

IA										IIA								IIIB								IVB		VB		VIB		VIIB		VIII								IB		IIB		IIIA		IVA		VA		VIA		VIIA		VIII A																																																
1 1.008 H Hydrogen										3 6.941 Li Lithium	4 9.012 Be Beryllium									19 39.098 K Potassium	20 40.08 Ca Calcium	21 44.956 Sc Scandium	22 47.88 Ti Titanium	23 50.942 V Vanadium	24 51.996 Cr Chromium	25 54.938 Mn Manganese	26 55.847 Fe Iron	27 58.933 Co Cobalt	28 58.70 Ni Nickel	29 63.546 Cu Copper	30 65.39 Zn Zinc	31 69.72 Ga Gallium	32 72.61 Ge Germanium	33 74.922 As Arsenic	34 78.96 Se Selenium	35 79.904 Br Bromine	36 83.80 Kr Krypton	37 85.468 Rb Rubidium	38 87.62 Sr Strontium	39 88.906 Y Yttrium	40 91.22 Zr Zirconium	41 92.906 Nb Niobium	42 95.94 Mo Molybdenum	43 (98) Tc Technetium	44 101.07 Ru Ruthenium	45 102.906 Rh Rhodium	46 106.42 Pd Palladium	47 107.868 Ag Silver	48 112.41 Cd Cadmium	49 114.82 In Indium	50 118.71 Sn Tin	51 121.76 Sb Antimony	52 127.60 Te Tellurium	53 126.905 I Iodine	54 131.29 Xe Xenon	55 132.905 Cs Cesium	56 137.33 Ba Barium	57 138.906 La Lanthanum	72 178.49 Hf Hafnium	73 180.948 Ta Tantalum	74 183.85 W Tungsten	75 186.207 Re Rhenium	76 190.2 Os Osmium	77 192.22 Ir Iridium	78 195.08 Pt Platinum	79 196.967 Au Gold	80 200.59 Hg Mercury	81 204.38 Tl Thallium	82 207.2 Pb Lead	83 208.980 Bi Bismuth	84 (209) Po Polonium	85 (210) At Astatine	86 (222) Rn Radon	87 (223) Fr Francium	88 226.025 Ra Radium	89 227.028 Ac Actinium	90 232.038 Th Thorium	91 231.036 Pa Protactinium	92 238.029 U Uranium	93 237.048 Np Neptunium	94 (244) Pu Plutonium	95 (243) Am Americium	96 (247) Cm Curium	97 (247) Bk Berkelium	98 (251) Cf Californium	99 (252) Es Einsteinium	100 (257) Fm Fermium	101 (258) Md Mendelevium	102 (259) No Nobelium	103 (260) Lr Lawrencium	104 140.12 Ce Cerium	105 140.908 Pr Praseodymium	106 144.24 Nd Neodymium	107 (145) Pm Promethium	108 150.36 Sm Samarium	109 151.97 Eu Europium	110 157.25 Gd Gadolinium	111 158.925 Tb Terbium	112 162.50 Dy Dysprosium	113 164.930 Ho Holmium	114 167.26 Er Erbium	115 168.934 Tm Thulium	116 173.04 Yb Ytterbium	117 174.967 Lu Lutetium

1Å = 10⁻¹⁰ meters

1nm = 10⁻⁹ meters

1µm = 10⁻⁶ meters

1mm = 10⁻³ meters

1cm = 10⁻² meters

1dm = 10⁻¹ meters

1m = 1 meters

Crystal Structures

Cubic, face centered Cubic, body centered

Cubic Hexagonal Monoclinic

Orthorhombic Tetragonal Rhombohedral

Atomic Number	Atomic Weight	Alkali Earth	Alkaline Earth
Symbol		Rare Earth	Other Metals
K α Energy (+)	L α Energy (+)	Non-Metals	Halogens
L α Energy (+)	Crystal Structure	Transition Metals	Metalloids
M α Energy (+)		Noble Gases	



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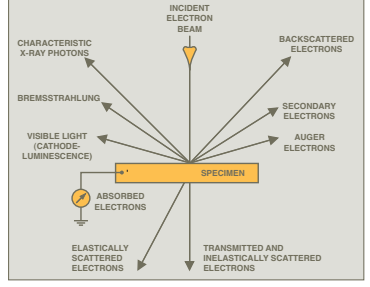
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EDAX Peak Identification Chart

Table listing elements from Li to U with columns for atomic number, K, L, and M line energies (Kα, Kβ, Lα, Lβ, Lγ).

A listing of each element from lithium upwards by increasing atomic number with attendant K, L & M Line energies (up to 40 keV).

Signals Generated in the Scanning Electron Microscope



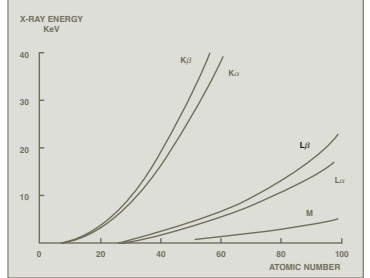
Resolution: FWHM = sqrt(R^2 + 2.4236 * (E - 5894))

Bragg's Law: nλ = 2d sinθ

Energy ↔ Wavelength λ = (12.396 / E)

FWHM = Full Width Half Maximum R = Resolution (eV) @ MnKα E = X-ray Energy λ = Wavelength (Angstroms)

Energies of the Principal X-Ray Emission Lines



Large table of EDAX peak data. Columns include Energy, Element, Atomic Number, Principal Emission Line, and less intense minor line energies for various elements from Be to Sm.