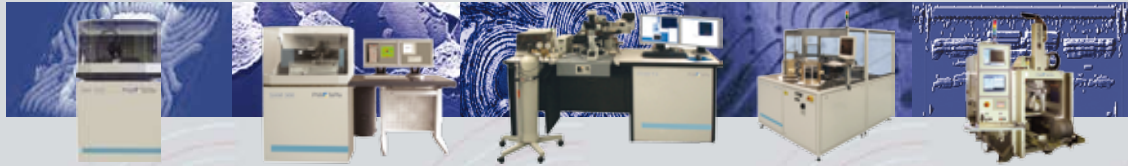


Periodic Table of Elements for Scanning Acoustic Microscopy



1 0.00009 H Hydrogen 0.0001 1314																	2 0.00018 He Helium 0.00017 972	
3 0.53 Li Lithium 3.18 6000	4 1.85 Be Beryllium 23.79 12890																	
11 0.97 Na Sodium 3.1 3200	12 1.74 Mg Magnesium 10.12 5823																	
19 0.86 K Potassium 1.57 1820	20 1.55 Ca Calcium 5.91 3810	21 2.99 Sc Scandium -	22 4.51 Ti Titanium 27.65 6130	23 6.09 V Vanadium 36.68 6023	24 7.19 Cr Chromium 47.51 6608	25 7.44 Mn Manganese 34.22 4600	26 7.874 Fe Iron 46.46 5900	27 8.9 Co Cobalt -	28 8.9 Ni Nickel 44.23 4970	29 8.96 Cu Copper 42.64 4759	30 7.135 Zn Zinc (rolled) 29.87 4187	31 5.91 Ga Gallium 16.19 2740	32 5.32 Ge Germanium 28.78 5410	33 5.72 As Arsenic 14.76 2580	34 4.79 Se Selenium 16.05 3350	35 3.12 Br Bromine 0.4212 135	36 0.0037 Kr Krypton 0.00078 212	
37 1.53 Rb Rubidium 1.93 1260	38 2.54 Sr Strontium -	39 4.45 Y Yttrium -	40 6.53 Zr Zirconium 30.36 4650	41 8.57 Nb Niobium 43.43 5068	42 10.22 Mo Molybdenum 66.17 6475	43 11.5 Tc Technetium -	44 12.37 Ru Ruthenium 73.85 5970	45 12.45 Rh Rhodium 58.52 4700	46 12.02 Pd Palladium 36.9 3070	47 10.5 Ag Silver 39.84 3794	48 8.65 Cd Cadmium 24.05 2780	49 7.31 In Indium 8.8817 1215	50 7.30 Sn Tin 24.67 3380	51 6.69 Sb Antimony 22.75 3400	52 6.24 Te Tellurium -	53 4.93 I Iodine -	54 0.0059 Xe Xenon 0.0064 1090	
55 1.87 Cs Caesium 1.81 967	56 3.65 Ba Barium 20.59 5640	57 6.17 La Lanthanum -	72 13.3 Hf Hafnium 51.07 3840	73 16.6 Ta Tantalum 69.04 4159	74 19.3 W Tungsten 100.77 5221	75 21.02 Re Rhenium 98.79 4700	76 22.61 Os Osmium 111.69 4940	77 22.65 Ir Iridium 109.29 4825	78 21.4 Pt Platinum 69.76 3260	79 19.3 Au Gold (hard drawn) 62.53 3240	80 13.55 Hg Mercury 19.65 1450	81 11.85 Tl Thallium 19.20 1620	82 11.4 Pb Lead 24.62 2160	83 9.8 Bi Bismuth 21.56 2200	84 9.3 Po Polonium -	85 At Astatine -	86 0.0097 Rn Radon -	
87 1.87 Fr Francium -	88 5.0 Ra Radium 4.11 822																	
																89 10.07 Ac Actinium -	90 11.7 Th Thorium 28.08 2400	92 18.95 U Uranium 51.9 3370

Density [g/cm³]
Atomic Number
Atomic Symbol
Element/Alloy
Impedance (Mrayl)
Longitudinal Sound Velocity [m/s]

- Metallic
- Metalloid
- Non-metallic
- Alkali
- Alkaline
- Gases
- Fluids
- Oxides
- Glasses
- Plastic
- Rubbers
- Other Materials

Oxides and Ceramics, Glasses, Plastic and Rubbers, other Materials

2.70 Al Al (rolled) 17.33 6420	3.97 Alumina -	2.795 Dural Duraluminium 17.88 6398	3.98 Sapphire Sapphire (c-axis) 44.38 11150	7.69 Iron (soft) -	7.22 Iron (cast) -	7.90 Steel mild -	7.90 Steel stainless -	8.0 Invar Fe alloy 37.26 4657	8.70 Babbitt Bearing alloy 20.01 2300	8.907 Nickel nonmag. soft -	8.907 Nickel nonmag. hard -	8.82 Monel Ni/Cu Alloy 47.19 5350	8.39 Inconel Ni alloy 47.82 5700	8.90 Constantan Ni alloy 46.08 5177	8.5 Brass Cu/Ni alloy 37.16 4372	9.36 Zircalloy -	1.90 Bone human tibia 7.60 4000
1.21 Epon 828 mpda 3.42 2829	2.71 Epoxy silver, e-solder 5.15 1900	3.21 Silicon carbide -	3.185 Silicon nitride -	5.15 Titanium carbide -	5.606 Zink oxide (c-axis) -	6.02 Barium titanate -	15.0 Tungsten carbid -	10.96 Uranium dioxide -	2.49 Coming 0215 sheet 14.09 5660	2.24 Crown -	3.60 Flint heavy -	2.23 Pyrex -	2.20 Quarz fused -	2.50 Soda lime -	2.15 Silica fused -	1.19 Acrylic Plexiglas -	1.40 Bakelite -
1.11 Butyl rubber 1.89 1700	1.18 Mylar -	1.31 Neoprene -	1.14 Nylon Nylon 66 2.99 2620	1.185 PMMA Perspex 3.20 2700	1.19 PC Polycarbonate 2.64 2220	1.07 Polyesther casting resin 2.45 2290	0.92 PE Polyethylene 1.79 1950	0.904 PP Polypropylene 2.48 2740	1.05 PS Polystyren 2.52 2400	1.35 PVC Polyvinylchloride 3.11 2300	1.70 PVDC Polyvinilidene 4.08 2400	2.14 PTFE Teflon 2.97 1390	0.00012 Air -	1.00 Water H ₂ O 1.495 1495	0.7869 Methanol CH ₃ OH 0.856 1088	0.7894 Ethanol C ₂ H ₅ OH 0.89 1127	0.7869 Acetone (CH ₃) ₂ CO 0.911 1158