Hydrogen	H	1	1.00794	1	0.0899	1s1	2.1	2.08	14.1	14.304	14.304	0.1815
Helium	He	2	4.0026		0.1785	1s2	0		31.8	5.193	5.193	0.152
Lithium	Li	3	6.941	1	0.53	1s2 2s1	0.98	1.55	13.1	3.582	3.582	84.7
Beryllium	Be	4	9.01218	2	1.85	1s2 2s2	1.57	1.12	5	1.825	1.825	200
Boron	B	5	10.811	3	2.34	1s2 2s2 p1	2.04	0.98	4.6	1.026	1.026	27
Carbon	C	6	12.011	+/-4, 2	2.26	1s2 2s2 p2	2.55	0.91	5.3	0.709	0.709	155
Nitrogen	N	7	14.0067	+/-3, 5, 4, 2	1.251	1s2 2s2 p3	3.04	0.92	17.3	1.042	1.042	0.02598
Oxygen	O	8	15.9994	-2	1.429	1s2 2s2 p4	3.44	0.65	14	0.92	0.92	0.2674
Fluorine	F	9	18.9984	-1	1.696	1s2 2s2 p5	3.98	0.57	17.1	0.824	0.824	0.0279
Neon	Ne	10	20.1797		0.900	1s2 2s2 p6	0	0.51	16.9	1.03	1.03	0.0493
Sodium	Na	11	22.98977	1	0.97	[Ne] 3s1	0.93	1.9	23.7	1.23	1.23	141
Magnesium	Mg	12	24.305	2	1.74	[Ne] 3s2	1.31	1.6	14	1.02	1.02	156
Aluminum	Al	13	26.98154	3	2.7	[Ne] 3s2 p1	1.61	1.43	10	0.9	0.9	237
Silicon	Si	14	28.0855	4	2.33	[Ne] 3s2 p2	1.9	1.32	12.1	0.70	0.70	148
Phosphorus	P	15	30.97376	+/-3, 5, 4	1.82	[Ne] 3s2 p3	2.19	1.28	17	0.769	0.769	0.235
Sulfur	S	16	32.066	+/-2, 4, 6	2.07	[Ne] 3s2 p4	2.58	1.27	15.5	0.71	0.71	0.269
Chlorine	Cl	17	35.4527	+/-1, 3, 5, 7	3.214	[Ne] 3s2 p5	3.16	0.97	18.7	0.48	0.48	0.0089
Argon	Ar	18	39.948		1.784	[Ne] 3s2 p6	0	0.88	24.2	0.52	0.52	0.0177
Potassium	K	19	39.0983	1	0.86	[Ar] 4s1	0.82	2.35	45.3	0.757	0.757	102.5
Calcium	Ca	20	40.078	2	1.55	[Ar] 4s2	1	1.97	29.9	0.647	0.647	200
Scandium	Sc	21	44.9559	3	2.99	[Ar] 3d1 4s2	1.36	1.62	15	0.568	0.568	15.8
Titanium	Ti	22	47.88	4, 3	4.54	[Ar] 3d2 4s2	1.54	1.45	10.6	0.523	0.523	21.9
Vanadium	V	23	50.9415	5, 4, 3, 2	6.11	[Ar] 3d3 4s2	1.63	1.34	8.35	0.489	0.489	30.7
Chromium	Cr	24	51.996	6, 3, 2	7.19	[Ar] 3d5 4s1	1.66	1.3	7.23	0.449	0.449	93.7
Manganese	Mn	25	54.938	7, 6, 4, 2, 3	7.44	[Ar] 3d5 4s2	1.55	1.35	7.39	0.48	0.48	7.82
Iron	Fe	26	55.847	2, 3	7.874	[Ar] 3d6 4s2	1.83	1.26	7.1	0.449	0.449	80.2
Cobalt	Co	27	58.9332	2, 3	8.9	[Ar] 3d7 4s2	1.88	1.25	6.7	0.421	0.421	100
