

Essentials Of Molecular Biology By David Freifelder

This book is an accessible resource offering practical information not found in more database-oriented resources. The first chapter lists acronyms with definitions, and a glossary of terms and subjects used in biochemistry, molecular biology, biotechnology, proteomics, genomics, and systems biology. There follows chapters on chemicals employed in biochemistry and molecular biology, complete with properties and structure drawings. Researchers will find this book to be a valuable tool that will save them time, as well as provide essential links to the roots of their science. Key selling features: Contains an extensive list of commonly used acronyms with definitions Offers a highly readable glossary for systems and techniques Provides comprehensive information for the validation of biotechnology assays and manufacturing processes Includes a list of Log P values, water solubility, and molecular weight for selected chemicals Gives a detailed listing of protease

inhibitors and cocktails, as well as a list of buffers

Molecular Biology provides an introduction to the concepts of molecular biology in strict adherence to the UGC curriculum for undergraduate students of biochemistry, microbiology, biotechnology, bioinformatics, botany and zoology offered by all Indian universities. Replete with vivid illustrations, the book probes the recent developments in epigenetics, drug discovery, genomics proteomics, prions and oncology. Exhaustive coverage of the fundamentals of molecular biology as well as comprehensive review questions and multiple-choice questions make this book a perfect text for classroom.

This authoritative book gathers together a broad range of ideas and topics that define the field. It provides clear, concise, and comprehensive coverage of all aspects of cellular physiology from fundamental concepts to more advanced topics. The Third Edition contains substantial new material. Most chapters have been thoroughly reworked. The book includes chapters on important topics such as sensory

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transduction, the physiology of protozoa and bacteria, the regulation of cell division, and programmed cell death. Completely revised and updated - includes 8 new chapters on such topics as membrane structure, intracellular chloride regulation, transport, sensory receptors, pressure, and olfactory/taste receptors Includes broad coverage of both animal and plant cells Appendixes review basics of the propagation of action potentials, electricity, and cable properties Authored by leading experts in the field Clear, concise, comprehensive coverage of all aspects of cellular physiology from fundamental concepts to more advanced topics
The New Molecular and Medical Genetics

Working with DNA and RNA

Student Study Guide to Accompany Essentials of Molecular Biology

Handbook of Epigenetics

Provides an overview of the rapidly evolving field of genomics with coverage of nucleic acid technologies, proteomics and bioinformatics. It includes chapters on

applications in human health, agriculture and comparative genomics and also contains two chapters on the legal and ethical issues of genomics, a topic that is becoming increasingly important as genomics moves out of the laboratory into practical applications.

Perfect for a single term on Molecular Biology and more accessible to beginning students in the field than its encyclopedic counterparts, *Fundamental Molecular Biology* provides a distillation of the essential concepts of molecular biology, and is supported by current examples, experimental evidence, an outstanding art program, multimedia support and a solid pedagogical framework. The text has been praised both for its balanced and solid coverage of traditional topics, and for its broad coverage of RNA structure and function, epigenetics and medical molecular biology.

Expert biochemist N.V. Bhagavan's new work condenses his successful *Medical Biochemistry* texts along with numerous case studies, to act as an extensive review and reference guide for both students and experts alike. The research-driven content includes four-color illustrations throughout to develop an understanding of the events and processes that are occurring at both the molecular and macromolecular levels of physiologic regulation, clinical effects, and interactions. Using thorough introductions, end of chapter reviews, fact-filled

tables, and related multiple-choice questions, Bhagavan provides the reader with the most condensed yet detailed biochemistry overview available. More than a quick survey, this comprehensive text includes USMLE sample exams from Bhagavan himself, a previous coauthor. * Clinical focus emphasizing relevant physiologic and pathophysiologic biochemical concepts * Interactive multiple-choice questions to prep for USMLE exams * Clinical case studies for understanding basic science, diagnosis, and treatment of human diseases * Instructional overview figures, flowcharts, and tables to enhance understanding

Essentials of Molecular Biology #b David Freifelder

A Robust Approach

A User-friendly Guide for Learning Molecular Biology

Essentials of Molecular Genetics

With Applications to the Biological and Chemical Sciences

Sugar chains (glycans) are often attached to proteins and lipids and have multiple roles in the organization and function of all organisms. "Essentials of Glycobiology" describes their biogenesis and function and offers a useful gateway to the understanding of glycans.

