

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 <i>C2mm</i>	21 38	<i>Cmm2</i> <i>Cmmm</i>	35 65	<i>Cm2m</i>	38
$h+k$	k	h	$h+k$	h	k	l	C222₁	20				
$h+k$	k	h	h,k	h	k		<i>Cm2e</i>	39	<i>C2me</i>	39	<i>Cmme</i>	67
$h+k$	k	h,l	$h+k$	h	k	l	<i>Cmc2₁</i>	36	<i>C2cm</i>	40	<i>Cmcm</i>	63
$h+k$	k	h,l	h,k	h	k	l	<i>C2ce</i>	41	<i>Cmce</i>	64		
$h+k$	k,l	h	$h+k$	h	k	l	<i>Ccm2₁</i>	36	<i>Cc2m</i>	40	<i>Ccmm</i>	63
$h+k$	k,l	h	h,k	h	k	l	<i>Cc2e</i>	41	<i>Ccme</i>	64		
$h+k$	k,l	h,l	$h+k$	h	k	l	<i>Ccc2</i>	37	<i>Cccm</i>	66		
$h+k$	k,l	h,l	h,k	h	k	l	<i>Ccce</i>	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 <i>B2mm</i>	21 38	<i>Bm2m</i> <i>Bmmm</i>	35 65	<i>Bmm2</i>	38
$h+l$	l	$h+l$	h	h	k	l	B22₁2	20				
$h+l$	l	$h+l$	h,k	h	k	l	<i>Bm2₁b</i>	36	<i>B2mb</i>	40	<i>Bmbm</i>	63
$h+l$	l	h,l	h	h		l	<i>Bme2</i>	39	<i>B2em</i>	39	<i>Bmem</i>	67
$h+l$	l	h,l	h,k	h	k	l	<i>B2eb</i>	41	<i>Bmeb</i>	64		
$h+l$	k,l	$h+l$	h	h	k	l	<i>Bb2₁m</i>	36	<i>Bbm2</i>	40	<i>Bbmm</i>	63
$h+l$	k,l	$h+l$	h,k	h	k	l	<i>Bb2b</i>	37	<i>Bbmb</i>	66		
$h+l$	k,l	h,l	h	h	k	l	<i>Bbe2</i>	41	<i>Bbem</i>	64		
$h+l$	k,l	h,l	h,k	h	k	l	<i>Bbeb</i>	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 <i>Amm2</i>	21 38	<i>A2mm</i> <i>Ammm</i>	35 65	<i>Am2m</i>	38
$k+l$	$k+l$	l	k	h	k	l	A2₁22	20				
$k+l$	$k+l$	l	h,k	h	k	l	<i>A2₁ma</i>	36	<i>Am2a</i>	40	<i>Amma</i>	63
$k+l$	$k+l$	h,l	k	h	k	l	<i>A2₁am</i>	36	<i>Ama2</i>	40	<i>Amam</i>	63
$k+l$	$k+l$	h,l	h,k	h	k	l	<i>A2aa</i>	37	<i>Amaa</i>	66		
$k+l$	k,l	l	k		k	l	<i>Aem2</i>	39	<i>Ae2m</i>	39	<i>Aemm</i>	67
$k+l$	k,l	l	h,k	h	k	l	<i>Ae2a</i>	41	<i>Aema</i>	64		
$k+l$	k,l	h,l	k	h	k	l	<i>Aea2</i>	41	<i>Aeam</i>	64		
$k+l$	k,l	h,l	h,k	h	k	l	<i>Aeaa</i>	68				