

Elements

Atomic number	Name	Symbol	Group	Crystal Structure	Atomic weight
1	Hydrogen	H	Non-Metal	Hexagonal	1.0079
2	Helium	He	Noble Gas	Hexagonal	4.0026
3	Lithium	Li	Alkali Met.	Cubic body centered	6.94
4	Beryllium	Be	Alkali Earth	Hexagonal	9.01218
5	Boron	B	Non-Metal	Rhombohedral	10.81
6	Carbon	C	Non-Metal	Hexagonal	12.011
7	Nitrogen	N	Non-Metal	Hexagonal	14.0067
8	Oxygen	O	Non-Metal	Cubic	15.9994
9	Fluorine	F	Halogen	Cubic	18.998403
10	Neon	Ne	Noble Gas	Cubic face centered	20.17
11	Sodium	Na	Alkali Met.	Cubic body centered	22.98977
12	Magnesium	Mg	Alkali Earth	Hexagonal	24.305
13	Aluminum	Al	Metal	Cubic face centered	26.98154
14	Silicon	Si	Non-Metal	Cubic face centered	28.0855
15	Phosphorous	P	Non-Metal	Monoclinic	30.97376
16	Sulfur	S	Non-Metal	Orthorhombic	32.06
17	Chlorine	Cl	Halogen	Orthorhombic	35.453
18	Argon	Ar	Noble Gas	Cubic face centered	39.948
19	Potassium	K	Alkali Met.	Cubic body centered	39.0983
20	Calcium	Ca	Alkali Earth	Cubic face centered	40.08
21	Scandium	Sc	Trans. Met.	Hexagonal	44.9559
22	Titanium	Ti	Trans. Met.	Hexagonal	47.9
23	Vanadium	V	Trans. Met.	Cubic body centered	50.9415
24	Chromium	Cr	Trans. Met.	Cubic body centered	51.996
25	Manganese	Mn	Trans. Met.	Cubic body centered	54.938
26	Iron	Fe	Trans. Met.	Cubic body centered	55.847
27	Cobalt	Co	Trans. Met.	Hexagonal	58.9332
28	Nickel	Ni	Trans. Met.	Cubic face centered	58.71
29	Copper	Cu	Trans. Met.	Cubic face centered	63.546
30	Zinc	Zn	Trans. Met.	Hexagonal	65.38
31	Gallium	Ga	Metal	Orthorhombic	69.735
32	Germanium	Ge	Metal	Cubic face centered	72.59
33	Arsenic	As	Non-Metal	Rhombohedral	74.9216
34	Selenium	Se	Non-Metal	Hexagonal	78.96
35	Bromine	Br	Halogen	Orthorhombic	79.904
36	Krypton	Kr	Noble Gas	Cubic face centered	83.8
37	Rubidium	Rb	Alkali Met.	Cubic body centered	85.467
38	Strontium	Sr	Alkali Earth	Cubic face centered	87.62
39	Yttrium	Y	Trans. Met.	Hexagonal	88.9059
40	Zirconium	Zr	Trans. Met.	Hexagonal	91.22
41	Niobium	Nb	Trans. Met.	Cubic body centered	92.9064