This introductory reference provides a practical, concise summary of everything a physician needs to know about genomics and emerging

technologies. Through extensive illustrative examples, this book offers a clear and concise starting point to understanding how medicine has been, and will be, transformed by genomics and bioinformatics. Beginning with a clear overview on the Human Genome Project and its revolutionary impact, the book further investigates new technologies in detail, including: high-throughput DNA sequencing, genome sequence databases, microarrays, proteomics, pharmacogenomics, genetic testing, and gene therapy. This textbook, Essentials of Biochemistry is aimed at chemistry and biochemistry undergraduate students and first year biochemistry graduate students. It incorporates the lectures of the authors given to students with a strong chemistry background. An emphasis is placed on metabolism and reaction mechanisms and how they are studied. As the title of the book implies, the text lays the basis for an understanding of the fundamentals of biochemistry.

Structure and Dynamics of Biological Macromolecules

Essentials of Glycobiology

Fundamental Molecular Biology, 2nd Edition

A Practical Lab Manual

Essentials of Genomic and Personalized Medicine

Essentials of Molecular Biology Jones & Bartlett Learning

For all introductory genetics courses A forward-looking exploration of essential genetics topics Known for its focus on conceptual understanding, problem solving, and practical applications, this bestseller strengthens problem-solving skills and explores the essential genetics topics that today's students need to understand. The 9th Edition maintains the text's brief, less-detailed coverage of core concepts and has been extensively updated with relevant, cutting-edge coverage of emerging topics in genetics. The full text downloaded to your computer With eBooks you can: search for key concepts, words and phrases make highlights and notes as you study share your notes with friends eBooks are downloaded to your computer and accessible either offline through the Bookshelf (available as a free download), available online and also via the iPad and Android apps. Upon purchase, you will receive via email the code and instructions on how to access this product. Time limit The eBooks products do not have an expiry date. You will continue to access your digital ebook products whilst you have your Bookshelf installed. Essential Cell Biology provides a readily accessible introduction to the central concepts of cell biology, and its

lively, clear writing and exceptional illustrations make it the ideal textbook for a first course in both cell and molecular biology. The text and figures are easy-to-follow, accurate, clear, and engaging for the introductory student. Molecular detail has been kept to a minimum in order to provide the reader with a cohesive conceptual framework for the basic science that underlies our current understanding of all of biology, including the biomedical sciences. The Fourth Edition has been thoroughly revised, and covers the latest developments in this fast-moving field, yet retains the academic level and length of the previous edition. The book is accompanied by a rich package of online student and instructor resources, including over 130 narrated movies, an expanded and updated Question Bank. Essential Cell Biology, Fourth Edition is additionally supported by the Garland Science Learning System. This homework platform is designed to evaluate and improve student performance and allows instructors to select assignments on specific topics and review the performance of the entire class, as well as individual students, via the instructor dashboard. Students receive immediate feedback on their mastery of the topics, and will be better

prepared for lectures and classroom discussions. The user-friendly system provides a convenient way to engage students while assessing progress. Performance data can be used to tailor classroom discussion, activities, and lectures to address students' needs precisely and efficiently. For more information and sample material, visit <http://garlandscience.rocketmix.com/>.

Essential Cell Biology

Essentials of Genomics and Bioinformatics

**Student Manual to Accompany Essentials of Molecular Biology,
Second Edition**

**Lashley's Essentials of Clinical Genetics in Nursing Practice,
Second Edition**

Essentials of Genetics, Loose-Leaf Edition

Essentials of Molecular Biology, Fourth Edition focuses on the fundamental aspects of molecular structure and function by reviewing key features and along the way, capsulizing them as a series of concise concepts. Thus, students are encouraged to place the reductionist knowledge of molecular biology into broad contexts and thereby develop both academic and personal meaning for this discipline.

An indispensable handbook of the highest standard for those working in the fields of food analysis and forensic applications.

Focuses on the fundamental aspects of molecular structure and function by reviewing key

features, and along the way, capsulizing them as a series of concise concepts. Users are encouraged to place the essential knowledge of molecular biology into broad contexts and develop both academic and personal meaning for this discipline.

