Oxidation states of the elements																			
Element			Negative states						Positive states									Group	Notes
			−5	−4	−3	−2	−1	0	+1	+2	+3	+4	+5	+6	+7	+8	+9		
Z																			
1	hydrogen	H					**−1**		**+1**									1	
2	helium	He																18	
3	lithium	Li							**+1**									1	[22]
4	beryllium	Be						0	+1	**+2**								2	[23][24]
5	boron	B	−5				−1	0	+1	+2	**+3**							13	[25][26][27]
6	carbon	C		**−4**	**−3**	**−2**	**−1**	**0**	**+1**	**+2**	**+3**	**+4**						14	
7	nitrogen	N			**−3**	−2	−1	0	+1	+2	**+3**	+4	**+5**					15	[28]
8	oxygen	O				**−2**	−1	0	+1	+2								16	
9	fluorine	F					**−1**	0										17	[29]
10	neon	Ne																18	
11	sodium	Na					−1		**+1**									1	[22]
12	magnesium	Mg						0	+1	**+2**								2	[30][31]
13	aluminium	Al				−2	−1		+1	+2	**+3**							13	[32][33][34]
14	silicon	Si		**−4**	−3	−2	−1	0	+1	+2	+3	**+4**						14	[35]
15	phosphorus	P			**−3**	−2	−1	0	+1	+2	**+3**	+4	**+5**					15	[36]
16	sulfur	S				**−2**	−1	0	+1	**+2**	+3	**+4**	+5	**+6**				16	
17	chlorine	Cl					**−1**		**+1**	+2	**+3**	+4	**+5**	+6	**+7**			17	[37]
18	argon	Ar						**0**										18	[38]
19	potassium	K					−1		**+1**									1	[22]
20	calcium	Ca							+1	**+2**								2	[39][40]
21	scandium	Sc						0	+1	+2	**+3**							3	[41][42][43]
22	titanium	Ti				−2	−1	0	+1	**+2**	**+3**	**+4**						4	[44][45][46][47]
23	vanadium	V			−3		−1	0	+1	**+2**	**+3**	**+4**	**+5**					5	[45]
24	chromium	Cr		−4		−2	−1	0	+1	**+2**	**+3**	+4	+5	**+6**				6	[45]
25	manganese	Mn			−3	−2	−1	0	+1	**+2**	**+3**	**+4**	+5	**+6**	**+7**			7	
26	iron	Fe		−4		−2	−1	0	+1	**+2**	**+3**	+4	+5	+6	+7			8	[48][49][50]
27	cobalt	Co			−3		−1	0	+1	**+2**	**+3**	+4	+5					9	[45]
28	nickel	Ni				−2	−1	0	+1	**+2**	+3	+4						10	[51]
29	copper	Cu				−2		0	**+1**	**+2**	+3	+4						11	[50][52]
30	zinc	Zn				−2		0	+1	**+2**								12	[50][53][54][55]
31	gallium	Ga	−5	−4	−3	−2	−1	0	+1	+2	**+3**							13	[33][56][57][58]
32	germanium	Ge		**−4**	−3	−2	−1	0	+1	**+2**	+3	**+4**						14	[59][35]
33	arsenic	As			**−3**	−2	−1	0	+1	+2	**+3**	+4	**+5**					15	[33][60][61][62]
34	selenium	Se				**−2**	−1	0	+1	**+2**	+3	**+4**	+5	**+6**				16	[63][64][65][66][67]
35	bromine	Br					**−1**		**+1**		**+3**	+4	**+5**		+7			17	
36	krypton	Kr						**0**	+1	+2								18	
37	rubidium	Rb					−1		**+1**									1	[22]
38	strontium	Sr							+1	**+2**								2	[68][40]
39	yttrium	Y						0	+1	+2	**+3**							3	[69][70][71]
40	zirconium	Zr				−2		0	+1	+2	+3	**+4**						4	[45][72][73]
41	niobium	Nb			−3		−1	0	+1	+2	+3	+4	**+5**					5	[45][74][75]
42	molybdenum	Mo		−4		−2	−1	0	+1	+2	+3	**+4**	+5	**+6**				6	[45]

