]$

Table 64: Wyckoff bond: 2b@2k

No.	vector	center	mapping
1	$[X, 0, 0]$	$[x, \frac{1}{2}, 0]$	$[1, 4]$
2	$[-X, 0, 0]$	$[-x, \frac{1}{2}, 0]$	$[2, 3]$

Table 65: Wyckoff bond: 4c@2k

No.	vector	center	mapping
1	$[X, Y, Z]$	$[x, \frac{1}{2}, 0]$	[1]
2	$[-X, -Y, Z]$	$[-x, \frac{1}{2}, 0]$	[2]
3	$[-X, Y, -Z]$	$[-x, \frac{1}{2}, 0]$	[3]
4	$[X, -Y, -Z]$	$[x, \frac{1}{2}, 0]$	[4]

\* Wyckoff site: 2l, site symmetry: 2..

Table 66: Wyckoff bond: 2a@2l

No.	vector	center	mapping
1	$[0, Y, Z]$	$[x, \frac{1}{2}, \frac{1}{2}]$	[1,-4]
2	$[0, -Y, Z]$	$[-x, \frac{1}{2}, \frac{1}{2}]$	[2,-3]

Table 67: Wyckoff bond: 2b@2l

No.	vector	center	mapping
1	$[X, 0, 0]$	$[x, \frac{1}{2}, \frac{1}{2}]$	[1,4]
2	$[-X, 0, 0]$	$[-x, \frac{1}{2}, \frac{1}{2}]$	[2,3]

Table 68: Wyckoff bond: 4c@2l

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

\* Wyckoff site: 2m, site symmetry: .2.

Table 69: Wyckoff bond: 2a@2m

No.	vector	center	mapping
1	$[X, 0, Z]$	$[0, y, 0]$	[1,-3]
2	$[-X, 0, Z]$	$[0, -y, 0]$	[2,-4]

Table 70: Wyckoff bond: 2b@2m

No.	vector	center	mapping
1	$[0, Y, 0]$	$[0, y, 0]$	$[1, 3]$
2	$[0, -Y, 0]$	$[0, -y, 0]$	$[2, 4]$

Table 71: Wyckoff bond: 4c@2m

No.	vector	center	mapping
1	$[X, Y, Z]$	$[0, y, 0]$	$[1]$
2	$[-X, -Y, Z]$	$[0, -y, 0]$	$[2]$
3	$[-X, Y, -Z]$	$[0, y, 0]$	$[3]$
4	$[X, -Y, -Z]$	$[0, -y, 0]$	$[4]$

\* Wyckoff site: 2n, site symmetry: .2.

Table 72: Wyckoff bond: 2a@2n

No.	vector	center	mapping
1	$[X, 0, Z]$	$[0, y, \frac{1}{2}]$	$[1, -3]$
2	$[-X, 0, Z]$	$[0, -y, \frac{1}{2}]$	$[2, -4]$

Table 73: Wyckoff bond: 2b@2n

No.	vector	center	mapping
1	$[0, Y, 0]$	$[0, y, \frac{1}{2}]$	$[1, 3]$
2	$[0, -Y, 0]$	$[0, -y, \frac{1}{2}]$	$[2, 4]$

Table 74: Wyckoff bond: 4c@2n

No.	vector	center	mapping
1	$[X, Y, Z]$	$[0, y, \frac{1}{2}]$	$[1]$
2	$[-X, -Y, Z]$	$[0, -y, \frac{1}{2}]$	$[2]$
3	$[-X, Y, -Z]$	$[0, y, \frac{1}{2}]$	$[3]$
4	$[X, -Y, -Z]$	$[0, -y, \frac{1}{2}]$	$[4]$

\* Wyckoff site: 2o, site symmetry: .2.

Table 75: Wyckoff bond: 2a@2o

No.	vector	center	mapping
1	$[X, 0, Z]$	$[\frac{1}{2}, y, 0]$	$[1, -3]$
2	$[-X, 0, Z]$	$[\frac{1}{2}, -y, 0]$	$[2, -4]$

Table 76: Wyckoff bond: 2b@2o

No.	vector	center	mapping
1	$[0, Y, 0]$	$[\frac{1}{2}, y, 0]$	$[1, 3]$
2	$[0, -Y, 0]$	$[\frac{1}{2}, -y, 0]$	$[2, 4]$

Table 77: Wyckoff bond: 4c@2o

No.	vector	center	mapping
1	$[X, Y, Z]$	$[\frac{1}{2}, y, 0]$	$[1]$
2	$[-X, -Y, Z]$	$[\frac{1}{2}, -y, 0]$	$[2]$
3	$[-X, Y, -Z]$	$[\frac{1}{2}, y, 0]$	$[3]$
4	$[X, -Y, -Z]$	$[\frac{1}{2}, -y, 0]$	$[4]$

\* Wyckoff site: 2p, site symmetry: .2.

