1. Record Nr. UNINA9910783643903321

Titolo	Optical microcavities [[electronic resource] /] / edited by Kerry Vahala
Pubbl/distr/stampa	Singapore, : World Scientific, 2004
ISBN	1-281-34780-9 9786611347802 981-256-573-6
Descrizione fisica	1 online resource (517 p.)
Collana	Advanced series in applied physics ; ; v. 1
Altri autori (Persone)	VahalaKerry
Disciplina	530.1433 621.36/6
Soggetti	Lasers Electrooptics Quantum electrodynamics Electromagnetic interactions
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Preface; CONTENTS; Chapter 1. Optical Resonators and Filters H. A. Haus, M. A. Popovie, M. R. Watts, C. Manolatou, 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. VahalaChapter 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. MabuchiChapter 9. Progress in Asymmetric Resonant Cavities: Using Shape as a Design Parameter in Dielectric Microcavity Lasers H.

	G. L. Schwefel, H. E. Tureci, A . D. Stone and R. K. Chang; Index
Sommario/riassunto	Optical microcavities are structures that enable confinement of lightto microscale volumes. The universal importance of these structureshas made them indispensable to a wide range of fields. This importantbook describes the many applications and the related physics,providing both a review and a tutorial of key subjects by leadingresearchers from each field.