Ionization Energies of Electrons from Photoelectron Spectroscopy

(all values in kJ/mol)

number	symbol	element	1*s*	2*s*	2*p*	3*s*	3*p*	3*d*	4*s*
1	H	hydrogen	1,310						
2	He	helium	2,370						
3	Li	lithium	6,260	520					
4	Be	beryllium	11,500	900					
5	B	boron	19,300	1,360	800				
6	C	carbon	28,600	1,720	1,090				
7	N	nitrogen	39,600	2,450	1,400				
8	O	oxygen	52,600	3,040	1,310				
9	F	fluorine	67,200	3,888	1,680				
10	Ne	neon	84,000	4,680	2,080				
11	Na	sodium	104,000	6,840	3,670	500			
12	Mg	magnesium	126,000	9,070	5,310	740			
13	Al	aluminum	151,000	12,100	7,190	1,090	580		
14	Si	silicon	178,000	15,100	10,300	1,460	790		
15	P	phosphorous	208,000	18,700	13,500	1,950	1,060		
16	S	sulfur	239,000	22,700	16,500	2,050	1,000		
17	Cl	chlorine	273,000	26,800	20,200	2,440	1,250		
18	Ar	argon	309,000	31,500	24,100	2,820	1,520		
19	K	potassium	347,000	37,100	29,100	3,930	2,380		420
20	Ca	calcium	390,000	42,700	34,000	4,650	2,900		590
21	Sc	scandium	433,000	48,500	39,200	5,440	3,240	770	630