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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.