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Autore	Pandey Sadanand
Titolo	Advance Nanomaterials for Biosensors
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Descrizione fisica	1 online resource (134 p.)
Soggetti	Technology: general issues
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Sommario/riassunto	The book provides a comprehensive overview of nanostructures and methods used to design biosensors, as well as applications for these biosensor nanotechnologies in the biological, chemical, and environmental monitoring fields. Biological sensing has proven to be an essential tool for understanding living systems, but it also has practical applications in medicine, drug discovery, food safety, environmental monitoring, defense, personal security, etc. In healthcare, advancements in telecommunications, expert systems, and distributed diagnostics are challenging current delivery models, while robust industrial sensors enable new approaches to research and development. Experts from around the world have written five articles on topics including:Diagnosing and treating intraocular cancers such as retinoblastoma; Nanomedicine in cancer management; Engineered nanomaterials in osteosarcoma diagnosis and treatment; Practical design of nanoscale devices; Detect alkaline phosphatase quantitatively in clinical diagnosis; Progress in the area of non-enzymatic sensing of dual/multi biomolecules; Developments in non-enzymatic glucose and H2O2 (NEGH) sensing; Multi-functionalized nanocarrier therapies for targeting retinoblastoma; Galactose functionalized nanocarriers; Sensing performance, electro-catalytic mechanism, and morphology and design of electrode materials; Biosensors along with their applications and the benefits of machine learning; Innovative approaches to improve the NEGH sensitivity, selectivity, and stability in

real-time applications; Challenges and solutions in the field of biosensors.