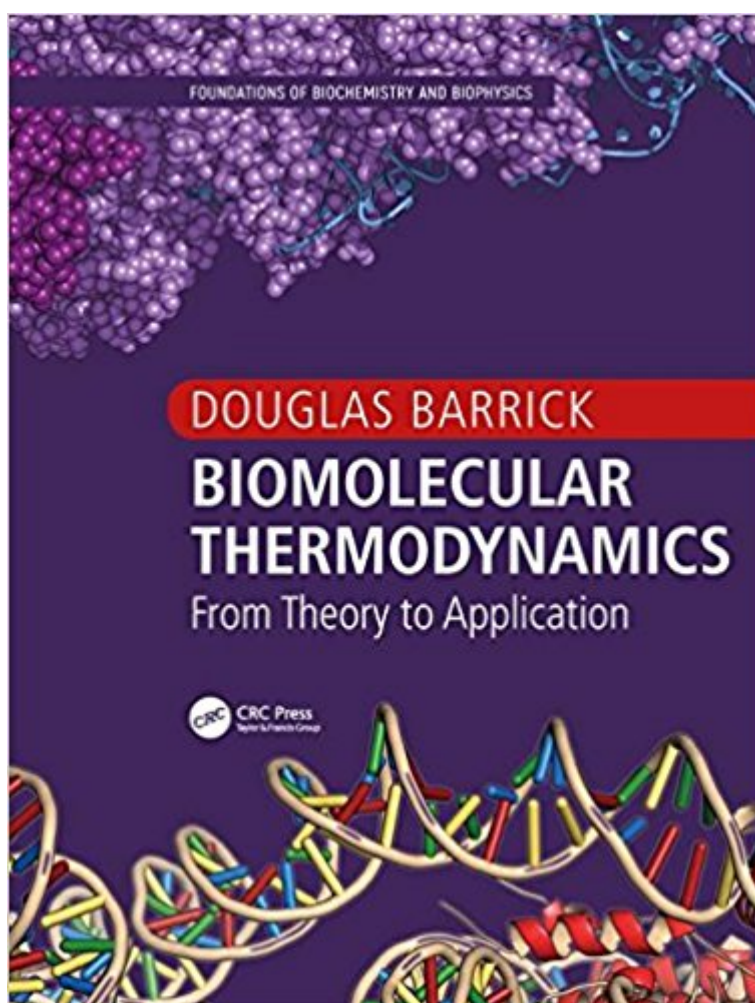


The book was found

Biomolecular Thermodynamics: From Theory To Application (Foundations Of Biochemistry And Biophysics)



Synopsis

This book introduces the concepts and practical tools necessary to understand the behavior of biological macromolecules at a quantitative level. It begins by describing biochemical phenomena using principles of classical and statistical thermodynamics. Unlike other books, this text goes beyond theory to explain in detail how the equations are applied to the analysis of experimental measurements. This emphasis on real-world applications is continued throughout and is a major feature of the book.

Book Information

Series: Foundations of Biochemistry and Biophysics

Paperback: 542 pages

Publisher: CRC Press; 1 edition (September 14, 2017)

Language: English

ISBN-10: 1439800197

ISBN-13: 978-1439800195

Shipping Weight: 1.1 pounds (View shipping rates and policies)

Average Customer Review: Be the first to review this item

Best Sellers Rank: #417,933 in Books (See Top 100 in Books) #109 in Books > Textbooks > Medicine & Health Sciences > Medicine > Basic Sciences > Biochemistry #208 in Books > Science & Math > Physics > Dynamics > Thermodynamics #268 in Books > Textbooks > Medicine & Health Sciences > Medicine > Clinical > Radiology & Nuclear Medicine

Customer Reviews

"Presents both the concepts and equations associated with statistical thermodynamics in a unique way that is at visual, intuitive, and rigorous. This approach will greatly benefit students at all levels." — Vijay S. Pande, Henry Dreyfus Professor of Chemistry, Stanford University "a masterful tour de force. Barrick's rigor and scholarship come through in every chapter. The focus on biomolecules combined with the detailed demonstrations of how concepts apply to practical aspects of biophysics make this a truly unique contribution. Everyone, from the purported expert to the true novice will gain immensely from this carefully crafted, well motivated, and deeply thought out contribution. This book should live on all of our bookshelves and be consulted routinely as a quick reference or as material for in depth study and training." — Rohit V. Pappu, Edwin H. Murty Professor of Engineering, Washington University in St. Louis "The author has created an impressive text that addresses a glaring gap in the teaching of physical chemistry, being specifically focused on

biologically-relevant systems along with a practical focus. It starts by bringing students up to speed on probability theory, multi-variate calculus and data fitting, the necessary tools for tackling the advanced topics covered in the remaining dozen chapters and for conducting rigorous interdisciplinary research. The ample problems and tutorials throughout are much appreciated." Tobin R. Sosnick, Professor and Chair, Dept of Biochemistry and Molecular Biology, University of Chicago

Douglas E. Barrick is a professor in the Department of Biophysics at Johns Hopkins University. He earned a Ph.D. in biochemistry from Stanford University (1993) and Ph.D. in biophysics and structural biology from the University of Oregon (1996). He has been honored as recipient of the Beckman Young Investigator award, the Helen Hay Whitney Postdoctoral fellowship, and Howard Hughes Medical Institute Predoctoral Fellowship. He has been an editorial board member of the journals Protein Science and Biophysical Journal, and has been an organizer of the Gibbs Conference on Biothermodynamics. Research in his lab focuses on the study of protein evolution, folding, and assembly.

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

Biomolecular Thermodynamics: From Theory to Application (Foundations of Biochemistry and Biophysics) 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) Ace Biochemistry!: The EASY Guide to Ace Biochemistry: (Biochemistry Study Guide, Biochemistry Review) Biomolecular Crystallography: Principles, Practice, and Application to Structural Biology Nonequilibrium Thermodynamics in Biophysics Entropy-Driven Processes in Biology: Polymerization of Tobacco Mosaic Virus Protein and Similar Reactions (Molecular Biology, Biochemistry and Biophysics Molekularbiologie, Biochemie und Biophysik) Thermodynamics, Kinetic Theory, and Statistical Thermodynamics (3rd Edition) Model of Human Occupation: Theory and Application (Model of Human Occupation: Theory & Application) Thermodynamics, Statistical Thermodynamics, & Kinetics (3rd Edition) Mathematical Approaches to Biomolecular Structure and Dynamics (The IMA Volumes in Mathematics and its Applications) From Neural Networks and Biomolecular Engineering to Bioelectronics (Electronics and Biotechnology Advanced (Elba) Forum Series) Therapeutic Oligonucleotides: RSC (RSC Biomolecular Sciences) Marks' Basic Medical Biochemistry (Lieberman, Marks's Basic Medical Biochemistry) Biochemistry (BIOCHEMISTRY (VOET)) Medical Biochemistry: With STUDENT CONSULT Online Access, 3e (Medial Biochemistry)

Transcultural Nursing Theory and Models: Application in Nursing Education, Practice, and Administration (Sager, Transcultural Nursing Theory and Models) Fretboard Theory: Complete Guitar Theory Including Scales, Chords, Progressions, Modes, Song Application and More. Library of Congress Subject Headings: Principles and Application, 4th Edition (Library of Congress Subject Headings: Principles & Application (Pape) Pesticide Application Log (Logbook, Journal - 96 pages, 5 x 8 inches): Pesticide Application Logbook (Deep Wine Cover, Small) (Unique Logbook/Record Books)

[Contact Us](#)

[DMCA](#)

[Privacy](#)

[FAQ & Help](#)