SG No. 28 C_{2v}^4 $Pma2$ [orthorhombic]

* plus set: $+[0,\ 0,\ 0]$
* Wyckoff site: `2a`, site symmetry: `..2`

Table 1: Wyckoff bond: `2a@2a`

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

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

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

Table 3: Wyckoff bond: `4c@2a`

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

* Wyckoff site: `2b`, site symmetry: `..2`

Table 4: Wyckoff bond: `2a@2b`

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

Table 5: Wyckoff bond: `2b@2b`

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

Table 6: Wyckoff bond: `4c@2b`

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

* Wyckoff site: `2c`, site symmetry: `m..`

Table 7: Wyckoff bond: `2a@2c`

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

Table 8: Wyckoff bond: `2b@2c`

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

Table 9: Wyckoff bond: `4c@2c`

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

* Wyckoff site: `4d`, site symmetry: `1`

Table 10: Wyckoff bond: `4a@4d`

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