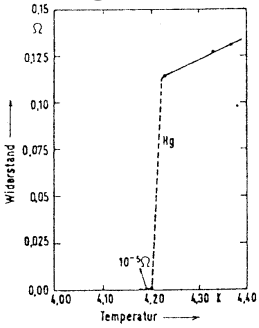
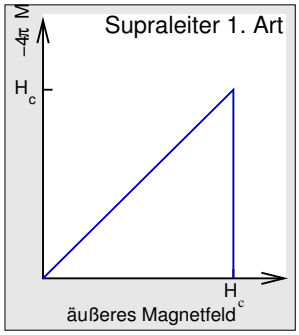
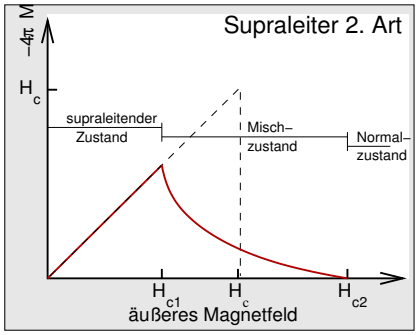
# Supraleiter

## 1. Allgemeines




SL von Hg (1913)



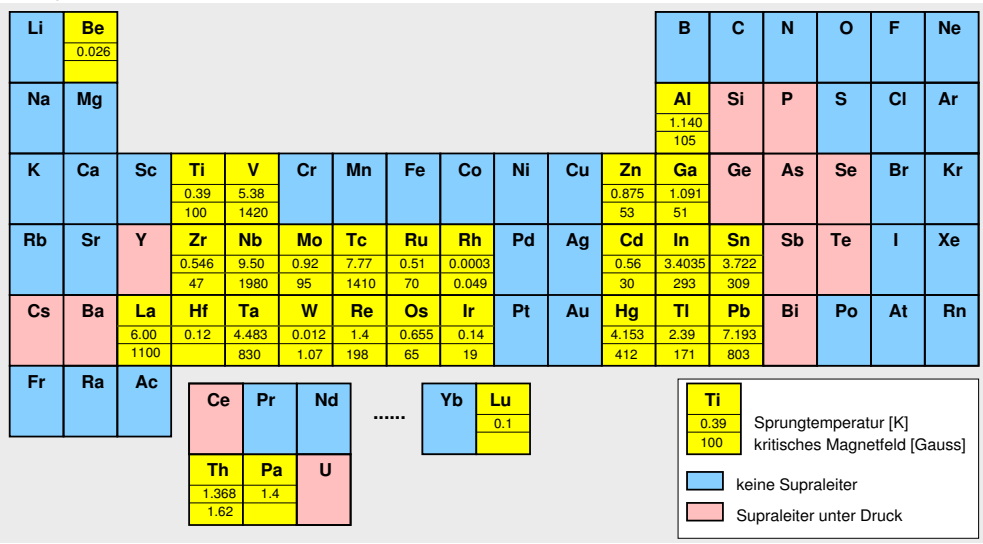




Supraleiter 1. und 2. Art

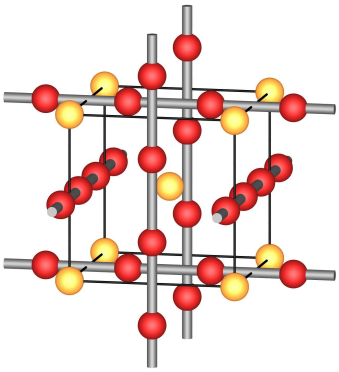
| Low-$T_c$-SL | | High-$T_c$-SL | |
|---|---|---|---|
| Verbindung | $T_c$[K] | Verbindung | $T_c$ [K] |
| Hg | 4.15 | $YBa_2Cu_3O_{7-x}$ | 93 |
| Nb | 9.5 | $YBa_2Cu_4O_{8+x}$ | 80 |
| NbN | 16.0 | $Bi_{2+x}(Sr, Ca)_3Cu_3O_{7-x}$ | 110 |
| $Pb[Mo_6S_8]$ | 14.4 | $Tl_2Ba_2Ca_2Cu_2O_{10}$ | 125 |
| $K_3C_{60}$ | 18.0 | $HgBa_2Ca_2Cu_3O_8$ | 130 |
| $Nb_3Sn$ | 18.05 | | |
| $Nb_3Ge$ | 23.2 | $La_{1.8}Sr_{0.2}CuO_4$ | 30 |
| $MgB_2$ | 39 | | |

Sprungtemperaturen verschiedener Supraleiter

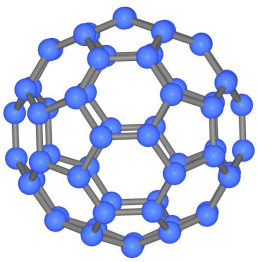
## 2. Low-$T_c$-Materialien

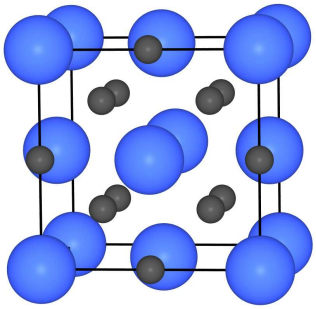



Supraleitende Elemente



$Nb_3Sn$





$K_3C_{60}$