

CHAPTER OVERVIEW

12: Atomic Theory and Quantum Mechanics

Chemical Principles (Zumdahl and Decoste) Textmap Alternative

Topic hierarchy

- 12.1: Electromagnetic Radiation
- 12.2: The Nature of Matter
- 12.3: The Atomic Spectrum of Hydrogen
- 12.4: The Bohr Model
- 12.5: The Quantum Mechanical Model of the Atom
- 12.6: Particle in a Box
- 12.7: The Wave Equation for the Hydrogen Atom
- 12.8: The Meaning of the Wavefunction
- 12.9: Orbital Shapes and Energies
- 12.10: Electron Spin and the Pauli Principle
- 12.11: Polyelectronic Atoms
- 12.12: The History of the Periodic Table
- 12.13: The Aufbau Principles and the Periodic Table
- 12.14: The Polyelectronic Model
- 12.15: Periodic Trends in Atomic Properties
- 12.16: The Properties of a Group: The Alkali Metals

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