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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Lasers: An Introduction Basics of Nonlinear Optics Gas Lasers Diode-pumped Solid-state Lasers and Intracavity Frequency Conversion Semiconductor Lasers Basics and Technology Fiber Lasers Free Electron Lasers Lasing in Random Amplifying Media Terahertz Transients: Generation and Applications Thin Film Coatings for Lasers and Other Applications Phase Shifting Laser Interferometry for Measurement of Surface Form Error High Resolution Spectroscopy Lasers in Materials Processing Biomedical Applications of Lasers.

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Sommario/riassunto

The book, 'Laser Physics and Technology', addresses fundamentals of laser physics, representative laser systems and techniques, and some important applications of lasers. The present volume is a collection of articles based on some of the lectures delivered at the School on 'Laser Physics and Technology' organized at Raja Ramanna Centre for Advanced Technology during March, 12-30, 2012. The objective of the School was to provide an in-depth knowledge of the important aspects of laser physics and technology to doctoral students and young researchers and motivate them for further work in this area. In keeping with this objective, the fourteen chapters, written by leading Indian experts, based on the lectures delivered by them at the School, provide along with class room type coverage of the fundamentals of the field, a brief review of the current status of the field. The book will be useful for doctoral students and young scientists who are embarking on a research in this area as well as to professionals who would be interested in knowing the current state of the field particularly in Indian context.