

Symmetry Classification for Serial Crystallography Experiments

Laue Class	Point Groups	Centrosymmetric Space Groups	Non-Centrosymmetric Space Groups
$\bar{1}$	1	$P\bar{1}$	P1
2/m	2 m	P2/m, $P2_1/m$, C2/m, P2/c, $P2_1/c$, C2/c	P2, $P2_1$, C2, Pm, Pc, Cm, Cc
mmm	222 mm2	Pmmm, Pnnn, Pccm, Pban, Pmma, Pnna, Pmna, Pcca, Pbam, Pccn, Pbcm, Pnnm, Pmmn, Pbcn, Pbca, Pnma, Cmcn, Cmce, Cmmm, Cccm, Cmme, Ccce, Fmmm, Fddd, Immm, Ibam, Ibca, Imma	P222, $P222_1$, $P2_12_12$, $P2_12_12_1$, $C222_1$, C222, F222, I222, $I2_12_12_1$, Pmm2, $Pmc2_1$, Pcc2, Pma2, $Pca2_1$, Pnc2, $Pmn2_1$, Pba2, $Pna2_1$, Pnn2, Cmm2, $Cmc2_1$, Ccc2, Amm2, Aem2, Ama2, Aea2, Fmm2, Fdd2, Imm2, Iba2, Ima2
4/m	4 $\bar{4}$	$P4/m$, $P4_2/m$, $P4/n$, $P4_2/n$, I4/m, $I4_1/a$	P4, $P4_1$, $P4_2$, $P4_3$, I4, $I4_1$, $P\bar{4}$, $I\bar{4}$
4/mmm	422 $\bar{4}2m$ 4mm	$P4/mmm$, $P4/mcc$, $P4/nbm$, $P4/nnc$, $P4/mbm$, $P4/mnc$, $P4/nmm$, $P4/ncc$, $P4_2/mmc$, $P4_2/mcm$, $P4_2/nbc$, $P4_2/nnm$, $P4_2/mbc$, $P4_2/mnm$, $P4_2/nmc$, $P4_2/ncm$, I4/mmm, I4/mcm, $I4_1/amd$, $I4_1/acd$	$P422$, $P42_12$, $P4_122$, $P4_12_12$, $P4_222$, $P4_22_12$, $P4_322$, $P4_32_12$, I422, $I4_122$, $P\bar{4}2m$, $P\bar{4}2c$, $P\bar{4}2_1m$, $P\bar{4}2_1c$, $P\bar{4}m2$, $P\bar{4}c2$, $P\bar{4}b2$, $P\bar{4}n2$, $I\bar{4}m2$, $I\bar{4}c2$, I42m, I42d, P4mm, P4bm, $P4_2cm$, $P4_2nm$, P4cc, P4nc, $P4_2mc$, $P4_2bc$, I4mm, I4cm, $I4_1md$, $I4_1cd$
$\bar{3}$	3	$P\bar{3}$, $R\bar{3}$	P3, $P3_1$, $P3_2$, R3
$\bar{3}m$	32 3m	$P\bar{3}1m$, $P\bar{3}1c$, $P\bar{3}m1$, $P\bar{3}c1$, $R\bar{3}m$, $R\bar{3}c$	P312, P321, $P3_112$, $P3_121$, $P3_212$, $P3_221$, R32, P3m1, P31m, P3c1, P31c, R3m, R3c
6/m	6 $\bar{6}$	$P6/m$, $P6_3/m$	P6, $P6_1$, $P6_5$, $P6_2$, $P6_4$, $P6_3$, $P\bar{6}$
6/mmm	622 $\bar{6}2m$ 6mm	$P6/mmm$, $P6/mcc$, $P6_3/mcm$, $P6_3/mmc$	$P622$, $P6_122$, $P6_522$, $P6_222$, $P6_422$, $P6_322$, $P\bar{6}m2$, $P\bar{6}c2$, $P\bar{6}2m$, $P\bar{6}2c$, P6mm, P6cc, $P6_3cm$, $P6_3mc$
$m\bar{3}$	23	$Pm\bar{3}$, $Pn\bar{3}$, $Fm\bar{3}$, $Fd\bar{3}$, $Im\bar{3}$, $Pa\bar{3}$, $Ia\bar{3}$	P23, F23, I23, $P2_13$, $I2_13$
$m\bar{3}m$	432 $\bar{4}32$	$Pm\bar{3}m$, $Pn\bar{3}n$, $Pm\bar{3}n$, $Pn\bar{3}m$, $Fm\bar{3}m$, $Fm\bar{3}c$, $Fd\bar{3}m$, $Fd\bar{3}c$, $Im\bar{3}m$, $Ia\bar{3}d$	$P432$, $P4_232$, F432, $F4_132$, I432, $P4_332$, $P4_132$, $I4_132$, $P\bar{4}3m$, $F\bar{4}3m$, $I\bar{4}3m$, $P\bar{4}3n$, $F\bar{4}3c$, $I\bar{4}3d$