

SG No. 101 C_{4v}^3 $P4_2cm$ [tetragonal]

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

Table 1: Wyckoff site: 2a, site symmetry: 2.m

No.	position	mapping
1	$[0, 0, z]$	$[1, 2, 7, 8]$
2	$[0, 0, z + \frac{1}{2}]$	$[3, 4, 5, 6]$

Table 2: Wyckoff site: 2b, site symmetry: 2.m

No.	position	mapping
1	$[\frac{1}{2}, \frac{1}{2}, z]$	$[1, 2, 7, 8]$
2	$[\frac{1}{2}, \frac{1}{2}, z + \frac{1}{2}]$	$[3, 4, 5, 6]$

Table 3: Wyckoff site: 4c, site symmetry: 2..

No.	position	mapping
1	$[0, \frac{1}{2}, z]$	$[1, 2]$
2	$[\frac{1}{2}, 0, z + \frac{1}{2}]$	$[3, 4]$
3	$[0, \frac{1}{2}, z + \frac{1}{2}]$	$[5, 6]$
4	$[\frac{1}{2}, 0, z]$	$[7, 8]$

Table 4: Wyckoff site: 4d, site symmetry: ..m

No.	position	mapping
1	$[x, x, z]$	$[1, 8]$
2	$[-x, -x, z]$	$[2, 7]$
3	$[-x, x, z + \frac{1}{2}]$	$[3, 6]$
4	$[x, -x, z + \frac{1}{2}]$	$[4, 5]$

Table 5: Wyckoff site: 8e, site symmetry: 1

No.	position	mapping
1	$[x, y, z]$	$[1]$
2	$[-x, -y, z]$	$[2]$
3	$[-y, x, z + \frac{1}{2}]$	$[3]$
4	$[y, -x, z + \frac{1}{2}]$	$[4]$
5	$[x, -y, z + \frac{1}{2}]$	$[5]$

continued ...

Table 5

No.	position	mapping
6	$[-x, y, z + \frac{1}{2}]$	[6]
7	$[-y, -x, z]$	[7]
8	$[y, x, z]$	[8]