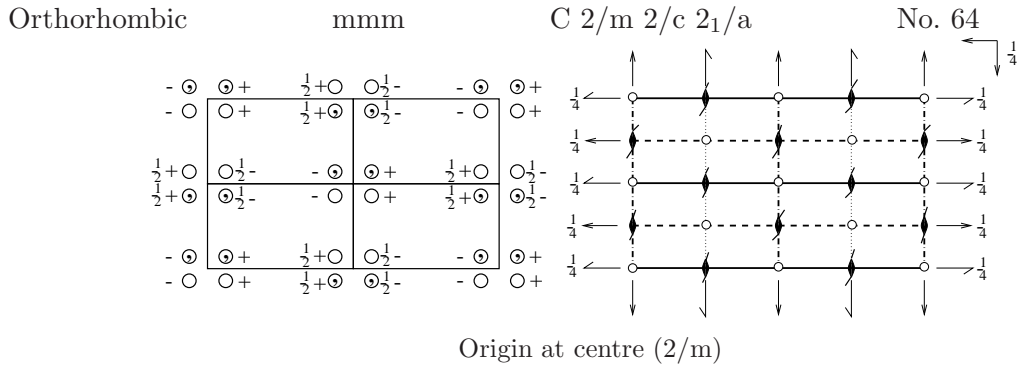


3.3. Raumgruppen (Forts.) Auszug aus den Internationalen Tabellen

Cmca
D_{2h}¹⁸



Number of positions, Wyckoff notation, and point symmetry Co-ordinates of equivalent positions Conditions limiting possible reflections

			(0,0,0; $\frac{1}{2}, \frac{1}{2}, 0$) +	
16	g	1	$x, y, z; x, \bar{y}, \bar{z}; x, \frac{1}{2} - y, \frac{1}{2} + z; x, \frac{1}{2} + y, \frac{1}{2} - z;$ $\bar{x}, \bar{y}, \bar{z}; \bar{x}, y, z; \bar{x}, \frac{1}{2} + y, \frac{1}{2} - z; \bar{x}, \frac{1}{2} - y, \frac{1}{2} + z.$	hkl: $h+k=2n$ Ok l : $(k=2n)$ h0 l : $l=2n; (h=2n)$ hk0: $h=2n; (k=2n)$ h00: $(h=2n)$ 0k0: $(k=2n)$ 00 l : $(l=2n)$

8	f	m	$0, y, z; 0, \bar{y}, \bar{z}; \frac{1}{2}, y, \frac{1}{2} - z; \frac{1}{2}, \bar{y}, \frac{1}{2} + z.$	Special: as above, plus no extra conditions
8	e	2	$\frac{1}{4}, y, \frac{1}{4}; \frac{3}{4}, \bar{y}, \frac{3}{4}; \frac{3}{4}, y, \frac{1}{4}; \frac{1}{4}, \bar{y}, \frac{3}{4}.$	hkl: $h=2n; (k=2n)$
8	d	2	$x, 0, 0; \bar{x}, 0, 0; x, \frac{1}{2}, \frac{1}{2}; \bar{x}, \frac{1}{2}, \frac{1}{2}.$	hkl: $k+l=2n; (l+h=2n)$
8	c	$\bar{1}$	$\frac{1}{4}, \frac{1}{4}, 0; \frac{1}{4}, \frac{3}{4}, 0; \frac{1}{4}, \frac{1}{4}, \frac{1}{2}; \frac{1}{4}, \frac{3}{4}, \frac{1}{2}.$	hkl: $h, l=2n; (k=2n)$
4	b	2/m	$\frac{1}{2}, 0, 0; \frac{1}{2}, \frac{1}{2}, \frac{1}{2}$	
4	a	2/m	$0, 0, 0; 0, \frac{1}{2}, \frac{1}{2}.$	

Symmetry of special projections

(001) pmm; $a'=a/2, b'=b/2$

(100) pgm; $b'=b/2, c'=c$

(010) pmm; $c'=c/2, a'=a/2$

Beispiel: I₂ (Cmca, $a=7.255 \text{ \AA}, b=4.795 \text{ \AA}, c=9.780 \text{ \AA}, I:0, 0.150, 0.117$)

