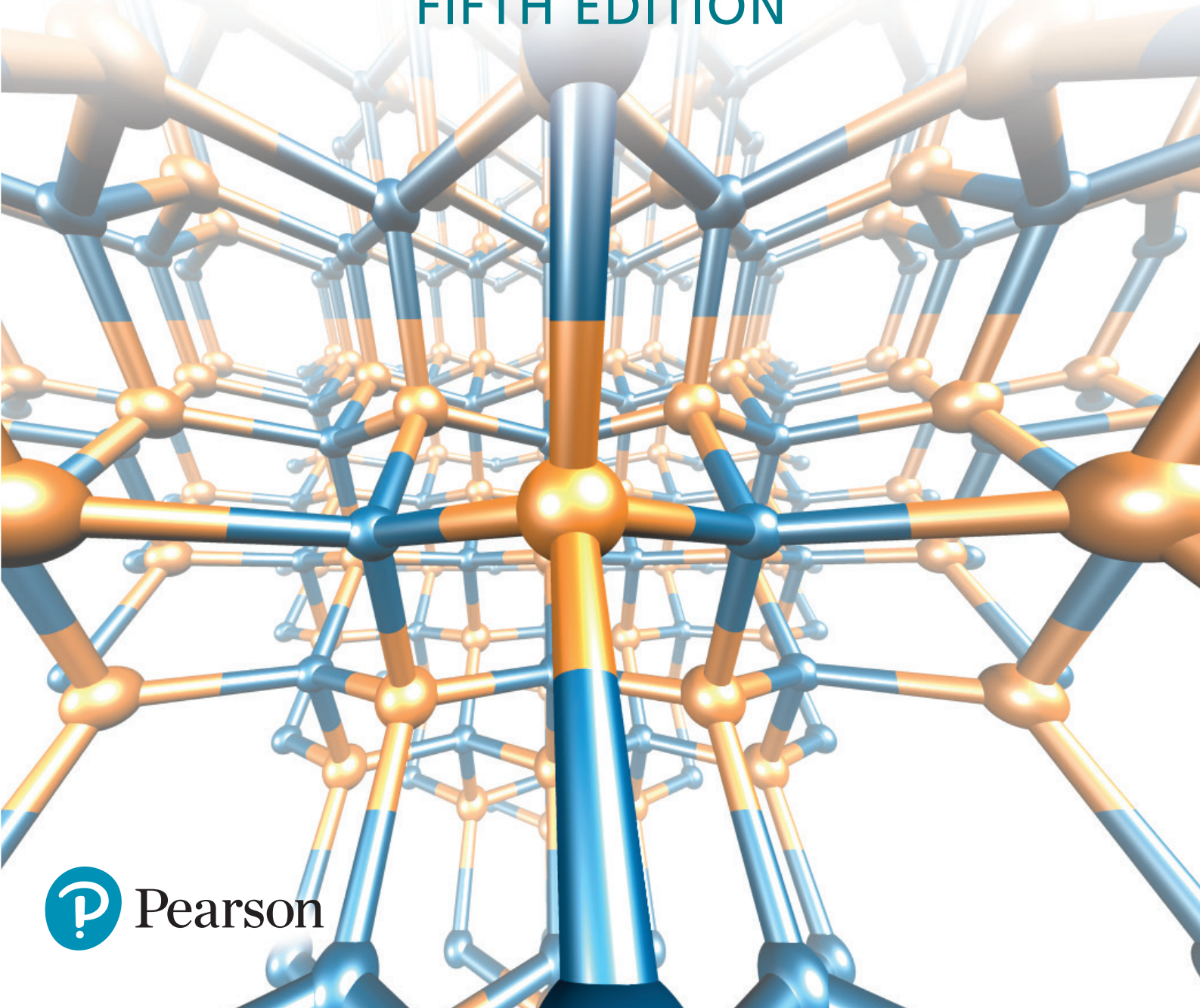
CATHERINE E. HOUSECROFT & ALAN G. SHARPE

