

1. INTRODUCTION TO SPACE-GROUP SYMMETRY

Table 1.6.4.4

Reflection conditions and possible space groups with Bravais lattice mS (mC , mA , mI) and Laue class $2/m$ (monoclinic, unique axis b); Patterson symmetry $C12/m1$, $A12/m1$, $I12/m1$

Reflection conditions							Space group	No.	Space group	No.	Space group	No.
hkl	$h0l$	$0kl$	$hk0$	$0k0$	$h00$	$00l$						
$h+k$	h	k	$h+k$	k	h		C2	5	Cm	8	$C2/m$	12
$h+k$	h, l	k	$h+k$	k	h	l	Cc	9	$C2/c$	15		
$k+l$	l	$k+l$	k	k		l	A2	5	Am	8	$A2/m$	12
$k+l$	h, l	$k+l$	k	k	h	l	An	9	$A2/n$	15		
$h+k+l$	$h+l$	$k+l$	$h+k$	k	h	l	I2	5	Im	8	$I2/m$	12
$h+k+l$	h, l	$k+l$	$h+k$	k	h	l	Ia	9	$I2/a$	15		

Table 1.6.4.5

Reflection conditions and possible space groups with Bravais lattice mP and Laue class $2/m$ (monoclinic, unique axis c); Patterson symmetry $P112/m$

Reflection conditions						Space group	No.	Space group	No.	Space group	No.
$h0l$	$0kl$	$hk0$	$0k0$	$h00$	$00l$						
						P2	3	Pm	6	$P2/m$	10
					l	P2₁	4	$P2_1/m$	11		
		h		h		Pa	7	$P2/a$	13		
		h		h	l	$P2_1/a$	14				
		k	k			Pb	7	$P2/b$	13		
		k	k		l	$P2_1/b$	14				
		$h+k$	k	h		Pn	7	$P2/n$	13		
		$h+k$	k	h	l	$P2_1/n$	14				

Table 1.6.4.6

Reflection conditions and possible space groups with Bravais lattice mS (mA , mB , mI) and Laue class $2/m$ (monoclinic, unique axis c); Patterson symmetry $A112/m$, $B112/m1$, $I112/m$

Reflection conditions							Space group	No.	Space group	No.	Space group	No.
hkl	$h0l$	$0kl$	$hk0$	$0k0$	$h00$	$00l$						
$k+l$	l	$k+l$	k	k		l	A2	5	Am	8	$A2/m$	12
$k+l$	l	$k+l$	h, k	k	h	l	Aa	9	$A2/a$	15		
$h+l$	$h+l$	l	h		h	l	B2	5	Bm	8	$B2/m$	12
$h+l$	$h+l$	l	h, k	k	h	l	Bn	9	$B2/n$	15		
$h+k+l$	$h+l$	$k+l$	$h+k$	k	h	l	I2	5	Im	8	$I2/m$	12
$h+k+l$	$h+l$	$k+l$	h, k	k	h	l	Ib	9	$I2/b$	15		