Essentials of Medical Biochemistry

Molecular Biology

Handbook of Biochemistry

Section D Physical Chemical Data

Essentials of Chemical Biology

NOTE: This loose-leaf, three-hole punched version of the textbook gives students the flexibility to take only what they need to class and add their own notes - all at an affordable price. For all introductory genetics courses. Focus on essential genetic topics and explore the latest breakthroughs Known for its focus on conceptual understanding, problem solving, and practical applications, the bestselling *Essentials of Genetics* strengthens problem-solving skills and explores the essential genetics concepts that today's students need to understand. The 10th Edition has been extensively updated to provide comprehensive coverage of important, emerging topics such as CRISPR-Cas, epigenetics, and genetic testing. Additionally, a new Special Topic chapter covers Advances in Neurogenetics with a focus on Huntington Disease, and new essays on Genetics, Ethics, and Society emphasize ethical considerations that genetics is bringing into everyday life. The accompanying Mastering Genetics online platform includes new tutorials on topics such as CRISPR-Cas and epigenetics, and new Dynamic Study Modules, which support student learning of key concepts and prepare them for class. Also available is Mastering Genetics: By combining trusted author content with digital tools and a flexible platform, Mastering personalizes the learning experience and improves results for each student. Mastering

Genetics allows students to develop problem-solving skills, learn from tutorials on key genetic concepts, and gain a better understanding of emerging topics. NOTE: You are purchasing a stand-alone product; Mastering(tm) does not come packaged with this content. Students, if interested in purchasing this title with Mastering Genetics, ask your instructor to confirm the correct package ISBN and Course ID. Instructors, contact your Pearson representative for more information. If you would like to purchase both the loose-leaf version of the text and Mastering Genetics, search for: 0135271665 / 9780135271667 Essentials of Genetics, Loose-Leaf Edition Plus Mastering Genetics with Pearson eText -- Access Card Package, 10/e Package consists of: 0135209889 / 9780135209882 Essentials of Genetics, Loose-Leaf Edition 0135188687 / 9780135188682 Mastering Genetics with Pearson eText -- ValuePack Access Card -- for Essentials of Genetics

Derived from the comprehensive two-volume set, Genomic and Personalized Medicine also edited by Drs. Willard and Ginsburg, this work serves the needs of the evolving population of scientists, researchers, practitioners and students that are embracing one of the most promising avenues for advances in diagnosis, prevention and treatment of human disease. From principles, methodological and translational approaches to genome discoveries and clinical applications, Essentials of Genomic and Personalized Medicine will be a valuable resource for various professionals and students across a wide range of medical disciplines, including human genetics and genomics, oncology, neuroscience, gene therapy, molecular medicine, pharmacology, and biomedical sciences. Updates with regard to diagnostic and therapeutic pharmacogenetics, predicting disease susceptibility, and other important research components are included as chapters dedicated to cardiovascular disease, oncology, inflammatory disease, metabolic disease, neuropsychiatric disease, and infectious disease, present this book as an essential tool for a wide range of professionals and students who are endeavouring into the developing the diverse and practical

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genomic and personalized medicine. * Full color throughout * Includes contributions on genetic counselling, ethical, legal/regulatory, and social issues related to the practice of genomic medicine by leaders in the field * Introductory chapter highlights differences between personalized and traditional medicine, promising areas of current research, and challenges to incorporate the latest research discoveries and practice * Ancillary material includes case studies and lab questions which highlight the collaborative approach to the science

Molecular Biology, Second Edition, examines the basic concepts of molecular biology while incorporating primary literature from today's leading researchers. This updated edition includes Focuses on Relevant Research sections that integrate primary literature from Cell Press and help the student learn how to read and understand research to prepare them for the scientific world. The new Academic Cell Study Guide features all the articles from the text with concurrent case studies to help students build foundations in the content while allowing them to make the appropriate connections to the text. Animations provided deal with topics such as protein purification, transcription splicing reactions, cell division and DNA replication and SDS-PAGE. The text also includes updated chapters on Genomics and Systems Biology, Proteomics, Bacterial Genetics and Molecular Evolution and RNA. An updated ancillary package includes flashcards, online self quizzing, references with links to outside content and PowerPoint slides with images. This text is designed for undergraduate students taking a course in Molecular Biology and upper-level students studying Cell Biology, Microbiology, Genetics, Biology, Pharmacology, Biotechnology, Biochemistry, and Agriculture. NEW: "Focus On Relevant Research" sections integrate primary literature from Cell Press and focus on helping the student learn how to read and understand research to prepare them for the scientific world. Academic Cell Study Guide features all articles from the text with concurrent case studies to

