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Nota di contenuto	From the Contents: Photonics. A short course -- The laser -- Spectrum of electromagnetic waves -- Propagation of electromagnetic waves -- Waves in vacuum -- Optical components -- Waves in matter -- Dispersive medium -- Modulation -- Linear electro-optic effect -- Semiconductor devices -- Semiconductor laser -- Optical fibers -- Properties of optical fibers -- Applications -- Information and communication technologies.
Sommario/riassunto	This book will serve as a concise, self-contained, up-to-date introduction to Photonics, to be used as a textbook for undergraduate students or as a reference book for researchers and professionals. Blending theory with technical descriptions, the book covers a wide range of topics, including the general mechanism of laser action, continuous and pulsed laser operation, optical propagation in isotropic and anisotropic media, operating principles and structure of passive

optical components, electro-optical and acousto-optical modulation, solid-state lasers, semiconductor lasers and LEDs, nonlinear optics, and optical fiber components and devices.. The book concludes with an overview of applications, including optical communications, telemetry and sensing, industrial and biomedical applications, solid-state lighting, displays, and photovoltaics.