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	42	Molybdenum	Mo	Trans. Met.	Cubic body centered	95.94
	43	Technetium	Tc	Trans. Met.	Hexagonal	98.9062
	44	Ruthenium	Ru	Trans. Met.	Hexagonal	101.07
	45	Rhodium	Rh	Trans. Met.	Cubic face centered	102.9055
	46	Palladium	Pd	Trans. Met.	Cubic face centered	106.4
	47	Silver	Ag	Trans. Met.	Cubic face centered	107.868
	48	Cadmium	Cd	Trans. Met.	Hexagonal	112.41
	49	Indium	In	Metal	Tetragonal	114.82
	50	Tin	Sn	Metal	Tetragonal	118.69
	51	Antimony	Sb	Metal	Rhombohedral	121.75
	52	Tellurium	Te	Non-Metal	Hexagonal	127.6
	53	Iodine	I	Halogen	Orthorhombic	126.9045
	54	Xenon	Xe	Noble Gas	Cubic face centered	131.3
	55	Cesium	Cs	Alkali Met.	Cubic body centered	132.9054
	56	Barium	Ba	Alkali Earth	Cubic body centered	137.33
	57	Lanthanum	La	Trans. Met.	Hexagonal	138.9055
	58	Cerium	Ce	Rare Earth	Cubic face centered	140.12
	59	Praseodymium	Pr	Rare Earth	Hexagonal	140.9077
	60	Neodymium	Nd	Rare Earth	Hexagonal	144.24
	61	Promethium	Pm	Rare Earth	Hexagonal	-145
	62	Samarium	Sm	Rare Earth	Rhombohedral	150.4
	63	Europium	Eu	Rare Earth	Cubic body centered	151.96
	64	Gadolinium	Gd	Rare Earth	Hexagonal	157.25
	65	Terbium	Tb	Rare Earth	Hexagonal	158.9254
	66	Dysprosium	Dy	Rare Earth	Hexagonal	162.5
	67	Holmium	Ho	Rare Earth	Hexagonal	164.9304
	68	Erbium	Er	Rare Earth	Hexagonal	167.26
	69	Thulium	Tm	Rare Earth	Hexagonal	168.9342
	70	Ytterbium	Yb	Rare Earth	Cubic face centered	173.04
	71	Lutetium	Lu	Rare Earth	Hexagonal	174.96
	72	Hafnium	Hf	Trans. Met.	Hexagonal	178.49
	73	Tantalum	Ta	Trans. Met.	Cubic body centered	180.947
	74	Tungsten	W	Trans. Met.	Cubic body centered	183.85
	75	Rhenium	Re	Trans. Met.	Hexagonal	186.207
	76	Osmium	Os	Trans. Met.	Hexagonal	190.2
	77	Iridium	Ir	Trans. Met.	Cubic face centered	192.22
	78	Platinum	Pt	Trans. Met.	Cubic face centered	195.09
	79	Gold	Au	Trans. Met.	Cubic face centered	196.9665
	80	Mercury	Hg	Trans. Met.	Rhombohedral	200.59
	81	Thallium	Tl	Metal	Hexagonal	204.37
	82	Lead	Pb	Metal	Cubic face centered	207.2
	83	Bismuth	Bi	Metal	Rhombohedral	208.9804
	84	Polonium	Po	Metal	Monoclinic	-209
	85	Astatine	At	Halogen	Unknown	-210

Elements

	86	Radon	Rn	Noble Gas	Cubic face centered	-222
	87	Francium	Fr	Alkali Met.	Cubic body centered	-223
	88	Radium	Ra	Alkali Earth	Cubic body centered	226.0254
	89	Actinium	Ac	Trans. Met.	Cubic face centered	-227
	90	Thorium	Th	Rare Earth	Cubic face centered	232.0381
	91	Protactinium	Pa	Rare Earth	Orthorhombic	231.0359
	92	Uranium	U	Rare Earth	Orthorhombic	238.029
	93	Neptunium	Np	Rare Earth	Orthorhombic	237.0482
	94	Plutonium	Pu	Rare Earth	Monoclinic	-244
	95	Americium	Am	Rare Earth	Hexagonal	-243
	96	Curium	Cm	Rare Earth	Unknown	-247
	97	Berkelium	Bk	Rare Earth	Unknown	-247
	98	Californium	Cf	Rare Earth	Unknown	-251
	99	Einsteinium	Es	Rare Earth	Unknown	-254
	100	Fermium	Fm	Rare Earth	Unknown	-257
	101	Mendelevium	Md	Rare Earth	Unknown	-258
	102	Nobelium	No	Rare Earth	Unknown	-259
	103	Lawrencium	Lr	Rare Earth	Unknown	-260
	104	Unnilquadium	Unq	Trans. Met.	Unknown	-261
	105	Unnilpentium	Unp	Trans. Met.	Unknown	-262
	106	Unnilhexium	Unh	Trans. Met.	Unknown	-263
	107	Unnilseptium	Uns	Trans. Met.	Unknown	-262
	108	Unniloctium	Uno	Trans. Met.	Unknown	-265
	109	Unnilennium	Une	Trans. Met.	Unknown	-266
	110	Ununnilium	Unn	Trans. Met.	Unknown	-272

