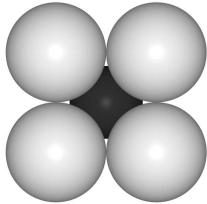
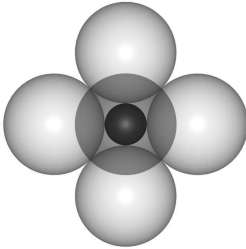
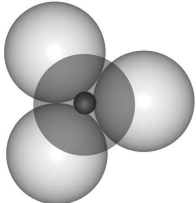
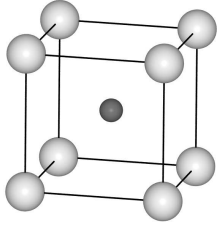
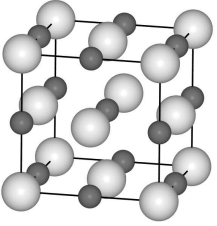
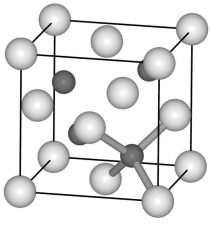
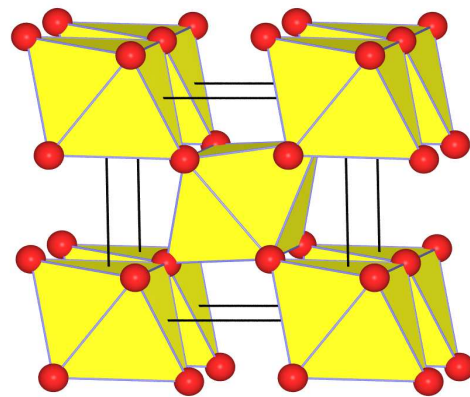
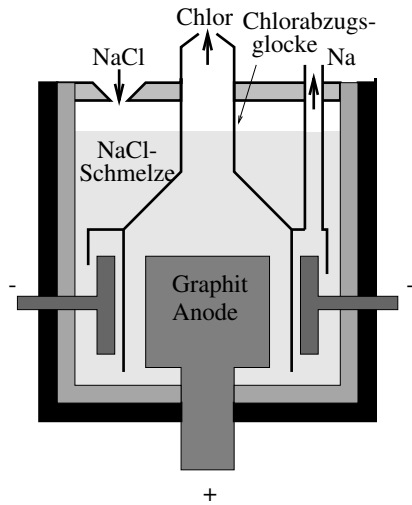


Koordinationszahlen in/Strukturen von Ionenkristallen (AB-Typen)

$CN_{Anion} = CN_{Kation}$	8	6	4
$\frac{r_{Kation}}{r_{Anion}} > 0.73$		0.73 – 0.41	0.41 – 0.22
Kationen-Koordination			
Elementarzelle			
Strukturtyp	CsCl	NaCl	ZnS (Zinkblende)
Beispiele	CsCl, CsI	LiF, LiCl, NaF, NaCl, KF, KCl, RbF, RbCl, CsF, MgO, CaO, SrO, BaO, CaS, SrS	BeO, MgTe



Downs-Zelle zur Na-Herstellung

Struktur von CaCl₂ (fast Rutil-Typ)

Alkali-/Erdalkalimetalle (Eigenschaften, wichtige Verbindungen)

	Alkalimetalle			Erdalkalimetalle						
	Li	Na	K	Rb/Cs	Be	Mg	Ca	Sr	Ba	
Elemente	← weiße, weiche, sehr luftempfindliche Metalle →									
Darstellung	← elektrochemisch →			← chemisch →	← elektrochemisch →					← chemisch →
Oxide	Li ₂ O	Na ₂ O Na ₂ O ₂	← Suboxide MO ₂ →		BeO	MgO (Magnesia)	CaO (Atzkalk, gebr Kalk)			
Carbonate	Li ₂ CO ₃ ↓	Na ₂ CO ₃ · 10H ₂ O (Soda)	K ₂ CO ₃ (Pottasche)				CaCO ₃ (Calcit, Aragonit, Vaterit)			
Nitrate (alle löslich)		NaNO ₃ (Chilesalpeter)	KNO ₃ (Salpeter)							
Sulfate		Na ₂ SO ₄ · 10H ₂ O (Glaubersalz)				MgSO ₄ · 7H ₂ O (Bittersalz)	CaSO ₄ · 2H ₂ O (Gips) CaSO ₄ · ½H ₂ O	SrSO ₄ ↓	BaSO ₄ ↓	
Halogenide	← alle leicht löslich →				kov. ← Fluoride schwerlöslich →					
sonst. Verb.	← M[Sb(OH) ₆] ↓ →		K ₂ [PtCl ₆] ↓ KClO ₄ ↓			MgNH ₄ (PO ₄) · 6H ₂ O ↓	Ca ₅ [PO ₄] ₃ (OH) (Apatit)		BaCrO ₄ ↓	
Spektrn Linienlagen in [nm]	violett-rot 780 421.5	gelb 589	violett 768.2 404.4	viol.-rosa	-	-	rot 622.0 553.3	rot 650-660 460.7	fahlgrün 524.2 513.9	