Nickel	Ni	28	58.6934	2, 3	8.9	[Ar] 3d8 4s2	1.91	1.24	6.6	0.444	0.444	90.7
Copper	Cu	29	63.546	2, 1	8.96	[Ar] 3d10 4s1	1.9	1.28	7.1	0.385	0.385	401
Zinc	Zn	30	65.39	2	7.13	[Ar] 3d10 4s2	1.65	1.38	9.2	0.388	0.388	116
Gallium	Ga	31	69.723	3	5.91	[Ar] 3d10 4s2 p1	1.81	1.41	11.8	0.371	0.371	40.6
Germanium	Ge	32	72.61	4	5.32	[Ar] 3d10 4s2 p2	2.01	1.37	13.6	0.32	0.32	59.9
Arsenic	As	33	74.9216	+/-3, 5	5.78	[Ar] 3d10 4s2 p3	2.18	1.39	13.1	0.33	0.33	50
Selenium	Se	34	78.96	-2, 4, 6	4.79	[Ar] 3d10 4s2 p4	2.55	1.4	16.5	0.32	0.32	2.04
Bromine	Br	35	79.904	+/-1, 5	3.12	[Ar] 3d10 4s2 p5	2.96	1.12	23.5	0.226	0.226	0.122
Krypton	Kr	36	83.8		3.75	[Ar] 3d10 4s2 p6	0	1.03	32.2	0.248	0.248	0.00949
Rubidium	Rb	37	85.4678	1	1.532	[Kr] 5s1	0.82	2.48	55.9	0.363	0.363	58.2
Strontium	Sr	38	87.62	2	2.54	[Kr] 5s2	0.95	2.15	33.7	0.3	0.3	35.3

Yttrium	Y	39	88.9059	3	4.47	[Kr] 4d1 5s2	1.22	1.78	19.8	0.3	0.3	17.2
Zirconium	Zr	40	91.224	4	6.51	[Kr] 4d2 5s2	1.33	1.6	14.1	0.278	0.278	22.7
Niobium	Nb	41	92.9064	5, 3	8.57	[Kr] 4d4 5s1	1.6	1.46	10.8	0.265	0.265	53.7
Molybdenum	Mo	42	95.94	6, 5, 4, 3, 2	10.22	[Kr] 4d5 5s1	2.16	1.39	9.4	0.25	0.25	138
Technetium	Tc	43	98	7	11.5	[Kr] 4d5 5s2	1.9	1.36	8.5	0.24	0.24	50.6
Ruthenium	Ru	44	101.07	2, 3, 4, 6, 8	12.37	[Kr] 4d7 5s1	2.2	1.34	8.3	0.238	0.238	117
Rhodium	Rh	45	102.9055	2, 3, 4	12.41	[Kr] 4d8 5s1	2.28	1.34	8.3	0.242	0.242	150
Palladium	Pd	46	106.42	2, 4	12	[Kr] 4d10	2.2	1.37	8.9	0.244	0.244	71.8
Silver	Ag	47	107.868	1	10.5	[Kr] 4d10 5s1	1.93	1.44	10.3	0.232	0.232	429
Cadmium	Cd	48	112.41	2	8.65	[Kr] 4d10 5s2	1.69	1.71	13.1	0.233	0.233	96.8
Indium	In	49	114.82	3	7.31	[Kr] 4d10 5s2 p1	1.78	1.66	15.7	0.233	0.233	81.6
Tin	Sn	50	118.71	4, 2	7.31	[Kr] 4d10 5s2 p2	1.96	1.62	16.3	0.228	0.228	66.6
Antimony	Sb	51	121.757	+/-3, 5	6.69	[Kr] 4d10 5s2 p3	2.05	1.59	18.4	0.207	0.207	24.3
Tellurium	Te	52	127.6	-2, 4, 6	6.24	[Kr] 4d10 5s2 p4	2.1	1.42	20.5	0.202	0.202	2.35
Iodine	I	53	126.9045	+/-1, 5, 7	4.93	[Kr] 4d10 5s2 p5	2.66	1.32	25.7	0.145	0.145	0.449
