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Nota di contenuto	1 Recent Progress in Polarization-Bistable VCSELs and Their Applications to All-Optical Signal Processing -- 2 Tunable Lasers based on Multimode Interference Effects -- 3 Whispering gallery mode microdisk resonator with dynamic material properties -- 4 Superradiant lasing and collective dynamics of active centers with polarization lifetime exceeding photon lifetime -- 5 The control of energy, temporal and spatial characteristics a microchip laser with active output mirror -- 6 Recent Advances in Secure Transmission with Chaotic Carriers -- 7 Superwicking surfaces produced by femtosecond laser -- 8 Optical processors as conceptual tools for designing nonconventional devices -- 9 Description of the Dynamics of Charged Particles in Electric Fields: An Approach using Fractional Calculus -- 10 Sub- and nanosecond pulsed lasers applied to the generation of broad spectrum in standard and microstructured optical fibers -- 11 Extremely high power CO2

	laser beam correction -- 12 Measurements of intense and wide-aperture laser radiation parameters with thinwire bolometers -- 13 Spectral and lasing characteristics of some red and NIR laser dyes in silica matrices -- 14 Interpretation of the time delay in the ionization of Coulomb systems by attosecond laser pulses.
Sommario/riassunto	Presenting a blend of applied and fundamental research in highly interdisciplinary subjects of rapidly developing areas, this book contains contributions on the frontiers and hot topics of laser physics, laser technology and laser engineering, and covers a wide range of laser topics, from all-optical signal processing and chaotic optical communication to production of superwicking surfaces, correction of extremely high-power beams, and generation of ultrabroadband spectra. It presents both review-type contributions and well researched and documented case studies, and is intended for graduate students, young scientist, and emeritus scientist working/studying in laser physics, optoelectronics, optics, photonics, and adjacent areas. The book contains both experimental and theoretical studies, as well as combinations of these two, which is known to be a most useful and interesting form of reporting scientific results, allowing students to really learn from each contribution. The book contains over 130 illustrations.