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Nota di contenuto	Chapter 1: Accessible Soliton Breathers in Diffraction-Managed Media.- Chapter 2: High-Power Orbital Angular Momentum Modes Obtained by Phase-Locking Lasers in a 1D Ring Array.- Chapter 3: 1kW Narrow-Linewidth CW Fiber Laser Source for Spectral Beam Combining -- Chapter 4: Effect of Amplitude-Phase Coupling on the Formation of Dissipative Topological Defects in Coupled Lasers -- Chapter 5: Non-Hermitian Phase Transition in All-Dielectric Apodized One - Dimensional Photonic Crystals -- Chapter 6: Aberration Laser Beams with Controlled Autofocusing, Self-Healing and Intensity Distribution -- Chapter 7: Rb D ₂ -Line Polarization Spectroscopy for Laser Frequency Locking -- Chapter 8: An Experimental Study on Polarization Mode Dispersion Compensation Technique for a Monolithic CMOS-Integrated Silicon Photonics Transceiver -- Chapter 9: Gyrotropic Confinement in Gyromagnetic Medium-Encased Dielectric Structures -- Chapter 10: THz Characterization of Ge ₁₀ Sb ₂₀ Se ₇₀ Thin Film -- Chapter 11: Design and Performance Characteristics of Quantum Well

Infra-Red Photodetectors -- Chapter 12 :Mid-Infrared Quantum Cascade Laser-Based Wavelength Modulation Spectroscopy for the Detection of Greenhouse Gases and NO_x -- Chapter 13 : Accurate Determination of Excitonic Spectra of Monolayer Selenium - PtS₂ Van der Waals Heterostructure -- Chapter 14:Low Intensity Noise Continuous Wave Supercontinuum Generation in Standard Telecom Optical Fibers.

Sommario/riassunto

This book presents the select proceedings of the Biennial Photonics Conference (Photonics 2023) held at IISc, Bengaluru on 5-8 July 2023. It covers topics across multiple areas of photonics, including established areas like optical communication and networks, quantum optics, non-linear and ultrafast photonics , nanophotonics , biophotonics and bioimaging, photonic integrated circuits , fibers and sensors, optical materials and fabrication techniques, optical metrology, and instrumentation, optofluidics, laser applications, optoelectronics. The book also covers emerging areas in photonics, such as THz photonics, structured Light, 2D materials, optomechanics, topological photonics, and AI/ML in photonics. The book will be useful for researchers and professionals interested in the broad field of photonics.
