

| | |
|-------------------------|--|
| 1. Record Nr. | UNINA9910451319103321 |
| Titolo | Free and guided optical beams [[electronic resource]] : International School of Quantum Electronics, Erice Sicily, Italy, 20-27 November 2002 // editors, Sergio Martellucci, Massimo Santarsiero |
| Pubbl/distr/stampa | Singapore ; ; New Jersey, : World Scientific, c2004 |
| ISBN | 1-281-89858-9 9786611898588 981-270-253-9 |
| Descrizione fisica | 1 online resource (273 p.) |
| Altri autori (Persone) | MartellucciS SantarsieroMassimo |
| Disciplina | 535.5 |
| Soggetti | Beam optics Optical wave guides Electronic books. |
| 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 | Table of Contents; Preface; List of Participants; Invited Lectures; Semiperiodic Zones, Critical Points and Numerical Calculation of Diffraction Integrals S. Bosch and J. Ferre-Borrull; Partial Polarization in Arbitrary Three-Dimensional Electromagnetic Fields A.T. Friberg; Optical Beams as Quantum Models (abstract) F. Gori; Micro-Optics: Fundamentals and Recent Topics H. P. Herzig; Generation and Propagation of Coherent Matter Waves F.S. Cataliotti, I. Herrera, S. Bartalini, C. Fort, L. Fallani and M. Inguscio; Broad-Band Active Optical Waveguides based on Thin Films R.M. Montereali Spatial Laser Beam Characterization and Propagation Through Abed-Type Optical Systems using the Second-Order Moments Method G. NemesBeams in Resonators (abstract) M.R. Perrone; On the Effects of Diffraction in the Propagation of Ultrashort, Femtosecond, Optical Pulses M.A. Porras; Gaussian and Bessel Beams and Pulses beyond the Paraxial Approximation (abstract) C. Sheppard; Partially Coherent Beams in Free Space and in Lenslike Media R. Simon; Beam Polarization Modulation in Wave-Optical Engineering J. Tervo and J. Turunen |

Spatial Coherence: Definitions and Measurements B. Eppich, G. Mann and H. Weber; Invited Seminars; Optical Beams in Uniaxial Crystals G. Cincotti, A. Ciattoni and H. Weber; Light Beam Shaping: The Integration Method P. Di Lazzaro, S. Bollanti and D. Murra; Beam Propagation in Quadratic Media G. Leo; Generation of Polarization Entangled Photons by a Universal Source of Entanglement M. Barbieri, F. De Martini, G. Di Nepi and P. Mataloni; Polarization Instabilities in a Quasi-Isotropic CO₂ Laser R. Meucci, I. Leyva and E. Allaria
Superluminal Localized Solutions to the Maxwell Equations for Vacuum and for Dispersive Media (with Arbitrary Frequencies and Bandwidths) M. Zamboni Rached, K.Z. Nobrega and E. Recami; Angular Momentum in Optical Beams J. Serna; Experimental Aspects in Beam Characterization (abstract) A. Sana; Seminars; Applications of the Time-Resolved Integral-Geometric Methods for the Composite Materials Diagnostics (abstract) A. A. Aliverdiev
The Electrodynamics of Processes having place in the Volume of a Monochromatic Coherent Polarized Radiation Beam (abstract) A. A. Aliverdiev, A. A. Aliverdiev and A. A. Amirov; Naturally Generated Beams by Quasi-Optical Phenomena M. Branescu; Laser and Satellite Remote Sensing of the Ocean L. Fiorani; Time-Resolved Spectroscopy of Semiconductor Photodetectors (abstract) B. Pura, J. Strzeszewski, A. Tadeusiak and Z. Wrzesinski; Polymer Waveguides for Optical Modulators (abstract) B. Pura, J. Strzeszewski, A. Tadeusiak and Z. Wrzesinski
Acceleration of Electrons in Free Space by a TM₀₁ Laser Beam C. Varin and M. Piche

Sommario/riassunto

Optical beams are electromagnetic waves that remain essentially concentrated around a mean axis upon free propagation or that are guided by suitable structures. The study of these beams has existed long ago and since then this field has been a focus of active investigation. However, in recent years, the interest on optical beams has further increased, due to the availability of many types of laser sources, characterized by very different properties, as far as their polarization, coherence, spectral content, and spatial distribution are concerned. This book contains lectures presented in the 35
