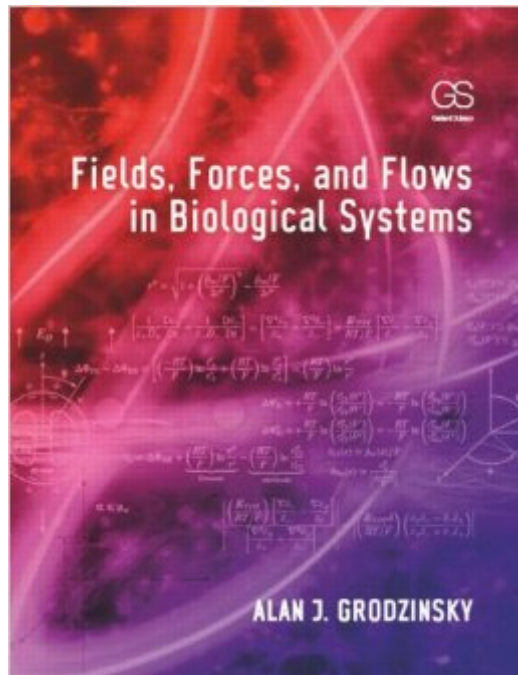


The book was found

# Fields, Forces, And Flows In Biological Systems



## Synopsis

Fields, Forces, and Flows in Biological Systems describes the fundamental driving forces for mass transport, electric current, and fluid flow as they apply to the biology and biophysics of molecules, cells, tissues, and organs. Basic mathematical and engineering tools are presented in the context of biology and physiology. The chapters are structured in a framework that moves across length scales from molecules to membranes to tissues. Examples throughout the text deal with applications involving specific biological tissues, cells, and macromolecules. In addition, a variety of applications focus on sensors, actuators, diagnostics, and microphysical measurement devices (e.g., bioMEMs/NEMs microfluidic devices) in which transport and electrokinetic interactions are critical. This textbook is written for advanced undergraduate and graduate students in biological and biomedical engineering and will be a valuable resource for interdisciplinary researchers including biophysicists, physical chemists, materials scientists, and chemical, electrical, and mechanical engineers seeking a common language on the subject.

## Book Information

Hardcover: 308 pages

Publisher: Garland Science; 1 edition (March 8, 2011)

Language: English

ISBN-10: 0815342128

ISBN-13: 978-0815342120

Product Dimensions: 8.4 x 0.6 x 11.2 inches

Shipping Weight: 2 pounds (View shipping rates and policies)

Average Customer Review: 4.0 out of 5 stars [See all reviews](#) (2 customer reviews)

Best Sellers Rank: #309,069 in Books (See Top 100 in Books) #27 in [Books > Engineering &](#)

[Transportation > Engineering > Chemical > Unit Operations & Transport Phenomena](#) #31

[in Books > Textbooks > Medicine & Health Sciences > Medicine > Biotechnology](#) #43 in [Books](#)

[> Science & Math > Biological Sciences > Biophysics](#)

## Customer Reviews

Great book with a lousy title. Good for biophysics of electrolytes.

book looks good, but not good enough to understand what is going on. I Received the book is good condition.

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

Fields, Forces, and Flows in Biological Systems Mrs. Fields Cookie Book: 100 Recipes from the Kitchen of Mrs. Fields River Flows in You and Other Eloquent Songs for Solo Piano Financial Market Rates and Flows (6th Edition) Modeling Structured Finance Cash Flows with Microsoft<sup>®</sup> Excel: A Step-by-Step Guide Large Eddy Simulation for Compressible Flows (Scientific Computation) Managing Business Process Flows (3rd Edition) Nonlinear Oscillations, Dynamical Systems, and Bifurcations of Vector Fields (Applied Mathematical Sciences) The Design of Life: Discovering Signs of Intelligence in Biological Systems Finite Fields, Coding Theory, and Advances in Communications and Computing (Lecture Notes in Pure and Applied Mathematics) In the Fields and the Trenches: The Famous and the Forgotten on the Battlefields of World War I Error-Correcting Codes and Finite Fields. Student Edition (Oxford Applied Mathematics and Computing Science Series) Error-Correcting Codes and Finite Fields (Oxford Applied Mathematics and Computing Science Series) Souvenir of Excursion to Battlefields by the Society of the Fourteenth Connecticut Regiment and Reunion at Antietam: September 1891; With History and ... on the Fields Revisited (Classic Reprint) Electrodynamics and Classical Theory of Fields and Particles (Dover Books on Physics) Show Case: Developing, Maintaining, and Presenting a Design-Tech Portfolio for Theatre and Allied Fields Building Suburbia: Green Fields and Urban Growth, 1820-2000 The Mathematics of Coding Theory: Information, Compression, Error Correction, and Finite Fields Applications of Finite Fields (Institute of Mathematics and its Applications Conference Series, New Series) The American Way of Eating: Undercover at Walmart, Applebee's, Farm Fields and the Dinner Table

[Dmca](#)