SG No. 46 C_{2v}^{22} $Ima2$ [orthorhombic]

* plus set: $+[0,\,0,\,0]$, $+\left[\frac{1}{2},\,\frac{1}{2},\,\frac{1}{2}\right]$
* Wyckoff site: `4a`, site symmetry: `..2`

Table 1: Wyckoff bond: `4a@4a`

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: `4b@4a`

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: `8c@4a`

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: `4b`, site symmetry: `m..`

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

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 5: Wyckoff bond: `4b@4b`

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 6: Wyckoff bond: `8c@4b`

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: `8c`, site symmetry: `1`

Table 7: Wyckoff bond: `8a@8c`

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]`