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Titolo	Photonic Materials for Sensing, Biosensing and Display Devices / / edited by Michael J. Serpe, Youngjong Kang, Qiang Matthew Zhang
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Descrizione fisica	1 online resource (376 p.)
Collana	Springer Series in Materials Science, , 0933-033X ; ; 229
Disciplina	382.45621381045
Soggetti	Optical materials Electronics - Materials Lasers Photonics Semiconductors Nanotechnology Biophysics Optical and Electronic Materials Optics, Lasers, Photonics, Optical Devices Biological and Medical Physics, Biophysics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	From the contents: One-dimensional micro/nanofibers or nanowire as sensors -- Surface-enhanced Raman scattering (SERS) for detection of cancer biomarkers -- Optical and electrical properties of nanomaterials -- Nanowire photonics -- Magnetically responsive photonic crystals -- Colloidal crystals for sensing applications -- Fabrication of polymeric microstructures with multi-scale and photonic responsive materials -- Nano-/micro-structured functional material for biosensors -- Polymer material for optical sensing -- Novel function nanomaterials for sensors, and actuators -- Photonic crystals for sensors and display devices.
Sommario/riassunto	This book presents the basics and applications of photonic materials. It focuses on the utility of these devices for sensing, biosensing, and

displays. The book includes fundamental aspects with a particular focus on the application of photonic materials. The field of photonic materials is both a burgeoning, and mature field. There are new advances being made on a daily basis, all based on the fundamental roots set by work by those like Ozin, Thomas, Asher, and others.