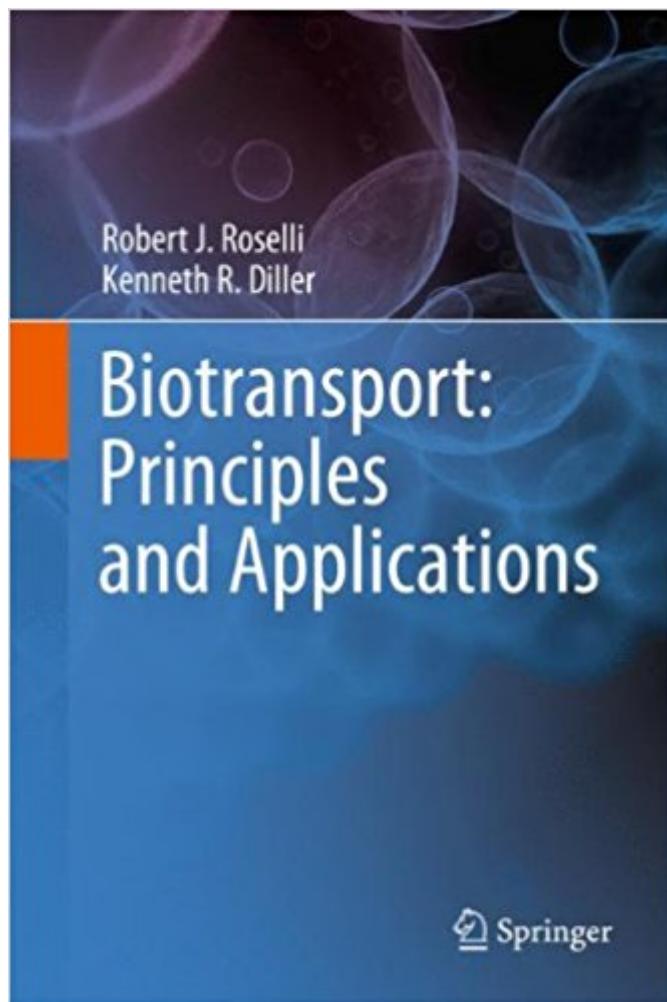


The book was found

Biotransport: Principles And Applications



Synopsis

Introduction to Biotransport Principles is a concise text covering the fundamentals of biotransport, including biological applications of: fluid, heat, and mass transport.

Book Information

Hardcover: 1286 pages

Publisher: Springer; 2011 edition (June 3, 2011)

Language: English

ISBN-10: 1441981187

ISBN-13: 978-1441981189

Product Dimensions: 9.4 x 6.4 x 2.2 inches

Shipping Weight: 5.1 pounds (View shipping rates and policies)

Average Customer Review: 3.5 out of 5 stars 3 customer reviews

Best Sellers Rank: #79,383 in Books (See Top 100 in Books) #12 in Books > Science & Math > Biological Sciences > Biophysics #22 in Books > Engineering & Transportation > Engineering > Bioengineering > Biomedical Engineering #29 in Books > Textbooks > Medicine & Health Sciences > Medicine > Basic Sciences > Biochemistry

Customer Reviews

Biotransport: Principles and Applications is written primarily for biomedical engineering and bioengineering students at the introductory level, but should prove useful for anyone interested in quantitative analysis of transport in living systems. It is important that bioengineering students be exposed to the principles and subtleties of transport phenomena within the context of problems that arise in living systems. These tend to have constitutive properties, compositions, and geometries that are quite distinct from those of typical inanimate systems. The book derives its genesis from a novel Engineering Research Center (ERC) in Bioengineering Educational Technologies sponsored by the National Science Foundation. This ERC was a multi-institutional consortium among Vanderbilt, Northwestern, Texas and Harvard/MIT Universities (VaNTH) based on collaboration among bioengineers, learning scientists and learning technologists. An objective was to develop state-of-the-art learning materials for students in bioengineering. This text is an outgrowth of the VaNTH ERC and was designed with dual objectives: to provide a coherent and concise pedagogical exposition of biotransport that includes the domains of fluid, heat and mass flows, and to present a guide for teaching and studying in the "How People Learn" (HPL) framework, with appropriate supporting materials for students and

