SG No. 148 C_{3i}^{2} $R\bar{3}$ [trigonal]

* plus set: $+[0,\,0,\,0]$, $+\left[\frac{2}{3},\,\frac{1}{3},\,\frac{1}{3}\right]$, $+\left[\frac{1}{3},\,\frac{2}{3},\,\frac{2}{3}\right]$
* Wyckoff site: `3a`, site symmetry: `-3.`

Table 1: Wyckoff bond: `3a@3a`

No.	vector	center	mapping
1	$[0,\,0,\,Z]$	$[0,\,0,\,0]$	`[1,2,3,-4,-5,-6]`

Table 2: Wyckoff bond: `9b@3a`

No.	vector	center	mapping
1	$[X,\,Y,\,Z]$	$[0,\,0,\,0]$	`[1,-4]`
2	$[-Y,\,X-Y,\,Z]$	$[0,\,0,\,0]$	`[2,-5]`
3	$[-X+Y,\,-X,\,Z]$	$[0,\,0,\,0]$	`[3,-6]`

* Wyckoff site: `3b`, site symmetry: `-3.`

Table 3: Wyckoff bond: `3a@3b`

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

Table 4: Wyckoff bond: `9b@3b`

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

* Wyckoff site: `6c`, site symmetry: `3.`

Table 5: Wyckoff bond: `6a@6c`

No.	vector	center	mapping
1	$[0,\,0,\,Z]$	$[0,\,0,\,z]$	`[1,2,3]`
2	$[0,\,0,\,-Z]$	$[0,\,0,\,-z]$	`[4,5,6]`

Table 6: Wyckoff bond: `18b@6c`

No.	vector	center	mapping
1	$[X, Y, Z]$	$[0, 0, z]$	`[1]`
2	$[-Y, X-Y, Z]$	$[0, 0, z]$	`[2]`
3	$[-X+Y, -X, Z]$	$[0, 0, z]$	`[3]`
4	$[-X, -Y, -Z]$	$[0, 0, -z]$	`[4]`
5	$[Y, -X+Y, -Z]$	$[0, 0, -z]$	`[5]`
6	$[X-Y, X, -Z]$	$[0, 0, -z]$	`[6]`

* Wyckoff site: `9d`, site symmetry: `-1`

Table 7: Wyckoff bond: `9a@9d`

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

* Wyckoff site: `9e`, site symmetry: `-1`

Table 8: Wyckoff bond: `9a@9e`

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

* Wyckoff site: `18f`, site symmetry: `1`

Table 9: Wyckoff bond: `18a@18f`

No.	vector	center	mapping
1	$[X, Y, Z]$	$[x, y, z]$	`[1]`
2	$[-Y, X-Y, Z]$	$[-y, x-y, z]$	`[2]`
3	$[-X+Y, -X, Z]$	$[-x+y, -x, z]$	`[3]`
4	$[-X, -Y, -Z]$	$[-x, -y, -z]$	`[4]`
5	$[Y, -X+Y, -Z]$	$[y, -x+y, -z]$	`[5]`
6	$[X-Y, X, -Z]$	$[x-y, x, -z]$	`[6]`