

# Periodic Table of Superconductivity

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

31 elements superconduct at ambient pressure, 24 more superconduct at high pressure.

H	ambient pressure superconductor																high pressure superconductor																He	
<b>Li</b> 0.0004 14 30	<b>Be</b> 0.026																	<b>B</b> 11 250	C	N	<b>O</b> 0.6 100	F	Ne											
Na	Mg																	<b>Al</b> 1.14	<b>Si</b> 8.2 15.2	<b>P</b> 13 30	<b>S</b> 17.3 190	Cl	Ar											
<b>K</b>	<b>Ca</b> 29 217	<b>Sc</b> 19.6 106	<b>Ti</b> 0.39 3.35 56.0	<b>V</b> 5.38 16.5 120	Cr	Mn	<b>Fe</b> 2.1 21	Co	Ni	Cu	<b>Zn</b> 0.875	<b>Ga</b> 1.091 7 1.4	<b>Ge</b> 5.35 11.5	<b>As</b> 2.4 32	<b>Se</b> 8 150	<b>Br</b> 1.4 100	Kr																	
<b>Rb</b> 2.5 55	<b>Sr</b> 7 50	<b>Y</b> 19.5 115	<b>Zr</b> 0.546 11 30	<b>Nb</b> 9.50 9.9 10	<b>Mo</b> 0.92	<b>Tc</b> 7.77	<b>Ru</b> 0.51	<b>Rh</b> .00033	Pd	Ag	<b>Cd</b> 0.56	<b>In</b> 3.404	<b>Sn</b> 3.722 5.3 11.3	<b>Sb</b> 3.9 25	<b>Te</b> 7.5 35	<b>I</b> 1.2 25	Xe																	
<b>Cs</b> 1.3 12	<b>Ba</b> 5 18	insert La-Lu	<b>Hf</b> 0.12 8.6 62	<b>Ta</b> 4.483 4.5 43	<b>W</b> 0.012	<b>Re</b> 1.4	<b>Os</b> 0.655	<b>Ir</b> 0.14	Pt	Au	<b>Hg-<math>\alpha</math></b> 4.153	<b>Tl</b> 2.39	<b>Pb</b> 7.193	<b>Bi</b> .00053 8.5 9.1	Po	At	Rn																	
Fr	Ra	insert Ac-Lr	<b>Rf</b>	<b>Ha</b>																														
																		<b>La-fcc</b> 6.00 13 15	<b>Ce</b> 1.7 5	Pr	Nd	Pm	Sm	<b>Eu</b> 2.75 142	Gd	Tb	Dy	Ho	Er	Tm	<b>Yb</b> 4.8 180	<b>Lu</b> 12.4 174		
																		<b>Ac</b>	<b>Th</b> 1.368	<b>Pa</b> 1.4	<b>U</b> 0.8( $\beta$ ) 2.4( $\alpha$ ) 1.2	Np	Pu	<b>Am</b> 0.79 2.2 6	<b>Cm</b>	<b>Bk</b>	<b>Cf</b>	<b>Es</b>	<b>Fm</b>	<b>Md</b>	<b>No</b>	<b>Lr</b>		

M. Debessai, T. Matsuoka, J.J. Hamlin, W. Bi, Y. Meng, K. Shimizu, and J.S. Schilling, J. Phys.: Conf. Series **215**, 012034 (2010).  
 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).