Elements

		Degrees C	Degrees C		+	+
Shells	Filling orbital	Melt	Boil	Electronegativity	Covalent radius	Atomic radius
1	1s1	-259.14	-252.87	2.2	0.32	0.79
2	1s2	-272	-268.6	#VALUE!	0.93	0.49
2,1	2s1	180.54	1347	0.98	1.23	2.05
2,2	2s2	1278	2970	1.57	0.9	1.4
2,3	2p1	2300	2550	2.04	0.82	1.17
2,4	2p2	3500	4827	2.55	0.77	0.91
2,5	2p3	-209.9	-195.8	3.04	0.75	0.75
2,6	2p4	-218.4	-183	3.44	0.73	0.65
2,7	2p5	-219.62	-188.14	3.98	0.72	0.57
2,8	2p6	-248.6	-246.1	#VALUE!	0.71	0.51
2,8,1	3s1	97.8	882.9	0.93	1.54	2.23
2,8,2	3s2	638.8	1090	1.31	1.36	1.72
2,8,3	3p1	660.37	2467	1.61	1.18	1.82
2,8,4	3p2	1410	2355	1.9	1.11	1.46
2,8,5	3p3	44.1	280	2.19	1.06	1.23
2,8,6	3p4	112.8	444.6	2.58	1.02	1.09
2,8,7	3p5	-100.98	-34.6	3.16	0.99	0.97
2,8,8	3p6	-189.3	-186	#VALUE!	0.98	0.88
2,8,8,1	4s1	63.65	774	0.82	2.03	2.77
2,8,8,2	4s2	839	1484	1	1.74	2.23
2,8,9,2	3d1	1539	2832	1.36	1.44	2.09
2,8,10,2	3d2	1660	3287	1.54	1.32	2
2,8,11,2	3d3	1890	3380	1.63	1.22	1.92
2,8,13,1	3d5	1857	2672	1.66	1.18	1.85
2,8,13,2	3d5	1245	1962	1.55	1.17	1.79
2,8,14,2	3d6	1535	2750	1.83	1.17	1.72
2,8,15,2	3d7	1495	2870	1.88	1.16	1.67
2,8,16,2	3d8	1453	2732	1.91	1.15	1.62
2,8,18,1	3d10	1083	2567	1.9	1.17	1.57
2,8,18,2	3d10	419.58	907	1.65	1.25	1.53
2,8,18,3	4p1	29.78	2403	1.81	1.26	1.81
2,8,18,4	4p2	937.4	2830	2.01	1.22	1.52
2,8,18,5	4p3	817	613	2.18	1.2	1.33
2,8,18,6	4p4	217	684.9	2.55	1.16	1.22
2,8,18,7	4p5	-7.2	58.78	2.96	1.14	1.12
2,8,18,8	4p6	-157.2	-153.4	#VALUE!	1.12	1.03
2,8,18,8,1	5s1	38.89	688	0.82	2.16	2.98
2,8,18,8,2	5s2	769	1384	0.95	1.91	2.45
2,8,18,9,2	4d1	1523	3337	1.22	1.62	2.27
2,8,18,10,2	4d2	1852	4377	1.33	1.45	2.16
2,8,18,12,1	4d4	2468	4927	1.6	1.34	2.08