Xenon	Xe	54	131.29		5.9	[Kr] 4d10 5s2 p6	2.6	1.24	42.9	0.158	0.158	0.00569
Cesium	Cs	55	132.9054	1	1.87	[Xe] 6s1	0.79	2.67	70	0.24	0.24	35.9
Barium	Ba	56	137.33	2	3.59	[Xe] 6s2	0.89	2.22	39	0.204	0.204	18.4
Lanthanum	La	57	138.9055	3	6.15	[Xe] 5d1 6s2	1.1	1.38	22.5	0.19	0.19	13.5
Cerium	Ce	58	140.12	3, 4	6.77	[Xe] 4f1 5d1 6s2	1.12	1.81	21	0.19	0.19	11.4
Praseodymium	Pr	59	140.9077	3, 4	6.77	[Xe] 4f3 6s2	1.13	1.82	20.8	0.193	0.193	12.5
Neodymium	Nd	60	144.24	3	7.01	[Xe] 4f4 6s2	1.14	1.82	20.6	0.19	0.19	16.5
Promethium	Pm	61	145	3	7.22	[Xe] 4f5 6s2	1.13		22.4			17.9
Samarium	Sm	62	150.36	3, 2	7.52	[Xe] 4f6 6s2	1.17	1.81	19.9	0.197	0.197	13.3
Europium	Eu	63	151.965	3, 2	5.24	[Xe] 4f7 6s2	1.2	1.99	28.9	0.182	0.182	13.9
Gadolinium	Gd	64	157.25	3	7.9	[Xe] 4f7 5d1 6s2	1.2	1.8	19.9	0.236	0.236	10.6
Terbium	Tb	65	158.9253	3, 4	8.23	[Xe] 4f9 6s2	1.1	1.8	19.2	0.18	0.18	11.1
Dysprosium	Dy	66	162.5	3	8.55	[Xe] 4f10 6s2	1.22	1.8	19	0.173	0.173	10.7
Holmium	Ho	67	164.9303	3	8.8	[Xe] 4f11 6s2	1.23	1.79	18.7	0.165	0.165	16.2
Erbium	Er	68	167.26	3	9.07	[Xe] 4f12 6s2	1.24	1.78	18.4	0.168	0.168	14.3
Thulium	Tm	69	168.9342	3, 2	9.32	[Xe] 4f13 6s2	1.25	1.77	18.1	0.16	0.16	16.8
Ytterbium	Yb	70	173.04	3, 2	6.97	[Xe] 4f14 6s2	1.1	1.94	24.8	0.155	0.155	34.9
Lutetium	Lu	71	174.967	3	9.84	[Xe] 4f14 5d1 6s2	1.27	1.75	17.8	0.15	0.15	16.4
Hafnium	Hf	72	178.49	4	13.31	[Xe] 4f14 5d2 6s2	1.3	1.67	13.6	0.14	0.14	23
Tantalum	Ta	73	180.9479	5	16.65	[Xe] 4f14 5d3 6s2	1.5	1.49	10.9	0.14	0.14	57.5
Tungsten	W	74	183.85	6, 5, 4, 3, 2	19.3	[Xe] 4f14 5d4 6s2	2.36	1.41	9.53	0.13	0.13	174
Rhenium	Re	75	186.207	7, 6, 4, 2, -1	21	[Xe] 4f14 5d5 6s2	1.9	1.37	8.85	0.137	0.137	47.9
Osmium	Os	76	190.2	2, 3, 4, 6, 8	22.6	[Xe] 4f14 5d6 6s2	2.2	1.35	8.43	0.13	0.13	87.6

Iridium	Ir	77	192.22	2, 3, 4, 6	22.6	[Xe] 4f14 5d7 6s2	2.2	1.36	8.54	0.13	0.13	147
Platinum	Pt	78	195.08	2, 4	21.45	[Xe] 4f14 5d9 6s1	2.28	1.39	9.1	0.13	0.13	71.6
Gold	Au	79	196.9665	3, 1	19.3	[Xe] 4f14 5d10 6s1	2.54	1.46	10.2	0.128	0.128	317
