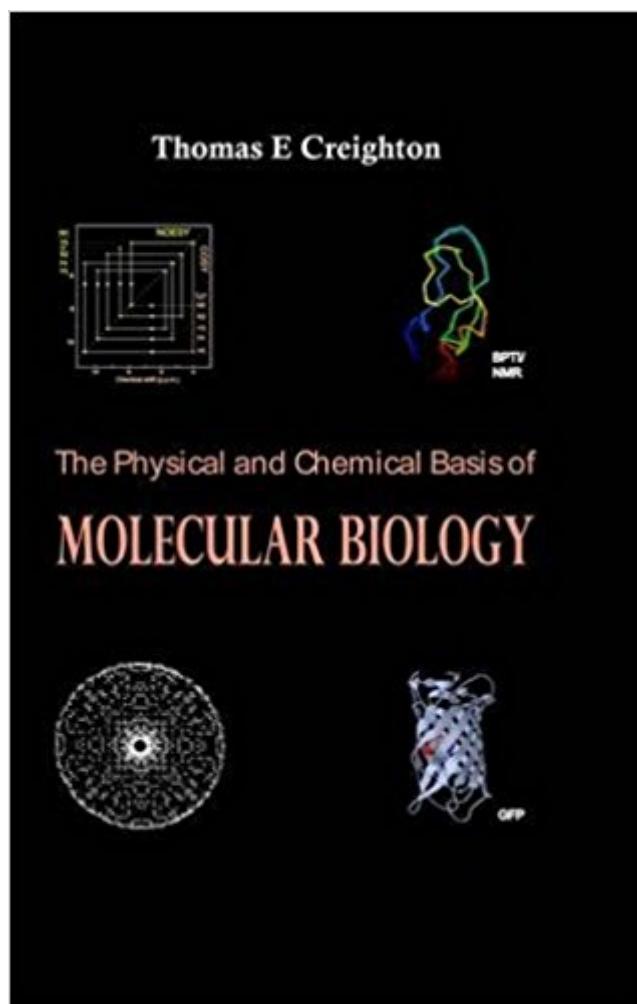


The book was found

# The Physical And Chemical Basis Of Molecular Biology



## Synopsis

The twenty-one chapters of this volume present a comprehensive description of the fundamental physical and chemical phenomena that form the basis of molecular biology. The topics include the fundamental thermodynamic and kinetic properties of biochemical reactions in solution; the physical properties of aqueous solutions, including the hydrophobic effect; both individual and cooperative noncovalent interactions between atoms and molecules; mass spectrometry; and radioactivity. Methods for observing the structures of nucleic acids and proteins, including microscopy, scanning probes, crystallography and NMR, are explained in detail. The interactions of macromolecules with radiation of various types are described in terms of the information that they yield. The hydrodynamic properties of proteins and nucleic acids in aqueous solution and in molecular sieves are described to explain centrifugation and electrophoresis. The interactions of macromolecules with other molecules in solution and when attached to solid supports are described, explaining chromatography, blotting, affinity labeling, and cross-linking.

## Book Information

Paperback: 688 pages

Publisher: Helvetian Press (June 10, 2010)

Language: English

ISBN-10: 0956478107

ISBN-13: 978-0956478108

Product Dimensions: 8.2 x 1.4 x 11 inches

Shipping Weight: 4.1 pounds (View shipping rates and policies)

Average Customer Review: Be the first to review this item

Best Sellers Rank: #970,076 in Books (See Top 100 in Books) #83 in Books > Science & Math > Chemistry > Crystallography #214 in Books > Science & Math > Biological Sciences > Biophysics #254 in Books > Computers & Technology > Computer Science > Bioinformatics

## Customer Reviews

Thomas E. Creighton is retired, after a career in academia at Caltech, Stanford and Yale Universities, the MRC Laboratory of Molecular Biology at Cambridge, England, and the European Molecular Biology Laboratory at Heidelberg, Germany. He is the author of two editions of Proteins: Structures and Molecular Properties published by W. H. Freeman and has edited the four-volume Encyclopedia of Molecular Biology and the five-volume Encyclopedia of Molecular Medicine for Wiley-Interscience, two editions of Protein Structure: A Practical Approach and Protein Function: A

Practical Approach for IRL Press at Oxford University Press, and the volume Protein Folding for W. H. Freeman.

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

The Physical and Chemical Basis of Molecular Biology Molecular Biology (WCB Cell & Molecular Biology) Current Topics in Computational Molecular Biology (Computational Molecular Biology) *Histophilus somni: Biology, Molecular Basis of Pathogenesis, and Host Immunity* (Current Topics in Microbiology and Immunology) Pathophysiology - E-Book: The Biologic Basis for Disease in Adults and Children (Pathophysiology the Biologic Basis) SPECIFICATIONS OF INTRODUCTION TO PHARMACOKINETICS AND PHARMACODYNAMICS: THE QUANTITATIVE BASIS OF DRUG THERAPY : THE QUANTITATIVE BASIS OF DRUG THERAPY 1ST EDITION (PAPERBACK) Bacteriophages: Methods and Protocols, Volume 2: Molecular and Applied Aspects (Methods in Molecular Biology) Basic Principles and Calculations in Chemical Engineering (8th Edition) (Prentice Hall International Series in the Physical and Chemical Engineering Sciences) Fundamental Concepts and Computations in Chemical Engineering (Prentice Hall International Series in the Physical and Chemical Engineering Sciences) Analysis, Synthesis and Design of Chemical Processes (4th Edition) (Prentice Hall International Series in the Physical and Chemical Engineering Sciences) Fundamentals of Chemical Engineering Thermodynamics (Prentice Hall International Series in the Physical and Chemical Engineering Sciences) Elements of Chemical Reaction Engineering (5th Edition) (Prentice Hall International Series in the Physical and Chemical Engineering Sciences) Essentials of Chemical Reaction Engineering (Prentice Hall International Series in Physical and Chemical Engineering) Chemical Process Safety: Fundamentals with Applications (3rd Edition) (Prentice Hall International Series in the Physical and Chemical Engineering Sciences) Entropy-Driven Processes in Biology: Polymerization of Tobacco Mosaic Virus Protein and Similar Reactions (Molecular Biology, Biochemistry and Biophysics Molekularbiologie, Biochemie und Biophysik) Biochemistry: The Molecular Basis of Life Biochemistry: The Molecular Basis of Life Updated Fifth Edition The Molecular Basis of Cancer, 4e Molecular Basis of Neuropharmacology: A Foundation for Clinical Neuroscience Mechanistic Toxicology: The Molecular Basis of How Chemicals Disrupt Biological Targets, Second Edition

[Contact Us](#)

[DMCA](#)

[Privacy](#)

FAQ & Help