

1.6. METHODS OF SPACE-GROUP DETERMINATION

Table 1.6.4.8

Reflection conditions and possible space groups with Bravais lattice oS (oC setting) and Laue class mmm ; Patterson symmetry $Cmmm$

Reflection conditions							Space group		Space group		Space group	
hkl	$0kl$	$h0l$	$hk0$	$h00$	$0k0$	$00l$	group	No.	group	No.	group	No.
$h+k$	k	h	$h+k$	h	k		C222	21	$Cmm2$	35	$Cm2m$	38
							$C2mm$	38	$Cmmm$	65		
$h+k$	k	h	$h+k$	h	k	l	C222₁	20				
$h+k$	k	h	h,k	h	k		$Cm2e$	39	$C2me$	39	$Cmme$	67
$h+k$	k	h,l	$h+k$	h	k	l	$Cmc2_1$	36	$C2cm$	40	$Cmcm$	63
$h+k$	k	h,l	h,k	h	k	l	$C2ce$	41	$Cmce$	64		
$h+k$	k,l	h	$h+k$	h	k	l	$Ccm2_1$	36	$Cc2m$	40	$Ccmm$	63
$h+k$	k,l	h	h,k	h	k	l	$Cc2e$	41	$Ccme$	64		
$h+k$	k,l	h,l	$h+k$	h	k	l	$Ccc2$	37	$Cccm$	66		
$h+k$	k,l	h,l	h,k	h	k	l	$Ccce$	68				

Table 1.6.4.9

Reflection conditions and possible space groups with Bravais lattice oS (oB setting) and Laue class mmm ; Patterson symmetry $Bmmm$

Reflection conditions							Space group		Space group		Space group	
hkl	$0kl$	$h0l$	$hk0$	$h00$	$0k0$	$00l$	group	No.	group	No.	group	No.
$h+l$	l	$h+l$	h	h		l	B222	21	$Bm2m$	35	$Bmm2$	38
							$B2mm$	38	$Bmmm$	65		
$h+l$	l	$h+l$	h	h	k	l	B22₁2	20				
$h+l$	l	$h+l$	h,k	h	k	l	$Bm2_1b$	36	$B2mb$	40	$Bmbm$	63
$h+l$	l	h,l	h	h		l	$Bme2$	39	$B2em$	39	$Bmem$	67
$h+l$	l	h,l	h,k	h	k	l	$B2eb$	41	$Bmeb$	64		
$h+l$	k,l	$h+l$	h	h	k	l	$Bb2_1m$	36	$Bbm2$	40	$Bbmm$	63
$h+l$	k,l	$h+l$	h,k	h	k	l	$Bb2b$	37	$Bbmb$	66		
$h+l$	k,l	h,l	h	h	k	l	$Bbe2$	41	$Bbem$	64		
$h+l$	k,l	h,l	h,k	h	k	l	$Bbeb$	68				

Table 1.6.4.10

Reflection conditions and possible space groups with Bravais lattice oS (oA setting) and Laue class mmm ; Patterson symmetry $Ammm$

Reflection conditions							Space group		Space group		Space group	
hkl	$0kl$	$h0l$	$hk0$	$h00$	$0k0$	$00l$	group	No.	group	No.	group	No.
$k+l$	$k+l$	l	k		k	l	A222	21	$A2mm$	35	$Am2m$	38
							$Amn2$	38	$Ammm$	65		
$k+l$	$k+l$	l	k	h	k	l	A2₁22	20				
$k+l$	$k+l$	l	h,k	h	k	l	$A2_1ma$	36	$Am2a$	40	$Amma$	63
$k+l$	$k+l$	h,l	k	h	k	l	$A2_1am$	36	$Ama2$	40	$Amam$	63
$k+l$	$k+l$	h,l	h,k	h	k	l	$A2aa$	37	$Amaa$	66		
$k+l$	k,l	l	k		k	l	$Aem2$	39	$Ae2m$	39	$Aemm$	67
$k+l$	k,l	l	h,k	h	k	l	$Ae2a$	41	$Aema$	64		
$k+l$	k,l	h,l	k	h	k	l	$Aea2$	41	$Aeam$	64		
$k+l$	k,l	h,l	h,k	h	k	l	$Aeaa$	68				