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Nota di contenuto	Chapter 1 - A Structural And Optical Look At Functional Materials -- Chapter 2 - Two-Dimensional Materials for Next Generation Nanoelectronics and Optoelectronics: Advances and Trends -- Chapter 3 - Optoelectronic Properties of Gaas, Gap and Znse Cathodes in a Plasma-Semiconductor Structures -- Chapter 4 - Optoelectronic Properties of ZnO Thin Films Prepared by the Spray Pyrolysis Method on Glass Substrates -- Chapter 5 - The Optical Properties of SnO2:F Thin Films Prepared by the Spray Pyrolysis Method on Glass Substrates -- Chapter 6 - No Gas Sensing Properties of Zn1-Xsnxo Nanostructures Under Uv Light Irradiation -- Chapter 7 - Optical Refractive Properties, Birefringence and Order Paratemeter at the Direct Smectic A – Isotropic and Reverse Isotropic – Smectic A Phase Transitions -- Chapter 8 - Charge Transport Mechanisms in the Silver-Modified-Zeolite Porous Microstructure -- Chapter 9 - Magnetoelectricity in Ion Implanted Ferroelectric Crystals.
Sommario/riassunto	This book focuses on the progress in optoelectronic materials research and technologies, presenting reviews and original works on the theory, fabrication, characterization, and applications of optoelectronic

materials. The chapters discuss preparation and properties of several optoelectronic materials, such as ZnO, SnO2, Zn1-XSnXO, BaTiO3, GaAs, GaP, ZnSe, and NaAlSi. The structural, optical, vibrational, and magnetic properties are discussed, in addition to transport and phase transformations.