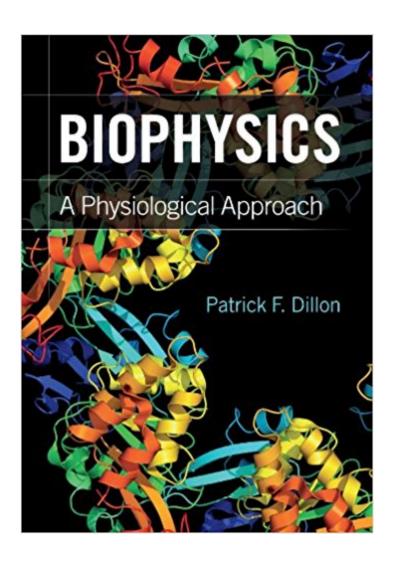


The book was found

Biophysics: A Physiological Approach





Synopsis

Specifically tailored to life science students, this textbook explains quantitative aspects of human biophysics with examples drawn from contemporary physiology, genetics and nanobiology. It outlines important physical ideas, equations and examples at the heart of contemporary physiology, along with the organization necessary to understand that knowledge. The wide range of biophysical topics covered include energetics, bond formation and dissociation, diffusion and directed transport, muscle and connective tissue physics, fluid flow, membrane structure, electrical properties and transport, pharmacokinetics and system dynamics and stability. Enabling students to understand the uses of quantitation in modern biology, equations are presented in the context of their application, rather than derivation. They are each directed toward the understanding of a biological principle, with a particular emphasis on human biology. Supplementary resources, including a range of test questions, are available at www.cambridge.org/9781107001442.

Book Information

Paperback: 314 pages

Publisher: Cambridge University Press; 1 edition (February 27, 2012)

Language: English

ISBN-10: 0521172160

ISBN-13: 978-0521172165

Product Dimensions: 6.8 x 0.6 x 9.7 inches

Shipping Weight: 1.4 pounds (View shipping rates and policies)

Average Customer Review: 4.0 out of 5 stars 1 customer review

Best Sellers Rank: #480,192 in Books (See Top 100 in Books) #100 in Books > Science & Math > Biological Sciences > Biophysics #438 in Books > Science & Math > Biological Sciences > Biology > Molecular Biology #907 in Books > Textbooks > Science & Mathematics > Biology &

Life Sciences > Anatomy & Physiology

Customer Reviews

"Students of life science in the broad sense tend to have either a mainly biological or physico-chemical approach to their subject, and it is indeed a large leap to acquire a good grasp of both aspects. This book offers rigorous but accessible explanations of basic mechanisms and also presents biomedical applications in a manner that heightens understanding of the biological context. The book presents the biophysical basis of an impressive number of physiological and biochemical mechanisms in a manner that is not found in traditional textbooks. It should certainly help to

broaden the knowledge base of students and researchers in biomedicine and life science and thereby facilitate cross-disciplinary understanding and interaction." Per Hellstrand, Lund University, Sweden"This book represents a good discussion of well-known biochemical and biophysical principles, but from a physiological viewpoint that is both interesting and uncommon. Highly recommended." J.A. Kelly, Choice magazine"The strength of the book lies in the decades of experience that the author can draw on to illustrate these processes and in knowing his students. Overall, this is a highly readable volume that discusses the physics in physiology in more depth than the typical physiology textbook and will expose concepts from bioengineering to a broader audience." Markus A. Seeliger, Stony Brook University for the Quarterly Review of Biology

Specifically tailored to life science students, this textbook outlines the important physical ideas, equations and examples at the heart of contemporary physiology, along with the organization necessary to understand that knowledge. The equations are designed to help students understand biological principles, with a particular emphasis on human biology.

Great book!

Download to continue reading...

Biophysics: A Physiological Approach Quantitative Understanding of Biosystems: An Introduction to Biophysics (Foundations of Biochemistry and Biophysics) Introduction to Experimental Biophysics, Second Edition: Biological Methods for Physical Scientists (Foundations of Biochemistry and Biophysics) Fractals in Molecular Biophysics (Topics in Physical Chemistry) Applied Biophysics of Activated Water: The Physical Properties, Biological Effects and Medical Applications of MRET Activated Water Nano-Optics for Enhancing Light-Matter Interactions on a Molecular Scale: Plasmonics, Photonic Materials and Sub-Wavelength Resolution (NATO Science ... Security Series B: Physics and Biophysics) Biophysics of Electron Transfer and Molecular Bioelectronics (Electronics and Biotechnology Advanced (Elba) Forum Series) Spectroscopic Techniques in Biophysics (Veneto Institute of Sciences, Letters and Arts Series, 4) Cellular Biophysics: Transport (MIT Press) (Volume 1) Cellular Biophysics: Electrical Properties (MIT Press) (Volume 2) Entropy-Driven Processes in Biology: Polymerization of Tobacco Mosaic Virus Protein and Similar Reactions (Molecular Biology, Biochemistry and Biophysics Molekularbiologie, Biochemie und Biophysik) Nonequilibrium Thermodynamics in Biophysics An Introduction to Environmental Biophysics (Modern Acoustics and Signal) Biophysics of Consciousness Methods in Molecular Biophysics: Structure, Dynamics, Function for Biology and Medicine Radiation Biophysics, Second

Edition Computational Approaches to Protein Dynamics: From Quantum to Coarse-Grained Methods (Series in Computational Biophysics) Biomolecular Thermodynamics: From Theory to Application (Foundations of Biochemistry and Biophysics) Spider Speculations: A Physics and Biophysics of Storytelling Physiological Assessment of Human Fitness - 2nd Edition

Contact Us

DMCA

Privacy

FAQ & Help