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2,8,18,13,1	4d5	2617	4612	2.16	1.3	2.01
2,8,18,14,1	4d6	2200	4877	1.9	1.27	1.95
2,8,18,15,1	4d7	2250	3900	2.2	1.25	1.89
2,8,18,16,1	4d8	1966	3727	2.28	1.25	1.83
2,8,18,18	4d10	1552	2927	2.2	1.28	1.79
2,8,18,18,1	4d10	961.93	2212	1.93	1.34	1.75
2,8,18,18,2	4d10	320.9	765	1.69	1.48	1.71
2,8,18,18,3	5p1	156.61	2000	1.78	1.44	2
2,8,18,18,4	5p2	231.9	2270	1.96	1.41	1.72
2,8,18,18,5	5p3	630	1750	2.05	1.4	1.53
2,8,18,18,6	5p4	449.5	989.8	2.1	1.36	1.42
2,8,18,18,7	5p5	113.5	184	2.66	1.33	1.32
2,8,18,18,8	5p6	-111.9	-108.1	#VALUE!	1.31	1.24
2,8,18,18,8,1	6s1	28.5	678.4	0.79	2.35	3.34
2,8,18,18,8,2	6s2	725	1140	0.89	1.98	2.78
2,8,18,18,9,2	5d1	920	3469	1.1	1.69	2.74
2,8,18,20,8,2	4f2	795	3257	1.12	1.65	2.7
2,8,18,21,8,2	4f3	935	3127	1.13	1.65	2.67
2,8,18,22,8,2	4f4	1010	3127	1.14	1.64	2.64
2,8,18,23,8,2	4f5	#VALUE!	#VALUE!	1.13	1.63	2.62
2,8,18,24,8,2	4f6	1072	1900	1.17	1.62	2.59
2,8,18,25,8,2	4f7	822	1597	1.2	1.85	2.56
2,8,18,25,9,2	4f7	1311	3233	1.2	1.61	2.54
2,8,18,27,8,2	4f9	1360	3041	1.2	1.59	2.51
2,8,18,28,8,2	4f10	1412	2562	1.22	1.59	2.49
2,8,18,29,8,2	4f11	1470	2720	1.23	1.58	2.47
2,8,18,30,8,2	4f12	1522	2510	1.24	1.57	2.45
2,8,18,31,8,2	4f13	1545	1727	1.25	1.56	2.42
2,8,18,32,8,2	4f14	824	1466	1.1	1.74	2.4
2,8,18,32,9,2	4f14	1656	3315	1.27	1.56	2.25
2,8,18,32,10,2	5d2	2150	5400	1.3	1.44	2.16
2,8,18,32,11,2	5d3	2996	5425	1.5	1.34	2.09
2,8,18,32,12,2	5d4	3410	5660	2.36	1.3	2.02
2,8,18,32,13,2	5d5	3180	5627	1.9	1.28	1.97
2,8,18,32,14,2	5d6	3045	5027	2.2	1.26	1.92
2,8,18,32,15,2	5d7	2410	4527	2.2	1.27	1.87
2,8,18,32,17,1	5d9	1772	3827	2.28	1.3	1.83
2,8,18,32,18,1	5d10	1064.43	2807	2.54	1.34	1.79
2,8,18,32,18,2	5d10	-38.87	356.58	2	1.49	1.76
2,8,18,32,18,3	6p1	303.5	1457	2.04	1.48	2.08
2,8,18,32,18,4	6p2	327.5	1740	2.33	1.47	1.81
2,8,18,32,18,5	6p3	271.3	1560	2.02	1.46	1.63
2,8,18,32,18,6	6p4	254	962	2	1.46	1.53
2,8,18,32,18,7	6p5	302	337	2.2	1.45	1.43