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students build foundations in the content while allowing them to make the appropriate connections to the text. NEW: Animations provided include topics in protein purification, transcription, splicing regulation, cell division and DNA replication and SDS-PAGE Updated chapters on Genomics and Systems Biology, Proteomics, Bacterial Genetics and Molecular Evolution and RNA Updated ancillary package including flashcards, online self quizzing, references with links to outside content and PowerPoint slides and images. Fully revised art program

Essentials of Cell and Molecular Biology

Biology Essentials For Dummies

Cell Physiology Source Book

An Introduction to Molecular Biology

Essentials of Medical Genomics

“This excellent work fills the need for an upper-level graduate course resource that examines the latest biochemical, biophysical, and molecular biological methods for analyzing the structures and physical properties of biomolecules... This reviewer showed [the book] to several of his senior graduate students, and they unanimously gave the book rave reviews. Summing Up: Highly recommended...”

CHOICE Chemical biology is a rapidly developing branch of chemistry, which sets out to understand the way biology works at the molecular level. Fundamental to chemical biology is a detailed understanding of the syntheses, structures and behaviours of biological macromolecules and macromolecular lipid assemblies that together represent the primary constituents of all cells and all organisms. The subject area of chemical biology bridges many different disciplines and is fast

becoming an integral part of academic and commercial research. This textbook is designed specifically as a key teaching resource for chemical biology that is intended to build on foundations laid down by introductory physical and organic chemistry courses. This book is an invaluable text for advanced undergraduates taking biological, bioorganic, organic and structural chemistry courses. It is also of interest to biochemists and molecular biologists, as well as professionals within the medical and pharmaceutical industry. Key Features: A comprehensive introduction to this dynamic area of chemistry, which will equip chemists for the task of understanding and studying the underlying principles behind the functioning of biological macro molecules, macromolecular lipid assemblies and cells. Covers many basic concepts and ideas associated with the study of the interface between chemistry and biology. Includes pedagogical features such as: key examples, glossary of equations, further reading and links to websites. Clearly written and richly illustrated in full colour.

Handbook of Epigenetics: The New Molecular and Medical Genetics, Second Edition, provides a comprehensive analysis of epigenetics, from basic biology, to clinical application. Epigenetics is considered by many to be the new genetics in that many biological phenomena are controlled, not through gene mutations, but rather through reversible and heritable epigenetic processes. These epigenetic processes range from DNA methylation to prions. The biological processes impacted by epigenetics are vast and encompass effects in lower organisms and humans that include tissue and organ regeneration, X-chromosome inactivation,

stem cell differentiation, genomic imprinting, and aging. The first edition of this important work received excellent reviews; the second edition continues its comprehensive coverage adding more current research and new topics based on customer and reader reviews, including new discoveries, approved therapeutics, and clinical trials. From molecular mechanisms and epigenetic technology, to discoveries in human disease and clinical epigenetics, the nature and applications of the science is presented for those with interests ranging from the fundamental basis of epigenetics, to therapeutic interventions for epigenetic-based disorders. Timely and comprehensive collection of fully up-to-date reviews on epigenetics that are organized into one volume and written by leading figures in the field Covers the latest advances in many different areas of epigenetics, ranging from basic aspects, to technologies, to clinical medicine Written at a verbal and technical level that can be understood by scientists and college students Updated to include new epigenetic discoveries, newly approved therapeutics, and clinical trials

Advanced Methods in Molecular Biology and Biotechnology: A Practical Lab Manual is a concise reference on common protocols and techniques for advanced molecular biology and biotechnology experimentation. Each chapter focuses on a different method, providing an overview before delving deeper into the procedure in a step-by-step approach. Techniques covered include genomic DNA extraction using cetyl trimethylammonium bromide (CTAB) and chloroform extraction, chromatographic techniques, ELISA, hybridization, gel electrophoresis, dot blot

analysis and methods for studying polymerase chain reactions. Laboratory protocols and standard operating procedures for key equipment are also discussed, providing an instructive overview for lab work. This practical guide focuses on the latest advances and innovations in methods for molecular biology and biotechnology investigation, helping researchers and practitioners enhance and advance their own methodologies and take their work to the next level. Explores a wide range of advanced methods that can be applied by researchers in molecular biology and biotechnology Features clear, step-by-step instruction for applying the techniques covered Offers an introduction to laboratory protocols and recommendations for best practice when conducting experimental work, including standard operating procedures for key equipment

Introduction to Molecular Biology

Essentials of Membrane Biophysics

Freifelder's Essentials of Molecular Biology

Advanced Methods in Molecular Biology and Biotechnology

A Practical Approach

Written by Pamela Hanratty and Geroge M. Malacinski, The accompanying student study guide is designed to emphasize student understanding of the topics they will encounter in the main textbook. The manual includes reviews of key concepts, exercises, concepts maps, review questions,

problem-solving guides, research resources, and additional learning tools.

