Periodic Table of Superconductivity

(dedicated to the memory of Bernd Matthias; compiled by James S. Schilling)

31 elements superconduct at ambient pressure, 23 more superconduct at high pressure.

H																**He**
Li 0.0004 14 30	**Be** 0.026											**B** 11 250	**C**	**N**	**O** 0.6 100	**F**	**Ne**
Na	**Mg**											**Al** 1.14	**Si** 8.2 15.2	**P** 13 30	**S** 17.3 190	**Cl**	**Ar**
K	**Ca** 29 217	**Sc** 19.6 106	**Ti** 0.39 3.35 56.0	**V** 5.38 16.5 120	**Cr**	**Mn**	**Fe** 2.1 21	**Co**	**Ni**	**Cu**	**Zn** 0.875	**Ga** 1.091 7 1.4	**Ge** 5.35 11.5	**As** 2.4 32	**Se** 8 150	**Br** 1.4 100	**Kr**
Rb 2.5 55	**Sr** 7 50	**Y** 19.5 115	**Zr** 0.546 11 30	**Nb** 9.50 9.9 10	**Mo** 0.92	**Tc** 7.77	**Ru** 0.51	**Rh** .00033	**Pd**	**Ag**	**Cd** 0.56	**In** 3.404	**Sn** 3.722 5.3 11.3	**Sb** 3.9 25	**Te** 7.5 35	**I** 1.2 25	**Xe**
Cs 1.3 12	**Ba** 5 18	insert **La-Lu**	**Hf** 0.12 8.6 62	**Ta** 4.483 4.5 43	**W** 0.012	**Re** 1.4	**Os** 0.655	**Ir** 0.14	**Pt**	**Au**	**Hg-α** 4.153	**Tl** 2.39	**Pb** 7.193	**Bi** .00053 8.5 9.1	**Po**	**At**	**Rn**
Fr	**Ra**	insert **Ac-Lr**	**Rf**	**Ha**													

La-fcc 6.00 13 15	**Ce** 1.7 5	**Pr**	**Nd**	**Pm**	**Sm**	**Eu**	**Gd**	**Tb**	**Dy**	**Ho**	**Er**	**Tm**	**Yb** 4.8 180	**Lu** 12.4 174
Ac	**Th** 1.368	**Pa** 1.4	**U** 0.8(β) 2.4(α) 1.2	**Np**	**Pu**	**Am** 0.79 2.2 6	**Cm**	**Bk**	**Cf**	**Es**	**Fm**	**Md**	**No**	**Lr**

ambient pressure superconductor

T_c(K)
T_c^{max}(K)
P(GPa)

high pressure superconductor

T_c^{max}(K)
P(GPa)

High pressure data for **Ca**: M. Sakata, Y. Nakamoto, K. Shimizu, T. Matsuoka, Y. Ohishi, Phys. Rev. B **83**, 220512 (2011).
High pressure data for **Yb:** J. Song, G. Fabbris, W. Bi, D. Haskel, J. S. Schilling, Phys. Rev. Lett. 121, 037001 (2018).
Ambient pressure data for **Bi**: O. Prakash, A. Kumar, A. Thamizhavel, S. Ramakrishnan, Science 355, 52 (2017).
High pressure data for **Rb**: Y. Deng and J. S. Schilling, Phys. Rev. B (Rapid) 100, 041109 (2019).