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2,8,18,32,18,8	6p6	-71	-61.8	#VALUE!	#VALUE!	1.34
2,8,18,32,18,8,1	7s1	27	677	0.7	#VALUE!	#VALUE!
2,8,18,32,18,8,2	7s2	700	1737	0.9	#VALUE!	#VALUE!
2,8,18,32,18,9,2	6d1	1050	3200	1.1	#VALUE!	#VALUE!
2,8,18,32,18,10,2	6d2	1750	4790	1.3	1.65	#VALUE!
2,8,18,32,20,9,2	5f2	1600	#VALUE!	1.5	#VALUE!	#VALUE!
2,8,18,32,21,9,2	5f3	1132	3818	1.38	1.42	#VALUE!
2,8,18,32,23,8,2	5f4	640	3902	1.36	#VALUE!	#VALUE!
2,8,18,32,24,8,2	5f6	639.5	3235	1.28	#VALUE!	#VALUE!
2,8,18,32,25,8,2	5f7	994	2607	1.3	#VALUE!	#VALUE!
2,8,18,32,25,9,2	5f7	1340	#VALUE!	1.3	#VALUE!	#VALUE!
2,8,18,32,26,9,2	5f8	#VALUE!	#VALUE!	1.3	#VALUE!	#VALUE!
2,8,18,32,28,8,2	5f10	#VALUE!	#VALUE!	1.3	#VALUE!	#VALUE!
2,8,18,32,29,8,2	5f11	#VALUE!	#VALUE!	1.3	#VALUE!	#VALUE!
2,8,18,32,30,8,2	5f12	#VALUE!	#VALUE!	1.3	#VALUE!	#VALUE!
2,8,18,32,31,8,2	5f13	#VALUE!	#VALUE!	1.3	#VALUE!	#VALUE!
2,8,18,32,32,8,2	5f14	#VALUE!	#VALUE!	1.3	#VALUE!	#VALUE!
2,8,18,32,32,9,2	5f14	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
2,8,18,32,32,10,2	6d2	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
2,8,18,32,32,11,2	6d3	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
2,8,18,32,32,12,2	6d4	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
2,8,18,32,32,13,2	6d5	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
2,8,18,32,32,14,2	6d6	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
2,8,18,32,32,15,2	6d7	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
2,8,18,32,32,17,1	6d8	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!

Elements

cm ³ /mol	V	V	V	
Atomic volume	First ionization potential	2nd ionization potential	3rd ionization potential	Oxidation states
14.4	13.598	#VALUE!	#VALUE!	1
#VALUE!	24.587	54.416	#VALUE!	#VALUE!
13.1	5.392	76.638	122.451	1
5	9.322	18.211	153.893	2
4.6	8.298	25.154	37.93	3
4.58	11.26	24.383	47.887	(<u>_</u> 4),2
17.3	14.534	29.601	47.448	(<u>_</u> 3),5,4,2
14	13.618	35.117	54.934	-2
17.1	17.422	34.97	62.707	-1
16.7	21.564	40.962	63.45	#VALUE!
23.7	5.139	47.286	71.641	1
13.97	7.646	15.035	80.143	2
10	5.986	18.828	28.447	3
12.1	8.151	16.345	33.492	4
17	10.486	19.725	30.18	<u>_</u> 3,(5),7
15.5	10.36	23.33	34.83	<u>_</u> 2,4,(6)
22.7	12.967	23.81	39.611	(<u>_</u> 1),3,5,7
28.5	15.759	27.629	40.74	#VALUE!
45.46	4.341	31.625	45.72	1
29.9	6.113	11.871	50.908	2
15	6.54	12.8	24.76	3
10.64	6.82	13.58	27.491	(4),3
8.78	6.74	14.65	29.31	(5),4,3,2
7.23	6.766	16.5	30.96	6,(3),2
1.39	7.435	15.64	33.667	7,6,4,(2),3
7.1	7.87	16.18	30.651	2,(3)
6.7	7.86	17.06	33.5	(2),3
6.59	7.635	18.168	35.17	(2),3
7.1	7.726	20.292	36.83	(2),1
9.2	9.394	17.964	39.722	2
11.8	5.999	20.51	30.71	3
13.6	7.899	15.934	34.22	4
13.1	9.81	18.633	28.351	(<u>_</u> 3),5
16.45	9.752	21.19	30.82	-2,(4),6
23.5	11.814	21.8	36	(<u>_</u> 1),5
38.9	13.999	24.359	36.95	#VALUE!
55.9	4.177	27.28	40	1
33.7	5.695	11.03	43.6	2
19.8	6.38	12.24	20.52	3
14.1	6.84	13.13	22.99	4
10.87	6.88	14.32	25.04	(5),3