V.1- Proteins; v.2.B. Nucleic acids; v.2c- Lipids, carbohydrates, steroids.

This book introduces students to the basic physical principles to analyze fluid flow in micro and nano-size devices. This is the first book that unifies the thermal sciences with electrostatics and electrokinetics and colloid science; electrochemistry; and molecular biology. The author discusses key concepts and principles, such as the essentials of viscous flows, an introduction to electrochemistry, heat and mass transfer phenomena, elements of molecular and cell biology, and much more. This textbook presents state-of-the-art analytical and computational approaches to problems in all of these areas, especially electrokinetic flows, and gives examples of the use of these disciplines to design devices used for rapid molecular analysis, biochemical sensing, drug delivery, DNA analysis, the design of an artificial kidney, and other transport

phenomena. This textbook includes exercise problems, modern examples of the applications of these sciences, and a solutions manual available to qualified instructors.

Essentials of Micro- and Nanofluidics

Essentials of Nucleic Acid Analysis

With Clinical Cases

Essentials of Stem Cell Biology

Biochemistry and Molecular Biology Compendium

First developed as an accessible abridgement of the successful Handbook of Stem Cells, Essentials of Stem Cell Biology serves the needs of the evolving population of scientists, researchers, practitioners and students that are embracing the latest advances in stem cells. Representing the combined effort of seven editors and more than 200 scholars and scientists whose pioneering work has defined our understanding of stem cells, this book combines the prerequisites for a general understanding of adult and embryonic stem cells with a presentation by the world's experts of the latest research information about specific organ systems. From basic biology/mechanisms, early development, ectoderm, mesoderm, endoderm, methods to application of stem cells to specific human diseases, regulation and ethics, and patient perspectives, no topic in the field of stem cells is left uncovered. Selected for

inclusion in Doody's Core Titles 2013, an essential collection development tool for health sciences libraries Contributions by Nobel Laureates and leading international investigators Includes two entirely new chapters devoted exclusively to induced pluripotent stem (iPS) cells written by the scientists who made the breakthrough Edited by a world-renowned author and researcher to present a complete story of stem cells in research, in application, and as the subject of political debate Presented in full color with glossary, highlighted terms, and bibliographic entries replacing references

Just the core concepts you need to score high in your biology course **Biology Essentials For Dummies** focuses on just the core concepts you need to succeed in an introductory biology course. From identifying the structures and functions of plants and animals to grasping the crucial discoveries in evolutionary, reproductive, and ecological biology, this easy-to-follow guide lets you skip the suffering and score high at exam time. Get down to basics — master the fundamentals, from understanding what biologists study to how living things are classified The chemistry of life — find out what you need to know about atoms, elements, molecules, compounds, acids, bases, and more Conquer and divide — discover the ins and outs of asexual and sexual reproduction, including cell division and DNA replication Jump into the gene pool — grasp how proteins make traits happen, and easily understand DNA transcription, RNA processing, translation, and gene regulation Open the book and find: An

overview of cells and their substructures Elementary chemistry The key facts about reproduction and DNA The 411 on energy and organisms What you need to know about evolution Coverage of ecosystems and populations Ten great biology discoveries Learn: Core concepts taught in an introductory biology course The structures and functions of plants and animals The key discoveries in evolutionary, reproductive, and ecological biology

Molecular biology studies biological activities that occur on a molecular level in a cell. Proteins, DNA and RNA are the primary molecules studied under this field. The interactions along with biosynthesis are closely evaluated in molecular biology. While understanding the long-term perspectives of the topics, the book makes an effort in highlighting their impact as a modern tool for the growth of the discipline. Those in search of information to further their knowledge will be greatly assisted by this book. Student Manual to Accompany Essentials of Molecular Biology Third Edition Essentials of Genetics, eBook, Global Edition

