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Nota di contenuto	Preface; CONTENTS; Chapter 1. Optical Resonators and Filters H. A. Haus, M. A. Popovic, M. R. Watts, C. Manolatu, B. E. Little and S. T. Chu; Chapter 2. Microfabricated Optical Cavities and Photonic Crystals M. Loncar and A. Scherer; Chapter 3. Semiconductor Lasers for Telecommunications T. L. Koch; Chapter 4. Cavity-Enhanced Single Photons from a Quantum Dot J. Vuckovic, C. Santori, D. Fattal, M. Pelton, G. S. Solomon and Y. Yamamoto Chapter 5. Fabrication, Coupling and Nonlinear Optics of Ultra-High-Q Micro-Sphere and Chip-Based Toroid Microcavities T. J. Kippenberg, S. M. Spillane, D. K. Armani, B. Man, L. Yang and K. J. Vahala Chapter 6. Nonlinear Optical Properties of Semiconductor Quantum Wells inside Microcavities T. Meier, C. Sieh, S. W. Koch, Y.-S. Lee, T. B. Norris, F. Jahnke, G. Khitrova and H. M. Gibbs; Chapter 7. Polymer Microring Resonators P. Rabiei and W. H. Steier Chapter 8. Atoms in Microcavities: Quantum Electrodynamics, Quantum Statistical Mechanics, and Quantum Information Science A . C. Doherty and H. Mabuchi Chapter 9. Progress in Asymmetric Resonant Cavities:

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G. L. Schwefel, H. E. Tureci, A . D. Stone and R. K. Chang; Index

Sommario/riassunto

Optical microcavities are structures that enable confinement of light to microscale volumes. The universal importance of these structures has made them indispensable to a wide range of fields. This important book describes the many applications and the related physics, providing both a review and a tutorial of key subjects by leading researchers from each field.