1. Record Nr. UNINA9910559395203321

Titolo	Advances in Bioelectrochemistry Volume 1 : Surface, Electron Transfer and Techniques / / edited by Frank N. Crespilho
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2022
ISBN	3-030-94988-5
Edizione	[1st ed. 2022.]
Descrizione fisica	1 online resource (137 pages)
Disciplina	572.437
Soggetti	Biomaterials Surfaces (Technology) Thin films Electrochemistry Surfaces, Interfaces and Thin Film
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	1. COMPUTER SIMULATION: BIOMOLECULES ON SURFACES -- 2. DIRECT AND MEDIATED ELECTRON TRANSFER IN ENZYME ELECTRODES -- 3. A CASE STUDY OF CYTOCHROME C -- 4. SURFACE-CONFINED BIOMOLECULES FOR APPLICATION IN BIOELECTRONICS -- 5. SENSITIVE DEVICES BASED ON FIELD-EFFECT TRANSISTORS -- 6. SUPRAMOLECULAR ELECTROCHEMISTRY: RECENT TRENDS AND PERSPECTIVES -- 7. IN SITU AND OPERANDO TECHNIQUES IN BIOELECTROCHEMISTRY.
Sommario/riassunto	This book presents a collection of chapters on modern bioelectrochemistry, showing different aspects of electron transfer reactions in biological systems and techniques. The chapters cover computer simulation, biomolecules on surfaces, direct and mediated electron transfer, electron transfer kinetics, surface-confined biomolecules, field-effect transistor effects, supramolecular electrochemistry, in situ and operando techniques in bioelectrochemistry. They provide relevant bibliographic information for researchers and students interested in computer simulation involving biomolecules on surfaces, processes of direct and mediated

electron transfer kinetics of cytochrome c, surface-confined biomolecules for application in bioelectronics, sensitive devices based on field-effect transistors, insights on supramolecular electrochemistry with recent trends and perspectives and technological innovation on instrumentation applied in operando techniques field.