Table 78: Wyckoff bond: 2a@2p

No.	vector	center	mapping
1	$[X, 0, Z]$	$[\frac{1}{2}, y, \frac{1}{2}]$	$[1, -3]$
2	$[-X, 0, Z]$	$[\frac{1}{2}, -y, \frac{1}{2}]$	$[2, -4]$

Table 79: Wyckoff bond: 2b@2p

No.	vector	center	mapping
1	$[0, Y, 0]$	$[\frac{1}{2}, y, \frac{1}{2}]$	$[1, 3]$
2	$[0, -Y, 0]$	$[\frac{1}{2}, -y, \frac{1}{2}]$	$[2, 4]$

Table 80: Wyckoff bond: 4c@2p

No.	vector	center	mapping
1	$[X, Y, Z]$	$[\frac{1}{2}, y, \frac{1}{2}]$	[1]
2	$[-X, -Y, Z]$	$[\frac{1}{2}, -y, \frac{1}{2}]$	[2]
3	$[-X, Y, -Z]$	$[\frac{1}{2}, y, \frac{1}{2}]$	[3]
4	$[X, -Y, -Z]$	$[\frac{1}{2}, -y, \frac{1}{2}]$	[4]

\* Wyckoff site: 2q, site symmetry:  $\dots 2$

Table 81: Wyckoff bond: 2a@2q

No.	vector	center	mapping
1	$[X, Y, 0]$	$[0, 0, z]$	[1, -2]
2	$[-X, Y, 0]$	$[0, 0, -z]$	[3, -4]

Table 82: Wyckoff bond: 2b@2q

No.	vector	center	mapping
1	$[0, 0, Z]$	$[0, 0, z]$	[1, 2]
2	$[0, 0, -Z]$	$[0, 0, -z]$	[3, 4]

Table 83: Wyckoff bond: 4c@2q

No.	vector	center	mapping
1	$[X, Y, Z]$	$[0, 0, z]$	[1]
2	$[-X, -Y, Z]$	$[0, 0, z]$	[2]
3	$[-X, Y, -Z]$	$[0, 0, -z]$	[3]
4	$[X, -Y, -Z]$	$[0, 0, -z]$	[4]

\* Wyckoff site: 2r, site symmetry:  $\dots 2$

Table 84: Wyckoff bond: 2a@2r

No.	vector	center	mapping
1	$[X, Y, 0]$	$[\frac{1}{2}, 0, z]$	[1, -2]
2	$[-X, Y, 0]$	$[\frac{1}{2}, 0, -z]$	[3, -4]

Table 85: Wyckoff bond: 2b@2r

No.	vector	center	mapping
1	$[0, 0, Z]$	$[\frac{1}{2}, 0, z]$	[1,2]
2	$[0, 0, -Z]$	$[\frac{1}{2}, 0, -z]$	[3,4]

Table 86: Wyckoff bond: 4c@2r

No.	vector	center	mapping
1	$[X, Y, Z]$	$[\frac{1}{2}, 0, z]$	[1]
2	$[-X, -Y, Z]$	$[\frac{1}{2}, 0, z]$	[2]
3	$[-X, Y, -Z]$	$[\frac{1}{2}, 0, -z]$	[3]
4	$[X, -Y, -Z]$	$[\frac{1}{2}, 0, -z]$	[4]

\* Wyckoff site: 2s, site symmetry: . . 2

Table 87: Wyckoff bond: 2a@2s

No.	vector	center	mapping
1	$[X, Y, 0]$	$[0, \frac{1}{2}, z]$	[1,-2]
2	$[-X, Y, 0]$	$[0, \frac{1}{2}, -z]$	[3,-4]

Table 88: Wyckoff bond: 2b@2s

No.	vector	center	mapping
1	$[0, 0, Z]$	$[0, \frac{1}{2}, z]$	[1,2]
2	$[0, 0, -Z]$	$[0, \frac{1}{2}, -z]$	[3,4]

Table 89: Wyckoff bond: 4c@2s

No.	vector	center	mapping
1	$[X, Y, Z]$	$[0, \frac{1}{2}, z]$	[1]
2	$[-X, -Y, Z]$	$[0, \frac{1}{2}, z]$	[2]
3	$[-X, Y, -Z]$	$[0, \frac{1}{2}, -z]$	[3]
4	$[X, -Y, -Z]$	$[0, \frac{1}{2}, -z]$	[4]

\* Wyckoff site: 2t, site symmetry: . . 2

Table 90: Wyckoff bond: 2a@2t

No.	vector	center	mapping
1	$[X, Y, 0]$	$[\frac{1}{2}, \frac{1}{2}, z]$	$[1, -2]$
2	$[-X, Y, 0]$	$[\frac{1}{2}, \frac{1}{2}, -z]$	$[3, -4]$

Table 91: Wyckoff bond: 2b@2t

No.	vector	center	mapping
1	$[0, 0, Z]$	$[\frac{1}{2}, \frac{1}{2}, z]$	$[1, 2]$
2	$[0, 0, -Z]$	$[\frac{1}{2}, \frac{1}{2}, -z]$	$[3, 4]$

Table 92: Wyckoff bond: 4c@2t

No.	vector	center	mapping
1	$[X, Y, Z]$	$[\frac{1}{2}, \frac{1}{2}, z]$	$[1]$
2	$[-X, -Y, Z]$	$[\frac{1}{2}, \frac{1}{2}, z]$	$[2]$
3	$[-X, Y, -Z]$	$[\frac{1}{2}, \frac{1}{2}, -z]$	$[3]$
4	$[X, -Y, -Z]$	$[\frac{1}{2}, \frac{1}{2}, -z]$	$[4]$

\* Wyckoff site: 4u, site symmetry: 1

Table 93: Wyckoff bond: 4a@4u

No.	vector	center	mapping
1	$[X, Y, Z]$	$[x, y, z]$	$[1]$
2	$[-X, -Y, Z]$	$[-x, -y, z]$	$[2]$
3	$[-X, Y, -Z]$	$[-x, y, -z]$	$[3]$
4	$[X, -Y, -Z]$	$[x, -y, -z]$	$[4]$