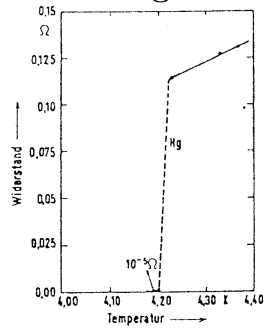
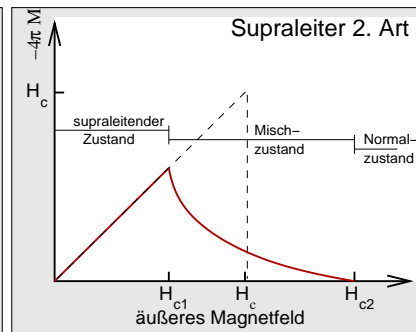
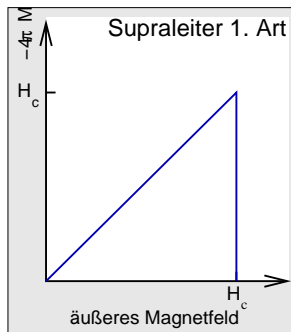


2.3. Supraleiter

2.3.1. Allgemeines



SL von Hg (1913)



Supraleiter 1. und 2. Art

Low-T _c -SL		High-T _c -SL	
Verbindung	T _c [K]	Verbindung	T _c [K]
Hg	4.15	YBa ₂ Cu ₃ O _{7-x}	93
Nb	9.5	YBa ₂ Cu ₄ O _{8+x}	80
NbN	16.0	Bi _{2+x} (Sr, Ca) ₃ Cu ₃ O _{7-x}	110
Pb[Mo ₆ S ₈]	14.4	Tl ₂ Ba ₂ Ca ₂ Cu ₂ O ₁₀	125
K ₃ C ₆₀	18.0	HgBa ₂ Ca ₂ Cu ₃ O ₈	130
Nb ₃ Sn	18.05		
Nb ₃ Ge	23.2	La _{1.8} Sr _{0.2} CuO ₄	30
MgB ₂	39		

Sprungtemperaturen verschiedener Supraleiter

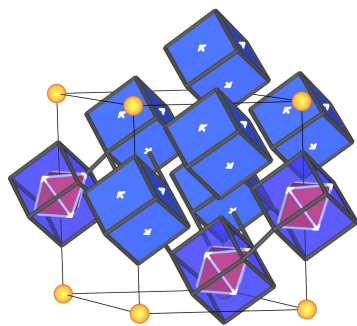
2.3.2. Low-T_c-Materialien

Li	Be 0.026											B	C	N	O	F	Ne
Na	Mg											Al 1.140 105	Si	P	S	Cl	Ar
K	Ca	Sc	Ti 0.39 100	V 5.38 1420	Cr	Mn	Fe	Co	Ni	Cu	Zn 0.875 53	Ga 1.091 51	Ge	As	Se	Br	Kr
Rb	Sr	Y	Zr 0.546 47	Nb 9.50 1980	Mo 0.92 95	Tc 7.77 1410	Ru 0.51 70	Rh 0.0003 0.049	Pd	Ag	Cd 0.56 30	In 3.4035 293	Sn 3.722 309	Sb	Te	I	Xe
Cs	Ba	La	Hf 6.00 1100	Ta 0.12 830	W 4.483 1.07	Re 0.012 198	Os 1.4 65	Ir 0.655 19	Pt	Au	Hg 4.153 412	Tl 2.39 171	Pb 7.193 803	Bi	Po	At	Rn
Fr	Ra	Ac	Ce 1.368 1.62	Pr 1.4	Nd	Yb	Lu 0.1									

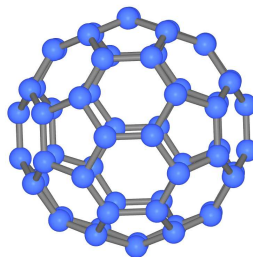
Ti
0.39 Sprungtemperatur [K]
100 kritisches Magnetfeld [Gauss]

keine Supraleiter
Supraleiter unter Druck

Supraleitende Elemente



Chevrell-Phase Pb[Mo₆S₈]



K₃C₆₀