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9.4	7.099	16.461	27.16	(6),5,4,3,2
8.5	7.28	15.26	29.54	7
8.3	7.37	16.76	28.47	2,(3,4),6,8
8.3	7.46	18.08	31.06	2,(3),4
8.9	8.34	19.63	32.93	(2),4
10.3	7.576	21.49	34.83	1
13.1	8.993	16.908	37.48	2
15.7	5.786	18.869	28.03	3
16.3	7.344	14.632	30.502	(4),2
18.23	8.641	16.53	25.3	(_3),5
20.5	9.009	18.6	27.96	-2,(4),6
25.74	10.451	19.131	33	(_1),5,7
37.3	12.13	21.21	32.1	#VALUE!
71.07	3.894	25.1	#VALUE!	1
39.24	5.212	10.004	#VALUE!	2
20.73	5.58	11.059	19.174	3
20.67	5.54	10.851	20.2	(3),4
20.8	5.46	10.551	21.62	(3,4)
20.6	5.53	10.727	22.076	3
22.39	5.554	10.903	22.283	3
19.95	5.64	11.069	23.423	(3),2
28.9	5.67	11.245	24.926	(3),2
19.9	6.15	12.095	20.635	3
19.2	5.86	11.525	21.91	(3),4
19	5.94	11.67	22.802	3
18.7	6.018	11.805	22.843	3
18.4	6.101	11.929	22.739	3
18.1	6.184	12.054	26.367	(3),2
24.79	6.254	12.188	25.03	(3),2
17.78	5.43	13.888	20.957	3
13.6	6.65	14.925	23.32	4
10.9	7.89	#VALUE!	#VALUE!	5
9.53	7.98	#VALUE!	#VALUE!	(6),5,4,3,2
8.85	7.88	#VALUE!	#VALUE!	(7),6,4,2,-1
8.49	8.7	#VALUE!	#VALUE!	2,3,(4),6,8
8.54	9.1	#VALUE!	#VALUE!	2,3,(4),6
9.1	9	18.563	#VALUE!	2,(4)
10.2	9.225	20.521	#VALUE!	(3),1
14.82	10.437	18.759	34.202	(2),1
17.2	6.108	20.428	29.829	3,(1)
18.17	7.416	15.028	31.943	4,(2)
21.3	7.289	16.687	25.559	(3),5
22.23	8.42	#VALUE!	#VALUE!	(4),2
#VALUE!	9.5	#VALUE!	#VALUE!	(_1),3,5,7

Elements

50.5	10.748	#VALUE!	#VALUE!	#VALUE!
#VALUE!	#VALUE!	#VALUE!	#VALUE!	1
45.2	5.279	10.148	#VALUE!	2
22.54	5.17	12.126	#VALUE!	3
19.9	6.08	11.504	20.003	4
15	5.89	#VALUE!	#VALUE!	(5),4
12.59	6.05	#VALUE!	#VALUE!	(6),5,4,3
11.62	6.19	#VALUE!	#VALUE!	6,(5),4,3
12.32	6.06	#VALUE!	#VALUE!	6,5,(4),3
17.86	5.993	#VALUE!	#VALUE!	6,5,4,(3)
18.28	6.02	#VALUE!	#VALUE!	3
#VALUE!	6.23	#VALUE!	#VALUE!	4,(3)
#VALUE!	6.3	#VALUE!	#VALUE!	3
#VALUE!	6.42	#VALUE!	#VALUE!	#VALUE!
#VALUE!	6.5	#VALUE!	#VALUE!	#VALUE!
#VALUE!	6.58	#VALUE!	#VALUE!	#VALUE!
#VALUE!	6.65	#VALUE!	#VALUE!	#VALUE!
#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!

