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Autore	Laud B. B
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Nota di contenuto	<p>           ""Cover ""; ""Preface to the Third Edition ""; ""Preface to the First Edition ""; ""Contents ""; ""Chapter 1 Introduction ""; ""1.1 Directionality ""; ""1.2 Intensity ""; ""1.3 Monochromaticity ""; ""1.4 Coherence ""; ""Chapter 2 Einstein's Quantum Theory of Radiation ""; ""2.1 Einstein Coefficients ""; ""2.2 Momentum Transfer ""; ""2.3 Life-Time ""; ""2.4 Possibility of Amplification ""; ""Chapter 3 Interaction of Radiation with Matter ""; ""3.1 Time Dependent Perturbation Theory ""; ""3.2 Electric Dipole Interaction ""; ""3.3 Quantum Electrodynamics ""         </p> <p>           ""3.3.1 Creation and Annihilation Operators""""3.3.2 Fock States""; ""3.3.3 Quantization of the Field""; ""3.3.4 Zero-point Energy""; ""3.3.5 Coherent-state Description of the Electromagnetic Field ""; ""3.3.6 Interaction of Radiation with Matter""; ""Chapter 4 Masers ""; ""4.1 The Two-Level Maser System Ammonia Maser ""; ""4.2 Hydrogen Maser ""; ""4.3 The Three-Level Maser System ""; ""Chapter 5 Theory of Some Simple Optical Processes ""; ""5.1 Waves and Interference ""; ""5.2 Coherence ""; ""5.3 Coherence of the Field and the Size of the Source ""; ""5.4 Visibility and the Size of the Source """"5.5 Coherence and Monochromaticity ""; ""5.6 Kinetics of Optical Absorption ""; ""5.7 Shape and Width of Spectral Lines ""; ""5.8 Line Broadening Mechanisms ""; ""5.8.1 Natural or Intrinsic Broadening""; ""5.8.2 Collision Broadening""; ""5.8.3 Doppler Broadening""; ""Chapter 6 Basic Principles of Lasers ""; ""6.1 Population Inversion ""; ""6.2 Laser Pumping ""; ""6.2.1 A Two-Level System""; ""6.2.2 A Three-Level System""; ""6.3 Resonators "";         </p>

""6.4 Vibrational Modes of a Resonator ""; ""6.5 Number of Modes Per Unit Volume ""  
""6.6 Open Resonators """"6.7 The Confocal Resonator ""; ""6.8 The Quality Factor Q ""; ""6.9 Losses Inside the Cavity ""; ""6.10 The Threshold Condition ""; ""6.11 Quantum Yield ""; ""Chapter 7 Solid State Lasers ""; ""7.1 The Ruby Laser-A Three-Level System ""; ""7.2 Pumping Power ""; ""7.3 Spiking ""; ""7.4 U<sup>3+</sup> in CaF<sub>2</sub> Laser: A Four-Level System ""; ""7.5 Neodymium Lasers ""; ""(a) Nd: YAG Laser""; ""(b) Neodymium: Glass Laser""; ""7.6 Ho<sup>3+</sup>: YLF Laser ""; ""7.7 Other Types of Solid State Lasers ""; ""Chapter 8 Gas Lasers ""; ""8.1 Neutral Atom Gas Lasers : Helium-Neon Laser ""  
""8.2 Copper Vapour Laser """"8.3 Ion Lasers ""; ""8.3.1 Argon Ion Laser [Bridges et al. 66]""; ""8.3.2 Krypton and Mercury Ion Lasers""; ""8.4 Metal Vapour Laser ""; ""8.4.1 He-Cd Laser""; ""8.4.2 He-Se Laser""; ""8.5 Molecular Gas Lasers ""; ""8.5.1 CO<sub>2</sub> Laser""; ""8.5.2 Electroionization Lasers""; ""8.5.3 Gas-dynamic Laser""; ""8.5.4 Vibronic Lasers""; ""8.6 Excimer Lasers ""; ""Chapter 9 Semiconductor Lasers ""; ""9.1 Central Features of Semiconductor Lasers""; ""9.2 Intrinsic Semiconductor Lasers ""; ""9.3 Doped Semiconductors ""; ""9.4 Condition For Laser Action ""  
""9.5 Injection Lasers ""

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