

Atomic Orbital Ionization Energies, eV

Atom	1s	2s	2p	3s	3p	4s	4p
H	13.6						
He	24.5						
Li		5.45					
Be		9.30					
B		14.0	8.30				
C		19.5	10.7				
N		25.5	13.1				
O		32.3	15.9				
F		46.4	18.7				
Ne		48.5	21.5				
Na				5.21			
Mg				7.68			
Al				11.3	5.95		
Si				15.0	7.81		
P				18.7	10.2		
S				20.7	11.7		
Cl				25.3	13.8		
Ar				29.2	15.9		
K						4.34	
Ca						6.07	
Zn						9.42	
Ga						12.6	5.95
Ge						15.6	7.56
As						17.6	9.05
Se						20.8	10.8
Br						24.0	12.5
Kr						27.5	14.3
		3d	4s	4p			
Sc		4.71	5.70	3.22			
Ti		5.58	6.07	3.35			
V		6.32	6.32	3.47			
Cr		7.19	6.57	3.47			
Mn		7.93	6.82	3.59			
Fe		8.68	7.07	3.72			
Co		9.42	7.32	3.84			
Ni		10.0	7.56	3.84			
Cu		10.7	7.69	3.97			

These are one-electron ionization energies of the valence orbitals calculated by finding the average energies of both the ground-state and ionized-state configurations. (Harry Gray, "Electrons and Chemical Bonding," Benjamin, 1964, Appendix)