

MSG No. 106.220  $P4_2bc1'$  [ Type II, tetragonal ]

Table 1: Wyckoff site: 4a, site symmetry:  $2..1'$

No.	position	mapping
1	$[0, 0, z]$	$[1, 4, 9, 12]$
2	$[0, 0, z + \frac{1}{2}]$	$[2, 3, 10, 11]$
3	$[\frac{1}{2}, \frac{1}{2}, z]$	$[5, 6, 13, 14]$
4	$[\frac{1}{2}, \frac{1}{2}, z + \frac{1}{2}]$	$[7, 8, 15, 16]$

Table 2: Wyckoff site: 4b, site symmetry:  $2..1'$

No.	position	mapping
1	$[0, \frac{1}{2}, z]$	$[1, 4, 9, 12]$
2	$[\frac{1}{2}, 0, z + \frac{1}{2}]$	$[2, 3, 10, 11]$
3	$[\frac{1}{2}, 0, z]$	$[5, 6, 13, 14]$
4	$[0, \frac{1}{2}, z + \frac{1}{2}]$	$[7, 8, 15, 16]$

Table 3: Wyckoff site: 8c, site symmetry:  $11'$

No.	position	mapping
1	$[x, y, z]$	$[1, 9]$
2	$[-y, x, z + \frac{1}{2}]$	$[2, 10]$
3	$[y, -x, z + \frac{1}{2}]$	$[3, 11]$
4	$[-x, -y, z]$	$[4, 12]$
5	$[\frac{1}{2} - x, y + \frac{1}{2}, z]$	$[5, 13]$
6	$[x + \frac{1}{2}, \frac{1}{2} - y, z]$	$[6, 14]$
7	$[\frac{1}{2} - y, \frac{1}{2} - x, z + \frac{1}{2}]$	$[7, 15]$
8	$[y + \frac{1}{2}, x + \frac{1}{2}, z + \frac{1}{2}]$	$[8, 16]$