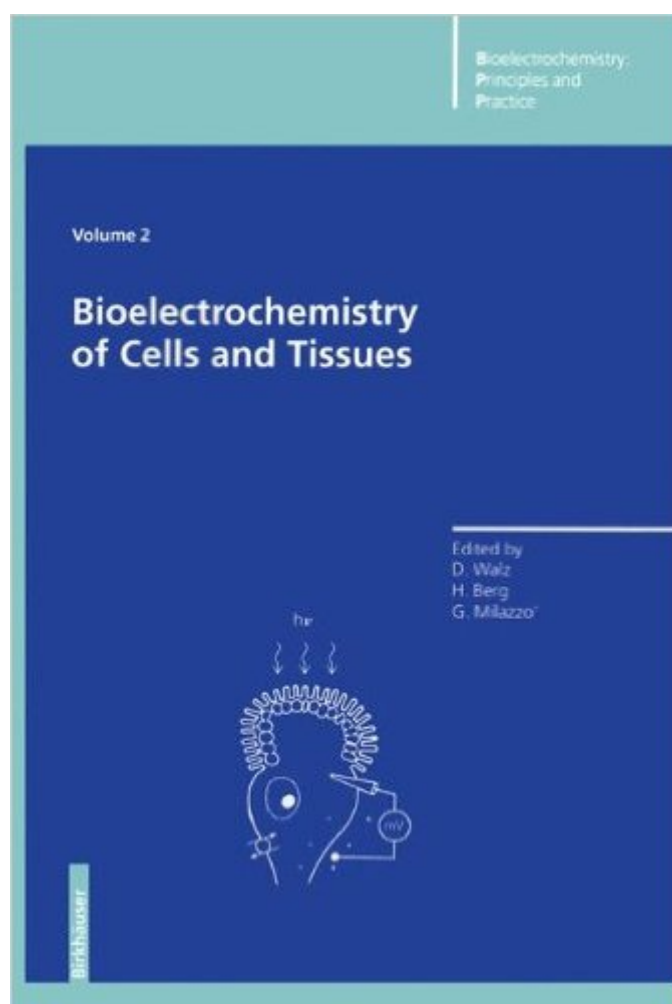


The book was found

# Bioelectrochemistry Of Cells And Tissues (Bioelectrochemistry: Principles And Practice)



## Synopsis

Bioelectrochemistry: Principles and Practice provides a comprehensive compilation of all the physicochemical aspects of the different biochemical and physiological processes. The role of electric and magnetic fields in biological systems forms the focus of this second volume in the Bioelectrochemistry series. The most prominent use of electric fields is found in some fish. These species generate fields of different strengths and patterns serving either as weapons, or for the purpose of location and communication. Electrical phenomena involved in signal transduction are discussed by means of two examples, namely excitation-contraction coupling in muscles and light transduction in photoreceptors. Also examined is the role of electrical potential differences in energy metabolism and its control. Temporal and spatial changes of the potential difference across the membranes of nerve cells are carefully evaluated, since they are the basis of the spreading and processing of information in the nervous system. The dielectric properties of cells and their responses to electric fields, such as electrophoresis and electrorotation, are dealt with in detail. Finally, the effects of magnetic fields on living systems and of low-frequency electromagnetic fields on cell metabolism are also considered. Further volumes will be added to the series, which is intended as a set of source books for graduate and postgraduate students as well as research workers at all levels in bioelectrochemistry.

## Book Information

Series: Bioelectrochemistry: Principles and Practice (Book 2)

Hardcover: 305 pages

Publisher: Birkh f user; 1995 edition (November 21, 1996)

Language: English

ISBN-10: 3764350857

ISBN-13: 978-3764350857

Shipping Weight: 1.9 pounds

Average Customer Review: Be the first to review this item

Best Sellers Rank: #14,283,760 in Books (See Top 100 in Books) #83 in  Books > Science & Math > Biological Sciences > Bioelectricity #3747 in  Books > Science & Math > Biological Sciences > Biophysics #6176 in  Books > Science & Math > Chemistry > Physical & Theoretical > Physical Chemistry

[Download to continue reading...](#)

Bioelectrochemistry of Cells and Tissues (Bioelectrochemistry: Principles and Practice)

Bioelectrochemistry IV: Nerve Muscle Function-Bioelectrochemistry, Mechanisms, Bioenergetics and Control (Nato Science Series: A:) Bioelectrochemistry: General Introduction (Bioelectrochemistry, Vol 1) Bioelectrochemistry of Biomacromolecules (Bioelectrochemistry (Birkhauser Verlag), Vol 5) Fluorescence Microscopy of Living Cells in Culture, Part A, Volume 29: Fluorescent Analogs, Labeling Cells, and Basic Microscopy (Methods in Cell Biology, Vol) (Vol 29) Tissue Engineering: Engineering Principles for the Design of Replacement Organs and Tissues Drugs and the Delivery of Oxygen to Tissues Chestnut's Obstetric Anesthesia: Principles and Practice: Expert Consult - Online and Print, 5e (Chestnut, Chestnut's Obstetric Anesthesia: Principles and Practice) Colposcopy: Principles and Practice, Text with DVD, 2e (Apgar,Colposcopy: Principles and Practice) Cardiopulmonary Bypass: Principles and Practice (Gravlee, Cardiopulmonary Bypass: Principles and Practice) ASTNA Patient Transport: Principles and Practice (Air & Surface Patient Transport: Principles and Practice) Principles and Practice of Psychiatric Nursing, 10e (Principles and Practice of Psychiatric Nursing (Stuart)) Bioelectrochemistry I: Biological Redox Reactions (Emotions, Personality, and Psychotherapy) (No. 1) Bioelectrochemistry II: Membrane Phenomena (Ettore Majorana International Science Series) The Complete Works of Herbert Spencer: The Principles of Psychology, The Principles of Philosophy, First Principles and More (6 Books With Active Table of Contents) Metabolic Activation and Toxicity of Chemical Agents to Lung Tissue and Cells Electrochemical Power Sources: Batteries, Fuel Cells, and Supercapacitors (The ECS Series of Texts and Monographs) Synergy, It's an Essential Oil Thing: Revealing the Science of Essential Oil Synergy with Cells, Genes, and Human Health LSC Chemistry, Cells and Genetics Fine Structure of the Nervous System: Neurons and Their Supporting Cells

[Dmca](#)