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-CdI_2
⬠ Cu_2O

MX
△ Wurtzit
■ NaCl
□ PtS

M_2X_3
▯ A,B oder C-St.
⊠ γ-Al_2O_3
⬢ Korund

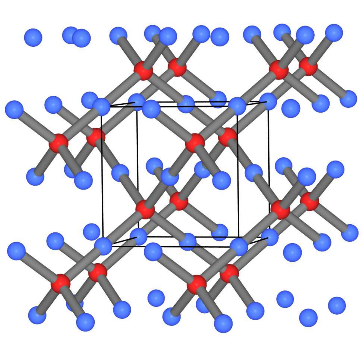
MX_2
▼ Rutil
⬟ ZrO_2

MX_3
◆ ReO_3
◇ CrO_3
◈ MoO_3

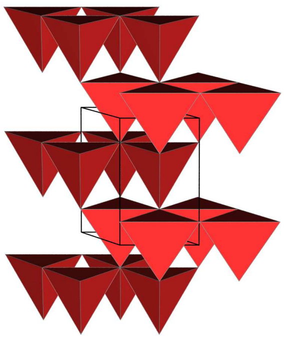
M_2X_7
○ Mn_2O_7
● Re_2O_7

MX_4
⦸ OsO_4

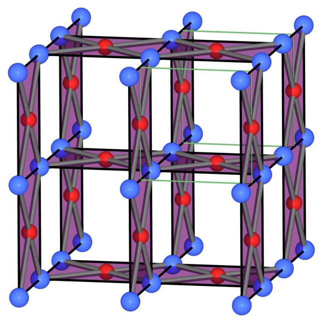
Ionenradien nach Shannon (für CN 6 in pm)



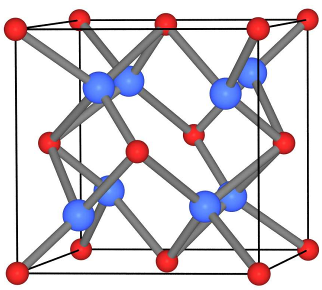
Cu_2O



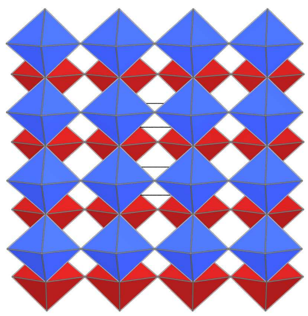
Wurtzit



PtS



ZrO_2



MoO_3

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