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3.3 Evidence of Wave Properties in Electrons; 3.4 Wavefunctions and the Particle-in-a-Box Model; 3.5 Reconciling Classical and Quantum Mechanics; 3.6 Angular Momentum in Quantum States
 3.7 Spectroscopic Notation and Electron Configuration 3.8 Energy Levels Described by Orbital Angular Momentum; 3.9 Magnetic Quantum Numbers; 3.10 Direct Evidence of Momentum: The Stern-Gerlach Experiment; 3.11 Electron Spin; 3.12 Summary of Quantum Numbers; 3.13 Example of Quantum Numbers: The Sodium Spectrum; 3.14 Multiple Electrons: The Mercury Spectrum; 3.15 Energy Levels and Transitions in Gas Lasers; 3.16 Molecular Energy Levels; 3.17 Infrared Spectroscopy Applications; Problems; 4. Lasing Processes; 4.1 Characteristics of Coherent Light; 4.2 Boltzmann Distribution and Thermal Equilibrium
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 7.3 Energy Storage in Laser Media

Sommario/riassunto

A comprehensive introduction to the burgeoning field of photonicsThe field of photonics is finding increasing applications across a broad range of industries. While many other books provide an overview of the subject, Fundamentals of Light Sources and Lasers closes a clear gap in the current literature by concentrating on the principles of laser operation as well as providing coverage of important concepts necessary to fully understand the principles involved. The scope of the book includes everything a professional needs to get up to speed in the field, as well as all the material necessa