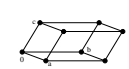
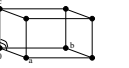
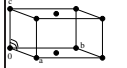




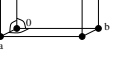
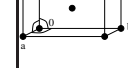







3.3. Raumgruppen (Forts.) Kristallsysteme, Punktgruppen, Bravaisgittertypen

Kristall-System	Punktgruppe	Gitterkonstanten	Bravaisgittertypen				Blickrichtung			Raumgruppen
			P	C	I	F	1.	2.	3.	
			x, y, z	x, y, z $x + \frac{1}{2}, y + \frac{1}{2}, z$	x, y, z $x + \frac{1}{2}, y + \frac{1}{2}, z + \frac{1}{2}$	x, y, z $x + \frac{1}{2}, y + \frac{1}{2}, z$ $x + \frac{1}{2}, y, z + \frac{1}{2}$ $x, y + \frac{1}{2}, z + \frac{1}{2}$				
triklin	1	$a \neq b \neq c$					-	-	-	P1
	$\bar{1}$	$\alpha \neq \beta \neq \gamma \neq 90^\circ$								$P\bar{1}$
monoklin	2	$a \neq b \neq c$ $\alpha = \gamma = 90^\circ$ $\beta \neq 90^\circ$					[010]	-	-	P2, P21, C2 Pm, Pc, Cm, Cc P2/m, P21/m, C2/m, P2/c, P21/c, C2/c
orthorhombisch	222	$a \neq b \neq c$ $\alpha = \beta = \gamma = 90^\circ$					[100]	[010]	[001]	P222, P2221, P21212, P212121, C222, F222, I222, I212121, Pmm2, Pmc21, Pcc2, Pma21, Pca21, Pnc21, Pmn21, Pba2, Pna21, Pnn2, Cmm2, Cmc21, Ccc2, Amm2, Abma, Ama2, Aba2, Fmm2, Fdd2, Imm2, Iba2, Ima2, Pmmm, Pnmm, Pccm, Pban, Pmma, Pnna, Pmna, Pcca, Pbam, Pccn, Pbcm, Pnmm, Pmnm, Pbcn, Pbca, Pnma, Cmcm, Cmca, Cmmm, Cccm, Cmma, Ccca, Fmmm, Fddd, Immm, Ibam, Ibcu, Imma
tetragonal	4	$a = b \neq c$ $\alpha = \beta = \gamma = 90^\circ$					[001]	[100]	[110]	P4, P41, P42, P43, I4, I41 P4, I4 P4/m, P42/m, P4/n, P42/n, I4/m, I41/a P422, P4212, P4122, P41212, P4222, P42212, P4322, P43212, I422, I4122 P4mm, P4bm, P42cm, P42nm, P4cc, P4nc, P42mc, P42bc, I4mm, I4cm, I41md, I41cd P42m, P42c, P421m, P421c, P4m2, P4c2, P4b2, P4n2, I4m2, I4c2, I42m, I42d P4/mmm, P4/mcc, P4/nbm, P4/nnc, P4/mbm, P4/mnc, P4/nmm, P4/ncc, P42/mmc, P42/mcm, P42/nbc, P42/nmm, P42/mbc, P42/mnm, P42/nmc, P42/ncm, I4/mmm, I4/mcm, I41/amd, I41/acd
trigonal	3	$a = b = c$ $\alpha = \beta = \gamma \neq 90^\circ$					[111]	[110]	-	P3, P31, P32, R3 P3, R3 P312, P321, P3112, P3121, P3212, P3221, R32 P3m1, P31m, P3c1, P31c, R3m, R3c P31m, P31c, P3m1, P3c1, R3m, R3c
hexagonal	6	$a = b \neq c$ $\alpha = \beta = 90^\circ$ $\gamma = 120^\circ$					[001]	[100]	[110]	P6, P61, P65, P63, P62, P64 P6 P6/m, P63/m P622, P6122, P6522, P6222, P6422, P6322 P6mm, P6cc, P63cm, P63mc P6m2, P6c2, P62m, P62c P6/mmm, P6/mcc, P63/mcm, P63/mmc
kubisch	23	$a = b = c$ $\alpha = \beta = \gamma = 90^\circ$					[100]	[111]	[110]	P23, F23, I23, P213, I213 Pm3, Pn3, Fm3, Fd3, Im3, Pa3, Ia3 P432, P432, F432, F4132, I432, P4332, P4132, I4132 P43m, F43m, I43m, P43n, F43c, I43d Pm3m, Pn3n, Pm3n, Pn3m, Fm3m, Fm3c, Fd3m, Fd3c, Im3m, Ia3d