Elements

g/cm ³	J/gK	kJ/mol	kJ/mol	10 ⁶ /cm ohm
Density @ 293 K	Specific heat	Heat of vaporization	Heat of fusion	Electrical conductivity
0.0000899	14.304	0.44936	0.05868	#VALUE!
0.0001787	5.193	0.0845	#VALUE!	#VALUE!
0.53	3.6	145.92	3	0.108
1.848	1.82	292.4	12.2	0.313
2.34	1.02	489.7	50.2	1E-12
2.62	0.71	355.8	#VALUE!	0.00061
0.0012506	1.04	2.7928	0.3604	#VALUE!
0.001429	0.92	3.4099	0.22259	#VALUE!
0.001696	0.82	3.2698	0.2552	#VALUE!
0.0009	0.904	1.7326	0.3317	#VALUE!
0.971	1.23	96.96	2.598	0.139
1.738	1.02	127.4	8.954	0.226
2.702	0.9	293.4	10.79	0.377
2.33	0.71	384.22	50.55	2.52E-12
1.82	0.77	12.129	0.657	1E-17
2.07	0.71	#VALUE!	1.7175	5E-24
0.003214	0.48	10.2	3.203	#VALUE!
0.0017824	0.52	6.447	1.188	#VALUE!
0.862	0.75	79.87	2.334	0.139
1.55	0.63	153.6	8.54	0.298
3	0.6	314.2	14.1	0.0177
4.5	0.52	421	15.45	0.0234
5.8	0.49	0.452	20.9	0.0489
7.19	0.45	344.3	16.9	0.0774
7.43	0.48	226	12.05	0.00695
7.86	0.44	349.6	13.8	0.0993
8.9	0.42	376.5	16.19	0.172
8.9	0.44	370.4	17.47	0.143
8.96	0.38	300.3	13.05	0.596
7.14	0.39	115.3	7.322	0.166
5.907	0.37	258.7	5.59	0.0678
5.323	0.32	330.9	36.94	0.0000000145
5.72	0.33	34.76	#VALUE!	0.0345
4.79	0.32	37.7	6.694	1E-12
3.119	0.473	15.438	5.286	#VALUE!
0.003708	0.248	9.029	1.638	#VALUE!
1.53	0.363	72.216	2.192	0.0779
2.6	0.3	144	8.3	0.0762
4.47	0.3	363	11.4	0.0166
6.4	0.27	58.2	16.9	0.0236
8.57	0.26	682	26.4	0.0693

Elements

10.2	0.25	598	32	0.187
11.5	0.21	660	24	0.067
12.2	0.238	595	24	0.137
12.4	0.242	493	21.5	0.211
12.02	0.24	357	17.6	0.095
10.5	0.235	250.58	11.3	0.63
8.65	0.23	99.57	6.192	0.138
7.31	0.23	231.5	3.263	0.116
7.3	0.227	295.8	7.029	0.0917
6.684	0.21	77.14	19.87	0.0288
6.24	0.2	52.55	17.49	0.000002
4.93	0.214	20.752	7.824	8E-16
0.00588	0.158	12.636	2.297	#VALUE!
1.873	0.24	67.74	2.092	0.0489
3.51	0.204	142	7.75	0.03
6.7	0.19	414	6.2	0.0126
6.78	0.19	414	5.46	0.0115
6.77	0.19	296.8	6.89	0.0148
7	0.19	273	7.14	0.0157
6.475	0.18	#VALUE!	#VALUE!	#VALUE!
7.54	0.2	166.4	8.63	0.00956
5.259	0.18	143.5	9.21	0.0112
7.895	0.23	359.4	10.05	0.00736
8.27	0.18	330.9	10.8	0.00889
8.536	0.17	230	11.06	0.0108
8.8	0.16	241	12.2	0.0124
9.05	0.17	261	19.9	0.0117
9.33	0.16	191	16.84	0.015
6.98	0.15	128.9	7.66	0.0351
9.85	0.15	355.9	18.6	0.0185
13.2	0.14	575	24.06	0.0312
16.6	0.14	743	31.6	0.0761
19.3	0.13	824	35.4	0.189
21	0.13	715	33.2	0.0542
22.4	0.13	746	31.8	0.109
22.42	0.13	604	26.1	0.197
21.45	0.13	510	19.6	0.0966
19.32	0.128	334.4	12.55	0.452
13.546	0.139	59.229	2.295	0.0104
11.85	0.13	164.1	4.142	0.0617
11.34	0.13	177.7	4.799	0.0481
9.8	0.12	104.8	11.3	0.00867
9.4	0.12	#VALUE!	#VALUE!	0.0219
#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!