# INORGANIC CHEMISTRY

FIFTH EDITION



Pearson

**Elements**

| Element | Symbol | Atomic number, $Z$ | Relative atomic mass, $A_r$[§]/g mol$^{-1}$ | Element | Symbol | Atomic number, $Z$ | Relative atomic mass, $A_r$[§]/g mol$^{-1}$ | Element | Symbol | Atomic number, $Z$ | Relative atomic mass, $A_r$[§]/g mol$^{-1}$ |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Actinium | Ac | 89 | [227] | Hafnium | Hf | 72 | 178.49 | Praseodymium | Pr | 59 | 140.91 |
| Aluminium | Al | 13 | 26.98 | Hassium | Hs | 108 | [270] | Promethium | Pm | 61 | [145] |
| Americium | Am | 95 | [243] | Helium | He | 2 | 4.00 | Protactinium | Pa | 91 | 231.04 |
| Antimony | Sb | 51 | 121.76 | Holmium | Ho | 67 | 164.93 | Radium | Ra | 88 | [226] |
| Argon | Ar | 18 | 39.95 | Hydrogen | H | 1 | 1.008 | Radon | Rn | 86 | [222] |
| Arsenic | As | 33 | 74.92 | Indium | In | 49 | 114.82 | Rhenium | Re | 75 | 186.21 |
| Astatine | At | 85 | [210] | Iodine | I | 53 | 126.90 | Rhodium | Rh | 45 | 102.91 |
| Barium | Ba | 56 | 137.33 | Iridium | Ir | 77 | 192.22 | Roentgenium | Rg | 111 | [281] |
| Berkelium | Bk | 97 | [247] | Iron | Fe | 26 | 55.85 | Rubidium | Rb | 37 | 85.47 |
| Beryllium | Be | 4 | 9.01 | Krypton | Kr | 36 | 83.80 | Ruthenium | Ru | 44 | 101.07 |
| Bismuth | Bi | 83 | 208.98 | Lanthanum | La | 57 | 138.91 | Rutherfordium | Rf | 104 | [267] |
| Bohrium | Bh | 107 | [270] | Lawrencium | Lr | 103 | [262] | Samarium | Sm | 62 | 150.36 |
| Boron | B | 5 | 10.81 | Lead | Pb | 82 | 207.2 | Scandium | Sc | 21 | 44.96 |
| Bromine | Br | 35 | 79.91 | Lithium | Li | 3 | 6.94 | Seaborgium | Sg | 106 | [269] |
| Cadmium | Cd | 48 | 112.41 | Livermorium | Lv | 116 | [293] | Selenium | Se | 34 | 78.97 |
| Caesium | Cs | 55 | 132.91 | Lutetium | Lu | 71 | 174.97 | Silicon | Si | 14 | 28.09 |
| Calcium | Ca | 20 | 40.08 | Magnesium | Mg | 12 | 24.31 | Silver | Ag | 47 | 107.87 |
| Californium | Cf | 98 | [251] | Manganese | Mn | 25 | 54.94 | Sodium | Na | 11 | 22.99 |
| Carbon | C | 6 | 12.01 | Meitnerium | Mt | 109 | [278] | Strontium | Sr | 38 | 87.62 |
| Cerium | Ce | 58 | 140.12 | Mendelevium | Md | 101 | [258] | Sulfur | S | 16 | 32.06 |
| Chlorine | Cl | 17 | 35.45 | Mercury | Hg | 80 | 200.59 | Tantalum | Ta | 73 | 180.95 |
| Chromium | Cr | 24 | 52.00 | Molybdenum | Mo | 42 | 95.95 | Technetium | Tc | 43 | [97] |
| Cobalt | Co | 27 | 58.93 | Moscovium | Mc | 115 | [289] | Tellurium | Te | 52 | 127.60 |
| Copernicium | Cn | 112 | [285] | Neodymium | Nd | 60 | 144.24 | Tennessine | Ts | 117 | [294] |
| Copper | Cu | 29 | 63.54 | Neon | Ne | 10 | 20.18 | Terbium | Tb | 65 | 158.93 |
| Curium | Cm | 96 | [247] | Neptunium | Np | 93 | [237] | Thallium | Tl | 81 | 204.38 |
| Darmstadtium | Ds | 110 | [281] | Nickel | Ni | 28 | 58.69 | Thorium | Th | 90 | 232.04 |
| Dubnium | Db | 105 | [270] | Nihonium | Nh | 113 | [285] | Thulium | Tm | 69 | 168.93 |
| Dysprosium | Dy | 66 | 162.50 | Niobium | Nb | 41 | 92.91 | Tin | Sn | 50 | 118.71 |
| Einsteinium | Es | 99 | [252] | Nitrogen | N | 7 | 14.01 | Titanium | Ti | 22 | 47.87 |
| Erbium | Er | 68 | 167.26 | Nobelium | No | 102 | [259] | Tungsten | W | 74 | 183.84 |
| Europium | Eu | 63 | 151.96 | Oganesson | Og | 118 | [294] | Uranium | U | 92 | 283.03 |
| Fermium | Fm | 100 | [257] | Osmium | Os | 76 | 190.23 | Vanadium | V | 23 | 50.94 |
| Flerovium | Fl | 114 | [289] | Oxygen | O | 8 | 16.00 | Xenon | Xe | 54 | 131.29 |
| Fluorine | F | 9 | 19.00 | Palladium | Pd | 46 | 106.42 | Ytterbium | Yb | 70 | 173.04 |
| Francium | Fr | 87 | [223] | Phosphorus | P | 15 | 30.97 | Yttrium | Y | 39 | 88.91 |
| Gadolinium | Gd | 64 | 157.25 | Platinum | Pt | 78 | 195.08 | Zinc | Zn | 30 | 65.38 |
| Gallium | Ga | 31 | 69.72 | Plutonium | Pu | 94 | [244] | Zirconium | Zr | 40 | 91.22 |
| Germanium | Ge | 32 | 72.63 | Polonium | Po | 84 | [209] | | | | |
| Gold | Au | 79 | 196.97 | Potassium | K | 19 | 39.10 | | | | |

[§]Where an element does not possess a stable isotope, a mass number in [ ] is given; the mass number given is for the longest-lived isotope of the element. For each of Th, Pa and U, the value of $A_r$ is based on the terrestrial isotopic composition.

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