

8. Übergangsmetalle

8.5. Oxide

	Sc	Ti	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	
I		▲							77 ◻		I
II		68 ■	79 ■	73 ■	67 ■	61 ■	65 ■	68 ■	73 ◻	74 ▲	II
III	75 ◻	67 ●	64 ●	62 ●	58 ◻	55 ◻					III
IV		61 ▼	58 ▼	55 ▼	53 ▼						IV
V			54 *	53 *							V
VI				44 ◊							VI
VII					46 ○						VII
	Y	Zr	Nb	Mo	Tc	Ru	Rh	Pd	Ag	Cd	
I									115 ◻		I
II			*					86 ◻	94 ◻	95 ■	II
III	90 ◻		72				67 ●				III
IV		72 ●	68 ▼	65 ▼	65 ▼	62 ▼	60 ▼				IV
V			64 *								V
VI				59 ◊							VI
VII					56 ○						VII
VIII						36 ◊					VIII
	La	Hf	Ta	W	Re	Os	Ir	Pt	Au	Hg	
I									151 ?		I
II								80 ◻		102 *	II
III	103 ◻								85 *		III
IV		71 ●	68 ▼	66 ▼	63 ▼	63 ▼	63 ▼	63 ▼			IV
V			64 *		58 ?						V
VI				60 ◆	55 ◆						VI
VII					53 ●						VII
VIII						39 ◊					VIII

* eigener Typ

M_2X

▲ anti-CdI₂

◻ Cu₂O

MX

▲ Wurtzit

■ NaCl

◻ PtS

M_2X_3

◻ A,B oder C-St.

◻ γ -Al₂O₃

● Korund

MX_2

▼ Rutil

● ZrO₂

MX_3

◆ ReO₃

◊ CrO₃

◊ MoO₃

M_2X_7

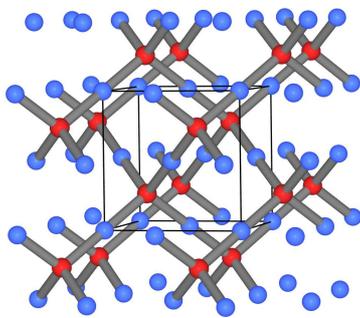
○ Mn₂O₇

● Re₂O₇

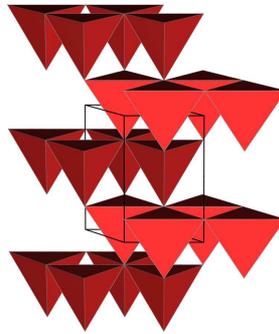
MX_4

○ OsO₄

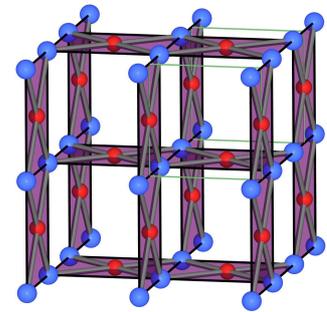
Ionenradien nach Shannon (für CN 6 in pm)



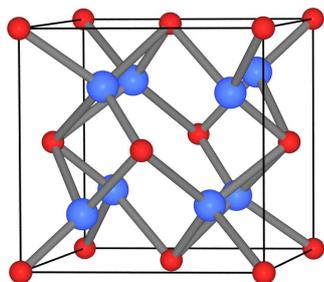
Cu₂O



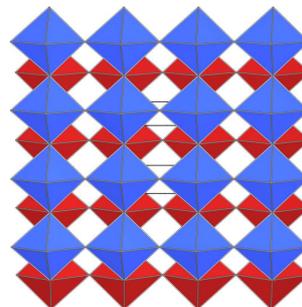
Wurtzit



PtS



ZrO₂



MoO₃

(s.a. http://www.ruby.chemie.uni-freiburg.de/Vorlesung/metalle/tm_oxide_volltext.html)