Mercury	Hg	80	200.59	2, 1	13.55	[Xe] 4f14 5d10 6s2	2	1.6	14.8	0.140	0.140	8.34
Thallium	Tl	81	204.383	3, 1	11.85	[Xe] 4f14 5d10 6s2 p1	2.04	1.71	17.2	0.129	0.129	46.1
Lead	Pb	82	207.2	4, 2	11.35	[Xe] 4f14 5d10 6s2 p2	2.33	1.75	18.3	0.129	0.129	35.3
Bismuth	Bi	83	208.9804	3, 5	9.75	[Xe] 4f14 5d10 6s2 p3	2.02	1.7	21.3	0.122	0.122	7.87
Polonium	Po	84	209	4, 2	9.3	[Xe] 4f14 5d10 6s2 p4	2	1.67	22.7			20
Astatine	At	85	210	+/-1, 3, 5, 7		[Xe] 4f14 5d10 6s2 p5	2.2	1.45				1.7
Radon	Rn	86	222		9.73	[Xe] 4f14 5d10 6s2 p6	0	1.34	50.5	0.094	0.094	0.00364
Francium	Fr	87	223	1		[Rn] 7s1	0.7	2.7				15
Radium	Ra	88	226.0254	2	5	[Rn] 7s2	0.89	2.33	45.2	0.094	0.094	18.6
Actinium	Ac	89	227	3	10.07	[Rn] 6d1 7s2	1.1	1.88	22.5	0.12	0.12	12
Thorium	Th	90	232.0381	4	11.72	[Rn] 6d2 7s2	1.3	1.8	19.9	0.113	0.113	54
Protactinium	Pa	91	231.0359	5, 4	15.4	[Rn] 5f2 6d1 7s2	1.5	1.61	15			47
Uranium	U	92	238.029	6, 5, 4, 3	18.95	[Rn] 5f3 6d1 7s2	1.38	1.38	12.5	0.12	0.12	27.6
Neptunium	Np	93	237.0482	6, 5, 4, 3	20.2	[Rn] 5f4 6d1 7s2	1.36	1.3	21.1			6.3
Plutonium	Pu	94	244	6, 5, 4, 3	19.84	[Rn] 5f6 7s2	1.28	1.51	12.32	0.13	0.13	6.74
Americium	Am	95	243	6, 5, 4, 3	13.7	[Rn] 5f7 7s2	1.3	1.84	20.8			10
Curium	Cm	96	247	3	13.5	[Rn] 5f7 6d1 7s2	1.3		18.3			10
Berkelium	Bk	97	247	4, 3		[Rn] 5f9 7s2	1.3					10
Californium	Cf	98	251	3		[Rn] 5f10 7s2	1.3					10
Einsteinium	Es	99	252			[Rn] 5f11 7s2	1.3					10
Fermium	Fm	100	257			[Rn] 5f12 7s2	1.3					10
Mendelevium	Md	101	258			[Rn] 5f13 7s2	1.3					10
Nobelium	No	102	259			[Rn] 5f14 7s2	1.3					10
Lawrencium	Lr	103	262			[Rn] 5f14 6d1 7s2						10
Rutherfordium	Rf	104	261			[Rn] 5f14 6d2 7s2						
Dubnium	Db	105	262			[Rn] 5f14 6d3 7s2						
Seaborgium	Sg	106	263			[Rn] 5f14 6d4 7s2						
Bohrium	Bh	107	262			[Rn] 5f14 6d5 7s2						
Hassium	Hs	108	265			[Rn] 5f14 6d6 7s2						
Meitnerium	Mt	109	266			[Rn] 5f14 6d7 7s2						
ununnilium	Uun	110	269			[Rn] 5f14 6d8 7s2						
unununium	Uuu	111	272			[Rn] 5f14 6d9 7s2						
ununbium	Uub	112	277			[Rn] 5f14 6d10 7s2						