

PERIODIC TABLE OF THE ELEMENTS

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| 1 IA 1.0079 1s -1,1 H 0.136(1+) 0.037 hydrogen | 2 IIA 9.01218 [He]2s ² 2 Be 0.111 0.031(2+) beryllium | 3 6.941 [He]2s ¹ 1 Li 0.152 0.08(1+) lithium | 4 9.01218 [He]2s ² 2 Be 0.111 0.031(2+) beryllium | 5 22.9898 [Ne]3s ¹ 1 Na 0.154 0.095(1+) sodium | 6 24.305 [Ne]3s ² 1,2 Mg 0.160 0.065(2+) magnesium | 7 4.9591 [Ar]3d ¹ 1,3 Sc 0.162 0.081(3+) scandium | 8 47.87 [Ar]3d ² 2,3,4 Ti 0.145 0.064(4+) titanium | 9 50.9415 [Ar]3d ² -1,0,1,2,3,4,5 V 0.134 0.04(5+) vanadium | 10 51.996 [Ar]3d ³ -2,-1,0,1,2,3,4,5,6 Cr 0.128 0.052(6+) chromium | 11 54.93805 [Ar]3d ⁵ 2,3,4,5,6,7 Mn 0.127 0.080(2+) manganese | 12 55.845 [Ar]3d ⁶ -2,-1,0,1,2,3,4,6,8 Fe 0.126 0.075(2+) iron | 13 58.93320 [Ar]3d ⁶ -1,0,1,2,3,4,5 Co 0.125 0.072(2+) cobalt | 14 58.693 [Ar]3d ⁷ -1,0,1,2,3,4 Ni 0.125 0.070(2+) nickel | 15 63.546 [Ar]3d ⁹ 1,2,3,4 Cu 0.128 0.080(2+) copper | 16 65.41 [Ar]3d ¹⁰ 2 Zn 0.134 0.074(2+) zinc | 17 69.72 [Ar]3d ¹⁰ 4s ¹ 1,2,3 Ga 0.122 0.063(3+) gallium | 18 72.64 [Ar]3d ¹⁰ 4s ² -4,1,2,3,4 Ge 0.123 0.053(4+) germanium | 19 74.9216 [Ar]3d ¹⁰ 4s ² 5s ¹ -3,3,5 As 0.125 0.069(3+) arsenic | 20 78.96 [Ar]3d ¹⁰ 4s ² 4p ² -2,2,4,6 Se 0.140 0.069(4+) selenium | 21 79.904 [Ar]3d ¹⁰ 4s ² 4p ³ -1,1,3,5,7 Br 0.195(1+) 0.115 bromine | 22 83.80 [Ar]3d ¹⁰ 4s ² 4p ⁴ 2 Kr 0.198 0.109 krypton | 23 85.4678 [Kr]5s ¹ 1 Rb 0.248 0.148(1+) rubidium | 24 87.62 [Kr]5s ² 1,2 Sr 0.215 0.113(2+) strontium | 25 88.9059 [Kr]4d ⁵ 3 Y 0.180 0.093(3+) yttrium | 26 91.224 [Kr]4d ⁴ 1,2,3,4 Zr 0.159 0.087(4+) zirconium | 27 92.9064 [Kr]4d ⁵ -1,0,1,2,3,4,5 Nb 0.146 0.069(5+) niobium | 28 95.94 [Kr]4d ⁵ -1,0,1,2,3,4,5,6 Mo 0.139 0.062(6+) molybdenum | 29 [98] [Kr]4d ⁵ -3,-1,0,1,2,3,4,5,6,7 Tc 0.136 0.056(7+) technetium | 30 101.07 [Kr]4d ⁶ -2,0,1,2,3,4,5,6,8 Ru 0.134 0.062(4+) ruthenium | 31 102.9055 [Kr]4d ⁷ -1,0,1,2,3,4,5,6 Rh 0.135 0.075(3+) rhodium | 32 106.42 [Kr]4d ⁸ 0,1,2,3,4,5,6 Pd 0.138 0.050(2+) palladium | 33 107.8682 [Kr]4d ⁹ 1,2,3 Ag 0.145 0.126(1+) silver | 34 112.41 [Kr]4d ¹⁰ 1,2 Cd 0.151 0.097(2+) cadmium | 35 114.818 [Kr]4d ¹⁰ 5s ¹ 1,2,3 In 0.163 0.081(3+) indium | 36 118.710 [Kr]4d ¹⁰ 5s ² 2,4 Sn 0.141 0.071(4+) tin | 37 121.76 [Kr]4d ¹⁰ 5s ² 5p ¹ -3,3,5 Sb 0.145 0.093(3+) antimony | 38 127.6 [Kr]4d ¹⁰ 5s ² 5p ² -2,2,4,6 Te 0.143 0.089(4+) tellurium | 39 126.9045 [Kr]4d ¹⁰ 5s ² 5p ³ -1,1,3,5,7 I 0.216(1+) 0.133 iodine | 40 