Oxidation states of the elements																			
Element			Negative states						Positive states									Group	Notes
			−5	−4	−3	−2	−1	0	+1	+2	+3	+4	+5	+6	+7	+8	+9		
Z																			
43	technetium	Tc			−3		−1	0	+1	+2	+3	**+4**	+5	+6	**+7**			7	
44	ruthenium	Ru		−4		−2		0	+1	+2	**+3**	**+4**	+5	+6	+7	+8		8	[45][50]
45	rhodium	Rh			−3		−1	0	+1	+2	**+3**	+4	+5	+6				9	[45][76]
46	palladium	Pd						**0**	+1	**+2**	+3	**+4**						10	[77][78]
47	silver	Ag				−2	−1	0	**+1**	+2	+3							11	[50][79][80]
48	cadmium	Cd				−2			+1	**+2**								12	[50][81]
49	indium	In	−5			−2	−1		+1	+2	**+3**							13	[33][82][83]
50	tin	Sn		**−4**	−3	−2	−1	0	+1	**+2**	+3	**+4**						14	[33][84][85][35]
51	antimony	Sb			**−3**	−2	−1	0	+1	+2	**+3**	+4	**+5**					15	[33][86][87][88][89]
52	tellurium	Te				**−2**	−1	0	+1	**+2**	+3	**+4**	+5	**+6**				16	[33][90][91][92][93]
53	iodine	I					**−1**		**+1**	+2	**+3**	+4	**+5**	+6	**+7**			17	[94][95][96]
54	xenon	Xe						**0**		+2		+4		+6		+8		18	[97][98][99]
55	caesium	Cs					−1		**+1**									1	[22]
56	barium	Ba							+1	**+2**								2	[100][40]
57	lanthanum	La						0	+1	+2	**+3**							n/a	[69][101]
58	cerium	Ce								+2	**+3**	**+4**						n/a	
59	praseodymium	Pr						0	+1	+2	**+3**	+4	+5					n/a	[69][102][103][104]
60	neodymium	Nd						0		+2	**+3**	+4						n/a	[69][105]
61	promethium	Pm								+2	**+3**							n/a	[106]
62	samarium	Sm						0	+1	+2	**+3**							n/a	[107]
63	europium	Eu						0		**+2**	**+3**							n/a	[69]
64	gadolinium	Gd						0	+1	+2	**+3**							n/a	[69]
65	terbium	Tb						0	+1	+2	**+3**	+4						n/a	[69][101][106]
66	dysprosium	Dy						0		+2	**+3**	+4						n/a	[69][108]
67	holmium	Ho						0		+2	**+3**							n/a	[69][106]
68	erbium	Er						0		+2	**+3**							n/a	[69][106]
69	thulium	Tm						0	+1	+2	**+3**							n/a	[69][101]
70	ytterbium	Yb						0	+1	+2	**+3**							n/a	[69][101]
71	lutetium	Lu						0		+2	**+3**							3	[69][106]
72	hafnium	Hf				−2		0	+1	+2	+3	**+4**						4	[45][73][109]
73	tantalum	Ta			−3		−1	0	+1	+2	+3	+4	**+5**					5	[45][75]
74	tungsten	W		−4		−2	−1	0	+1	+2	+3	**+4**	+5	**+6**				6	[45]
75	rhenium	Re			−3		−1	0	+1	+2	+3	**+4**	+5	+6	+7			7	
76	osmium	Os		−4		−2	−1	0	+1	+2	+3	**+4**	+5	+6	+7	+8		8	[50][110]
77	iridium	Ir			−3		−1	0	+1	+2	**+3**	**+4**	+5	+6	+7	+8	+9	9	[111][112][113][114]
78	platinum	Pt			−3	−2	−1	0	+1	**+2**	+3	**+4**	+5	+6				10	[50][115][116]
79	gold	Au			−3	−2	−1	0	**+1**	+2	**+3**		+5					11	[50][117]
80	mercury	Hg				−2			**+1**	**+2**								12	[50][118]
81	thallium	Tl	−5			−2	−1		**+1**	+2	**+3**							13	[33][119][120][121]
82	lead	Pb		−4		−2	−1	0	+1	**+2**	+3	**+4**						14	[33][122][123][124]
83	bismuth	Bi			−3	−2	−1		+1	+2	**+3**	+4	+5					15	[125][126][127][128]
84	polonium	Po				**−2**				**+2**		**+4**	+5	+6				16	[129]

Oxidation states of the elements																			
Element			Negative states						Positive states									Group	Notes
			−5	−4	−3	−2	−1	0	+1	+2	+3	+4	+5	+6	+7	+8	+9		
Z																			
85	astatine	At					**−1**		**+1**		+3		+5		+7			17	
86	radon	Rn								**+2**				+6				18	[130][131][132]
87	francium	Fr							**+1**									1	
88	radium	Ra								**+2**								2	
89	actinium	Ac								+2	**+3**							n/a	[133]
90	thorium	Th					−1		+1	+2	+3	**+4**						n/a	[134][135][136]
91	protactinium	Pa								+2	+3	+4	**+5**					n/a	[137]
92	uranium	U					−1		+1	+2	+3	**+4**	+5	**+6**				n/a	[138][139][140]
93	neptunium	Np								+2	+3	+4	**+5**	+6	+7			n/a	[141]
94	plutonium	Pu								+2	+3	**+4**	+5	+6	+7	+8		n/a	[142][143]
95	americium	Am								+2	**+3**	+4	+5	+6	+7			n/a	[144]
96	curium	Cm									**+3**	+4	+5	+6				n/a	[145][146][147][148]
97	berkelium	Bk								+2	**+3**	+4	+5					n/a	[145][146][149][150][151]
98	californium	Cf								+2	**+3**	+4	+5					n/a	[145][146]
99	einsteinium	Es								+2	**+3**	+4						n/a	[152]
100	fermium	Fm								+2	**+3**							n/a	
101	mendelevium	Md								+2	**+3**							n/a	
102	nobelium	No								**+2**	+3							n/a	
103	lawrencium	Lr									**+3**							3	
104	rutherfordium	Rf										**+4**						4	
105	dubnium	Db											**+5**					5	[153]
106	seaborgium	Sg						0						**+6**				6	[154][155]
107	bohrium	Bh													**+7**			7	[156]
108	hassium	Hs														**+8**		8	[157]
109	meitnerium	Mt																9	
110	darmstadtium	Ds																10	
111	roentgenium	Rg																11	
112	copernicium	Cn								**+2**								12	[158]
113	nihonium	Nh																13	
114	flerovium	Fl																14	
115	moscovium	Mc																15	
116	livermorium	Lv																16	
117	tennessine	Ts																17	
118	oganesson	Og																18	

Early forms (octet rule)

A figure with a similar format was used by Irving Langmuir in 1919 in one of the early papers about the octet rule.[159] The periodicity of the oxidation states was one of the pieces of evidence that led Langmuir to adopt the rule.