1. Record Nr. UNINA9910155549103321

Titolo	Micro/Nano Cell and Molecular Sensors / / edited by Ping Wang, Chunsheng Wu, Ning Hu, K. Jimmy Hsia
Pubbl/distr/stampa	Singapore : , : Springer Singapore : , : Imprint : Springer, , 2016
Edizione	[1st ed. 2016.]
Descrizione fisica	1 online resource (V, 243 p. 114 illus., 103 illus. in color.)
Disciplina	570.28
Soggetti	Biology—Technique Biomedical engineering Biotechnology Biological Techniques Biomedical Engineering and Bioengineering
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Chapter 1 Introduction -- Chapter 2. Micro/Nano Biosensors for Living Cell and Molecule Analysis -- Chapter 3 Label-free DNA Biosensors with Field-effect Devices -- Chapter4. Micro/Nano Cell-substrate Impedance Biosensors -- Chapter 5. Micro/Nano Cell Potential Biosensors -- Chapter 6. Micro/Nano Neuronal Network Cell Biosensors -- Chapter7. Micro/Nanomaterial-based Biosensors -- Chapter 8. Micro/Nano Electrochemical Sensors for Ion Sensing.-Chapter 9 Future Trends of Micro/Nano Cell and Molecule-based Biosensors.
Sommario/riassunto	This book focuses on cell- and molecule-based biosensors using micro/nano devices as transducers. After providing basic information on micro/nano cell- and molecule-based biosensors, it introduces readers to the basic structures and properties of micro/nano materials and their applications. The topics covered provide a comprehensive review of the current state of the art in micro/nano cell- and molecule-based biosensors as well as their future development trends, ensuring the book will be of great interest to the interdisciplinary community active in this area: researchers, engineers, biologists, medical scientists, and all those whose work involves related interdisciplinary

research and applications. Dr. Ping Wang is a Professor in Department of Biomedical Engineering at Zhejiang University, Hangzhou, China. Dr. Chunsheng Wu is a Professor in Medical School at Xi'an Jiaotong University, Xi'an, China. Dr. Ning Hu is an Assistant researcher in Department of Biomedical Engineering at Zhejiang University and a Postdoctoral researcher in Medical School at Harvard University, Boston, USA. Dr. K. Jimmy Hsia is a Professor in Department of Biomedical Engineering at Carnegie Mellon University, Pittsburgh, USA.