131.29 [Kr]4d ¹⁰ 5s ² 5p ⁴ 2,4,6,8 Xe 0.218 0.130 xenon | 41 132.9054 [Xe]6s ¹ 1 Cs 0.266 0.169(1+) caesium | 42 137.33 [Xe]6s ² 1,2 Ba 0.217 0.135(2+) barium | 43 138.906 [Xe]4f ^{5d} 6s ¹ 3 La 0.187 0.115(3+) lanthanum | 44 178.49 [Xe]4f ¹⁴ 5d ¹ 1,2,3,4 Hf 0.156 0.084(4+) hafnium | 45 180.9479 [Xe]4f ¹⁴ 5d ² -1,1,2,3,4,5 Ta 0.146 0.068(5+) tantalum | 46 183.84 [Xe]4f ¹⁴ 5d ³ -2,-1,0,2,3,4,5,6 W 0.139 0.068(6+) tungsten | 47 186.207 [Xe]4f ¹⁴ 5d ⁴ -3,-1,0,1,2,3,4,5,6,7 Re 0.137 0.056(7+) rhenium | 48 190.2 [Xe]4f ¹⁴ 5d ⁵ -2,0,1,2,3,4,5,6,8 Os 0.135 0.065(4+) osmium | 49 192.22 [Xe]4f ¹⁴ 5d ⁶ -1,0,1,2,3,4,5,6 Ir 0.136 0.065(4+) iridium | 50 195.078 [Xe]4f ¹⁴ 5d ⁷ 0,2,3,4,5,6 Pt 0.139 0.052(2+) platinum | 51 196.967 [Xe]4f ¹⁴ 5d ⁸ 1,2,3,5 Au 0.144 0.137(1+) gold | 52 200.59 [Xe]4f ¹⁴ 5d ⁹ 1,2 Hg 0.151 0.110(2+) mercury | 53 204.383 [Xe]4f ¹⁴ 5d ¹⁰ 6s ¹ 1,3 Tl 0.170 0.149(1+) thallium | 54 207.2 [Xe]4f ¹⁴ 5d ¹⁰ 6s ² 2,4 Pb 0.175 0.128(2+) lead | 55 208.980 [Xe]4f ¹⁴ 5d ¹⁰ 6s ² 6p ¹ -3,1,2,3,5 Bi 0.155 0.120(3+) bismuth | 56 208.982 [Xe]4f ¹⁴ 5d ¹⁰ 6s ² 6p ² -2,2,4,6 Po 0.164 0.119(4+) polonium | 57 [210] [Xe]4f ¹⁴ 5d ¹⁰ 6s ² 6p ³ -1,0,1,5,7 At 0.232(1+) 0.145 astatine | 58 222.018 [Xe]4f ¹⁴ 5d ¹⁰ 6s ² 6p ⁴ 2,4,6,8 Rn 0.214 0.145 radon | 59 223.0197 [Rn]7s ¹ 1 Fr 0.29 0.178(1+) francium | 60 226.0254 [Rn]7s ² 2 Ra 0.223 0.162(2+) radium | 61 227.0278 [Rn]5f ¹⁴ 6d ¹ 7s ¹ 3 Ac 0.188 0.111(3+) actinium | 62 [268] [Rn]5f ¹⁴ 6d ² 7s ¹ 4 Rf 0.160 rutherfordium | 63 [268] [Rn]5f ¹⁴ 6d ³ 7s ¹ 5 Db dubnium | 64 [272] [Rn]5f ¹⁴ 6d ⁴ 7s ¹ 6 Sg seaborgium | 65 [273] [Rn]5f ¹⁴ 6d ⁵ 7s ¹ 7 Bh bohrium | 66 [276] [Rn]5f ¹⁴ 6d ⁶ 7s ¹ 8 Hs hassium | 67 [279] [Rn]5f ¹⁴ 6d ⁷ 7s ¹ 9 Mt meitnerium | 68 [278] [Rn]5f ¹⁴ 6d ⁸ 7s ¹ 10 Ds darmstadtium | 69 [283] [Rn]5f ¹⁴ 6d ⁹ 7s ¹ 11 Rg roentgenium | 70 [285] [Rn]5f ¹⁴ 6d ¹⁰ 7s ¹ 12 Cn copernicium | 71 [287] [Rn]5f ¹⁴ 6d ¹⁰ 7s ² 7p ¹ ununtrium | 72 [289] [Rn]5f ¹⁴ 6d ¹⁰ 7s ² 7p ² 2,4 Uuq ununquadium | 73 [291] [Rn]5f ¹⁴ 6d ¹⁰ 7s ² 7p ³ ununpentium | 74 [292] [Rn]5f ¹⁴ 6d ¹⁰ 7s ² 7p ⁴ ununhexium | 75 [293] [Rn]5f ¹⁴ 6d ¹⁰ 7s ² 7p ⁵ ununseptium | 76 [294] [Rn]5f ¹⁴ 6d ¹⁰ 7s ² 7p ⁶ ununoctium |
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atomic number: 14

atomic weight: 28.0855

electrons configuration: [Ne]3s²3p²

oxidation: -4; -2; 1; 2; 3; 4

chemical symbol of the element: Si

element name: silicon

acid-alkali properties of the higher oxide:

- strongly alkali
- slightly alkali
- strongly acidic
- slightly acidic
- equal

chemical symbol of the element: Si

element name: silicon

ionic radius (nm): 0.041(4+)

anionic radius (nm): 0.041(4+)

atomic radius (nm): 0.117

Van der Waals radius (nm): 0.117

state: solid

group: 14

period: 3

block: p

classification:

- alkali metals
- alkaline earth metals
- transition metals
- halogens
- lanthanoids
- actinoids
- metals
- noble gases
- nonmetals

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| 58 140.12 [Xe]4f ^{5d} 6s ¹ 3,4 Ce 0.183 0.163(3+) cerium | 59 140.9077 [Xe]4f ^{5d} 6s ² 2,3,4 Pr 0.182 0.131(3+) praseodymium | 60 144.24 [Xe]4f ^{5d} 6s ² 2,3,4 Nd 0.181 0.109(3+) neodymium | 61 [145] [Xe]4f ^{5d} 6s ² 3 Pm 0.183 0.189(3+) promethium | 62 150.36 [Xe]4f ^{5d} 6s ² 2,3,4 Sm 0.180 0.099(3+) samarium | 63 151.96 [Xe]4f ^{5d} 6s ² 2,3 Eu 0.185 0.099(3+) europium | 64 157.25 [Xe]4f ^{5d} 6s ² 1,2,3 Gd 0.180 0.094(3+) gadolinium | 65 158.9253 [Xe]4f ^{5d} 6s ² 1,3,4 Tb 0.177 0.092(3+) terbium | 66 162.50 [Xe]4f ^{5d} 6s ² 2,3,4 Dy 0.178 0.091(3+) dysprosium | 67 164.9303 [Xe]4f ^{5d} 6s ² 2,3 Ho 0.176 0.089(3+) holmium | 68 167.26 [Xe]4f ^{5d} 6s ² 1,3 Er 0.176 0.089(3+) erbium | 69 168.9342 [Xe]4f ^{5d} 6s ² 2,3,4 Tm 0.176 0.087(3+) thulium | 70 173.04 [Xe]4f ^{5d} 6s ² 2,3 Yb 0.193 0.089(3+) ytterbium | 71 174.967 [Xe]4f ^{5d} 6s ² 3 Lu 0.145 0.089(3+) lutetium |
| 90 232.0381 [Rn]5f ^{6d} 7s ² 2,3,4 Th 0.180 0.090(4+) thorium | 91 231.0359 [Rn]5f ^{6d} 7s ² 3,4,5 Pa 0.163 0.090(5+) protactinium | 92 238.0289 [Rn]5f ^{6d} 7s ² 2,3,4,5,6 U 0.138 0.089(4+) uranium | 93 [237] [Rn]5f ^{6d} 7s ² 3,4,5,6,7 Np 0.155 0.087(5+) neptunium | 94 [241] [Rn]5f ^{6d} 7s ² 2,3,4,5,6,7 Pu 0.159 0.090(4+) plutonium | 95 [243] [Rn]5f ^{6d} 7s ² 2,3,4,5,6,7 Am 0.173 0.098(3+) americium | 96 [247] [Rn]5f ^{6d} 7s ² 2,3,4,6 Cm 0.174 0.095(3+) curium | 97 [247] [Rn]5f ^{6d} 7s ² 2,3,4 Bk 0.170 0.094(3+) berkelium | 98 [251] [Rn]5f ^{6d} 7s ² 2,3,4 Cf 0.186 0.096(3+) californium | 99 [252] [Rn]5f ^{6d} 7s ² 2,3,4 Es 0.186 0.093(3+) einsteinium | 100 [257] [Rn]5f ^{6d} 7s ² 2,3,4 Fm 0.190 0.092(3+) fermium | 101 [258] [Rn]5f ^{6d} 7s ² 1,2,3 Md 0.093(3+) mendelevium | 102 [259] [Rn]5f ^{6d} 7s ² 2,3,4 No 0.112(1+) nobelium | 103 [262] [Rn]5f ^{6d} 7s ² 7p ¹ 3 Lr 0.092(3+) lawrencium |

s - elements

d - elements

p - elements

f - elements