teachers. There is no other text that meets the latter objective. The text is designed for use in either a traditional didactic course or in an active learning environment in which a course is organized around a series of open ended challenge problems. The main portion of the text presents enduring concepts and analogies that form the foundations of biotransport. Sections on biofluid, bioheat and biomass transport are further subdivided into chapters that progressively cover principles and applications of biotransport fundamentals, macroscopic biotransport, 1-D steady and unsteady state transport, and general multidimensional microscopic transport.

Biotransport: Principles and Applications should serve as a clear and effective resource for students to learn the basic components of biotransport, so that class time can be freed to allow student-faculty interactions which focus on development of skills in adaptive thinking and solving open ended problems. The text provides numerous example problems with detailed numerical solutions to help students learn effectively during self study. Intermediate steps in derivations are included to make it easier for students to follow. The text includes extensive examples of various learning challenges that have been written by the authors for use in their own biotransport courses. Chapter summaries, review questions and over 230 problems are included at the end of chapters.

Kenneth R. Diller, Sc.D., P.E., is the Leibrock Professor of Engineering, Department of Biomedical Engineering, at The University of Texas at Austin. Robert J. Roselli, Ph.D., is Emeritus Professor of Biomedical and Chemical Engineering at Vanderbilt University.

as promised

Required for the class. Would have preferred having it taller and wider rather than fat so that it would fit into my backpack better.

The kindle version of this textbook is terrible. No page numbers to scroll through. No table of contents. The appendices are difficult to read due to formatting. I bought this because I find kindle versions on my iPad useful, but not this. Not a good buy.

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

Biotransport: Principles and Applications Nutritional Foundations and Clinical Applications: A Nursing Approach, 5e (Foundations and Clinical Applications of Nutrition) Transportation Systems Analysis: Models and Applications (Springer Optimization and Its Applications) 3D Reconstruction:

Methods, Applications and Challenges (Computer Science, Technology and Applications) Structural Analysis: With Applications to Aerospace Structures (Solid Mechanics and Its Applications) Encapsulation Technologies for Electronic Applications (Materials and Processes for Electronic Applications) Price Theory and Applications (with Economic Applications, InfoTrac 2-Semester Printed Access Card) Price Theory and Applications (with Economic Applications) Structural Equation Modeling with Mplus: Basic Concepts, Applications, and Programming (Multivariate Applications Series) Laboratory Applications in Microbiology: A Case Study Approach: Laboratory Applications in Microbiology: A Case Study Approach Intermediate Algebra: Concepts & Applications (9th Edition) (Bittinger Concepts & Applications) Glencoe Keyboarding with Computer Applications, Microsoft Office 2007, Applications 1-150, Student Manual (JOHNSON: GREGG MICRO KEYBOARD) Membrane Bioreactor Processes: Principles and Applications (Advances in Water and Wastewater Transport and Treatment) Introduction to Probability and Statistics: Principles and Applications for Engineering and the Computing Sciences Freezing Colloids: Observations, Principles, Control, and Use: Applications in Materials Science, Life Science, Earth Science, Food Science, and Engineering (Engineering Materials and Processes) The Principles of Harmony and Contrast of Colors: And Their Applications to the Arts Corporate Finance: Core Principles and Applications (McGraw-Hill/Irwin Series in Finance, Insurance, and Real Est) X-Rays and Extreme Ultraviolet Radiation: Principles and Applications Principles and Applications of Organic Light Emitting Diodes (OLEDs) (Woodhead Publishing Series in Electronic and Optical Materials) Sliding Friction: Physical Principles and Applications (NanoScience and Technology)

[Contact Us](#)

[DMCA](#)

[Privacy](#)

[FAQ & Help](#)