Essentials of Molecular Biology

Essentials of Biochemistry

Essential Molecular Biology

Completely updated to help nurses learn to think genetically Today's nurses must be able to think genetically to help individuals and families who are affected by genetic disease or contemplating genetic testing. This book is a classic resource for nursing

students and practitioners at all levels who need to acquire the knowledge and skills for using genomics in their practice. This completely updated second edition encompasses the many recent advances in genetic research and knowledge, providing essential new information on the science, technology, and clinical application of genomics. It focuses on the provision of individualized patient care based on personal genetics and dispositions. The second edition is designed for use by advanced practice nursing programs, as well as undergraduate programs. It pinpoints new developments in prenatal, maternity, and pediatric issues and supplies new information on genomics-based personal drug therapy, environmental susceptibilities, genetic therapies, epigenetics, and ethics. The text features a practical, clinically oriented framework in line with the core competencies defined by the AACN. It delivers information according to a lifespan approach used in the practice setting. The second edition continues to provide basic information on genomics, its impact on healthcare, and genetic disorders. It covers prevention, genetic counseling and referral, neuropsychiatric nursing, and public health. The core of the text presents information on a variety of diseases that affect patients throughout the lifespan, with specific guidance on the nursing role. Also included are tests for a variety of diseases and information on pharmacogenomics, which enable health care providers to select the best drugs for treatment based on a patient's genetic makeup. Plentiful case study examples support the information throughout. Additionally, an instructor's package of PowerPoint slides and a test bank

are provided for use at both the graduate and undergraduate levels. New to the Second Edition: Completely updated with several new chapters Personal drug therapy based on genomics Environmental susceptibilities Prenatal detection and diagnosis Newborn and genetic screening Reproductive technologies Ethical issues Genetic therapies Epigenetics Content for graduate-level programs PowerPoint slides and a test bank for all student levels Key Features: Encompasses state-of-the-art genomics from a nursing perspective Provides a practical, clinically oriented lifespan approach Covers science, technology, and clinical application of genomics Addresses prevention, genetic testing, and treatment methods Written for undergraduate- and graduate-level nursing students Oksana Ableitner offers a practical, clearly structured and easy to understand introduction to complicated definitions and structures in chemistry and molecular biology for work in the molecular biology laboratory. The author is guided by her experience in working with students and uses many illustrations to visualize abstract knowledge. An understanding of this matter is an essential basis for successful work with DNA and RNA in order to ensure high quality results. For responsible activities in application - such as genetic research or the determination of various pathogens - it is essential to be confident in dealing with the basics of these sensitive, fast and specific analytical methods. This Springer essential is a translation of the original German 2nd edition essentials, Einführung in die Molekularbiologie by Oksana Ableitner, published by Springer Fachmedien Wiesbaden GmbH, part of Springer Nature in 2018. The

translation was done with the help of artificial intelligence (machine translation by the service DeepL.com). A subsequent human revision was done primarily in terms of content, so that the book will read stylistically differently from a conventional translation. Springer Nature works continuously to further the development of tools for the production of books and on the related technologies to support the authors. The content Basic concepts of molecular biology Molecular biological methods such as PCR, real-time PCR, gel electrophoresis, sequencing, MLST, microarray technology and PFGE Chemical calculation in the laboratory The target groups Students of biology, chemistry and medicine Medical and chemical-technical assistants, biomedical analysts The Author After studying chemistry and biology, Oksana Ableitner first worked as a teacher in a Ukrainian school. After further training as a chemical engineer in Graz, she has worked for many years in the Core Unit Molecular Biology at a laboratory in Graz and is responsible for the implementation and optimisation of various molecular biological processes. This book is a translation of an original German edition. The translation was done with the help of artificial intelligence (machine translation by the service DeepL.com). A subsequent human revision was done primarily in terms of content, so that the book will read stylistically differently from a conventional translation. A text for a short first course in molecular biology. Treatment takes a layering approach, where complexity is developed chapter by chapter rather than presented all at once. Includes chapter summaries, drill questions, problems, and conceptual questions, plus

simple two- color diagrams. This third edition retains brevity of presentation and emphasis on fundamentals, and adds improved prose, updated material, margin terms, and key concepts. Material is reorganized in this edition in four sections on the structure of proteins, nucleic acids, and macromolecules; functions of macromolecules; coordination of macromolecular function in cells; and experimental manipulation of macromolecules. Annotation copyrighted by Book News, Inc., Portland, OR