1. Record Nr. UNINA9910456677303321

Titolo	Cell-based biosensors : principles and applications / / Ping Wang, Qingjun Liu, editors
Pubbl/distr/stampa	Boston : , : Artech House, , ©2010 [Piscataqay, New Jersey] : , : IEEE Xplore, , [2009]
ISBN	1-59693-440-9
Descrizione fisica	1 online resource (290 p.)
Collana	Artech House series engineering in medicine & biology
Altri autori (Persone)	WangPing <1959-> LiuQingjun
Disciplina	610.284
Soggetti	Biosensors Cellular signal transduction Transducers Electronic books.
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 and index.
Nota di contenuto	Cell-Based Biosensors Principles and Applications; Contents; Foreword; Preface; Acknowledgments; Chapter 1 Introduction; 1.1 Definition of Cell-Based Biosensors; 1.2 Characteristics of Cell-Based Biosensors; 1.3 Types of Cell-Based Biosensors; 1.4 Summary; References; Chapter 2 Cell Culture on Chips; 2.1 Introduction; 2.2 Cell Immobilization Factors; 2.2.1 Physical Factors; 2.2.2 Chemical Factors; 2.2.3 Biological Factors; 2.3 Basic Surface Modification Rules; 2.3.1 Hydrophilicity Improving; 2.3.2 Roughness Changing; 2.3.3 Chemical Coating; 2.4 Typical Methods 2.4.1 Special Physical Structure 2.4.2 Microcontact Printing; 2.4.3 Fast Ink-Jet Printing; 2.4.4 Perforated Microelectrode; 2.4.5 Self-Assembled Monolayer; 2.4.6 Microfluidic Technology; 2.5 Summary; References; Chapter 3 Mechanisms of Cell-Based Biosensors; 3.1 Introduction; 3.2 Metabolic Measurements; 3.2.1 Cell Metabolism; 3.2.2 Extracellular pH Monitoring; 3.2.3 Other Extracellular Metabolite Sensing; 3.2.4 Secondary Transducers; 3.3 Action Potential Measurements; 3.3.1 Action Potential; 3.3.2 The Solid-Electrolyte Interface; 3.3.3 Cell-Electrode Interface Model

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Sommario/riassunto

In the 21st century, we are witnessing the integration of two dynamic disciplines - electronics and biology. As a result bioelectronics and biosensors have become of particular interest to engineers and researchers working in related biomedical areas. Written by recognized experts the field, this leading-edge resource is the first book to systematically introduce the concept, technology, and development of cell-based biosensors. Readers find details on the latest cell-based biosensor models and novel micro-structure biosensor techniques. Taking an interdisciplinary approach, this unique volume presents the latest innovative applications of cell-based biosensors in a variety of biomedical fields. The book also explores future trends of cell-based biosensors, including integrated chips, nanotechnology and microfluidics. Over 140 illustrations help clarify key topics throughout the book.