Elements

W/cmK	Discovery date	Melt	Boil	Symbol
0.001815	1766			Ac
0.00152	1895	-272_C @ 26 atmos.		Ag
0.847	1817			Al
2	1798			Am
0.27	1828			Ar
1.29	#VALUE!	3500_C (Sublimes)		As
0.0002598	1772			At
0.0002674	1774			Au
0.000279	1886			B
0.000493	1898			Ba
1.41	1807			Be
1.56	1808			Bi
2.37	1825			Bk
1.48	1823			Br
0.00235	1669			C
0.00269	#VALUE!			Ca
0.000089	1774			Cd
0.0001772	1894			Ce
1.024	1807			Cf
2	1808			Cl
0.158	1879			Cm
0.219	1791			Co
0.307	1830	1890_C_10_C		Cr
0.937	1797			Cs
0.0782	1774			Cu
0.802	#VALUE!			Dy
1	1737			Er
0.907	1751			Es
4.01	#VALUE!			Eu
1.16	1746			F
0.406	1875			Fe
0.599	1886			Fm
0.5	#VALUE!	817_C @ 28 atmos.	613_C Sublimes	Fr
0.0204	1817			Ga
0.00122	1826			Gd
0.0000949	1898			Ge
0.582	1861			H
0.353	1790			He
0.172	1794			Hf
0.227	1789	1852_C_2_C		Hg
0.537	1801	2468_C_10_C		Ho

Elements

1.38	1778			I
0.506	1937	2200_C_50_C		In
1.17	1844			Ir
1.5	1803	1966_C_3_C		K
0.718	1803			Kr
4.29	#VALUE!			La
0.968	1817			Li
0.816	1863		2000_C_10_C	Lr
0.666	#VALUE!			Lu
0.243	#VALUE!			Md
0.0235	1782			Mg
0.00449	1804		184_C @ 35 atmos.	Mn
0.0000569	1898			Mo
0.359	1860			N
0.184	1808			Na
0.135	1839			Nb
0.114	1803			Nd
0.125	1885			Ne
0.165	1925			Ni
0.179	1945			No
0.133	1879			Np
0.139	1901			O
0.106	1880			Os
0.111	1843			P
0.107	1886			Pa
0.162	1878			Pb
0.143	1843			Pd
0.168	1879			Pm
0.349	1878			Po
0.164	1907			Pr
0.23	1923			Pt
0.575	1802		5425_C_100_C	Pu
1.74	1783	3410_C_20_C		Ra
0.479	1925			Rb
0.876	1804			Re
1.47	1804		4527_C_100_C	Rh
0.716	1735			Rn
3.17	#VALUE!			Ru
0.0834	#VALUE!			S
0.461	1861		1457_C_10_C	Sb
0.353	#VALUE!			Sc
0.0787	#VALUE!		1560_C_5_C	Se
0.2	1898			Si
0.017	1940			Sm

Elements

0.0000364	1898				Sn
0.15	1939				Sr
0.186	1898				Ta
0.12	1899		3200_C (_300_C)		Tb
0.54	1828				Tc
0.47	1917				Te
0.276	1789				Th
0.063	1940				Ti
0.0674	1940	639.5_C _2_C	3235_C _19_C		Tl
0.1	1945				Tm
0.1	1944				U
0.1	1949				Une
0.1	1950				Unh
0.1	1952				Unn
0.1	1953				Uno
0.1	1955				Unp
0.1	1957				Unq
0.1	1961				Uns
0.23	1969				V
0.58	1970				W
#VALUE!	1974				Xe
#VALUE!	1976				Y
#VALUE!	#VALUE!				Yb
#VALUE!	1982				Zn
#VALUE!	1987				Zr

Elements

Atomic number
89
47
13
95
18
33
85
79
5
56
4
83
97
35
6
20
48
58
98
17
96
27
24
55
29
66
68
99
63
9
26
100
87
31
64
32
1
2
72
80
67

Elements

53
49
77
19
36
57
3
103
71
101
12
25
42
7
11
41
60
10
28
102
93
8
76
15
91
82
46
61
84
59
78
94
88
37
75
45
86
44
16
51
21
34
14
62

Elements

50
38
73
65
43
52
90
22
81
69
92
109
106
110
108
105
104
107
23
74
54
39
70
30
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About

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Category

#NAME?