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Nota di contenuto	From the Contents: Optical properties and optical spectroscopy of rare-earth ions in solids -- Electron-phonon coupling in solids -- Physical and optical properties of laser glass -- Mechanical and thermal properties of glass -- Fiber fabrication and high quality glasses for gain fibers -- Spectroscopic properties of and gain fibers -- Propagation of light and spatial modes in optical fibers -- Fiber laser physics fundamentals -- Main fiber laser operational regimes -- Main optical components for fiber lasers and fiber amplifiers design -- High power fiber lasers -- Fiber lasers' industrial applications.
Sommario/riassunto	This book covers the fundamental aspects of fiber lasers and fiber amplifiers, and includes a wide range of material from laser physics fundamentals to state-of-the-art topics in this rapidly growing field of

quantum electronics. Emphasis is placed on the nonlinear processes taking place in fiber lasers and amplifiers, their similarities, differences to, and their advantages over other solid-state lasers. The reader will learn basic principles of solid-state physics and optical spectroscopy of laser active centers in fibers, main operational laser regimes, and practical recommendations and suggestions on fiber laser research, laser applications, and laser product development. The book will be useful for students, researchers, and professionals who work with lasers, in the optical communications, chemical and biological industries, etc.