

2.4.2. Übersichtstabelle der 2- und 3-dimensionalen Punktgruppen

Tabelle der 2-dimensionalen Punktgruppen

Nr.	Hermann-Mauguin	Schönflies-	Koordinatensystem	Nr.	Hermann-Mauguin	Schönflies-	Koordinatensystem
	Symbol				Symbol		
1	1	C_1	schiefwinklig ($a \neq b; \gamma$ beliebig)	7	311	C_3	hexagonal ($a = b; \gamma = 120^\circ$)
2	2	C_2		8	3m1	C_{3v}	
3	1m1	C_m	9	611	C_6		
4	2mm	C_{2v}	rechtwinklig ($a \neq b; \gamma = 90^\circ$)	10	6mm	C_{6v}	
5	411	C_4		quadratisch ($a = b; \gamma = 90^\circ$)			
6	4mm	C_{4v}					

Tabelle der 3-dimensionalen Punktgruppen/Kristallklassen

Nr.	Herman-Mauguin		Schönflies-	Koordinatensystem	Nr.	Herman-Mauguin		Schönflies-	Koordinatensystem
	Kurz-	Lang-				Kurz-	Lang-		
		symbol				symbol			
1	1	1	C_1	triklin	16	3	3	C_3	trigonal (hexagonale A.) ($a = b \neq c$ $\alpha = \beta = 90^\circ$; $\gamma = 120^\circ$)
2	$\bar{1}$	$\bar{1}$	C_i	($a \neq b \neq c; \alpha \neq \beta \neq \gamma$)	17	$\bar{3}$	$\bar{3}$	S_6	
3	m	1m1	C_s	monoklin	18	3m1	3m1	C_{3v}	
4	2	121	C_2	($a \neq b \neq c$; $\alpha = \gamma = 90^\circ; \beta \neq 90^\circ$)	19	321	321	D_3	
5	$\frac{2}{m}$	$1\frac{2}{m}1$	C_{2h}		20	$\bar{3}m1$	$\bar{3}\frac{2}{m}1$	D_{3d}	
6	mm2	mm2	C_{2v}	orthorhombisch	21	6	6	C_6	hexagonal ($a = b \neq c$ $\alpha = \beta = 90^\circ$; $\gamma = 120^\circ$)
7	222	222	D_2	($a \neq b \neq c$; $\alpha = \beta = \gamma = 90^\circ$)	22	$\bar{6}$	$\bar{6}$	C_{3h}	
8	mmm	$\frac{2}{m}\frac{2}{m}\frac{2}{m}$	D_{2h}		23	$\frac{6}{m}$	$\frac{6}{m}$	C_{6h}	
9	4	4	C_4	tetragonal	24	$\bar{6}m2$	$\bar{6}m2$	D_{3h}	
10	$\bar{4}$	$\bar{4}$	S_4	($a = b \neq c$ $\alpha = \beta = \gamma = 90^\circ$)	25	6mm	6mm	C_{6v}	
11	$\frac{4}{m}$	$\frac{4}{m}$	C_{4h}		26	622	622	D_6	
12	4mm	4mm	C_{4v}		27	$\frac{6}{m}mm$	$\frac{6}{m}\frac{2}{m}\frac{2}{m}$	D_{6h}	
13	$\bar{4}2m$	$\bar{4}2m$	D_{2d}		28	23	23	T	kubisch ($a = b = c$ $\alpha = \beta = \gamma = 90^\circ$)
14	422	422	D_4		29	$m\bar{3}$	$\frac{2}{m}\bar{3}$	T_h	
15	$\frac{4}{m}mm$	$\frac{4}{m}\frac{2}{m}\frac{2}{m}$	D_{4h}		30	$\bar{4}3m$	$\bar{4}3m$	T_d	
					31	432	432	O	
					32	$m\bar{3}m$	$\frac{4}{m}\bar{3}\frac{2}{m}$	O_h	

2.4.3. Punktgruppenbestimmung

