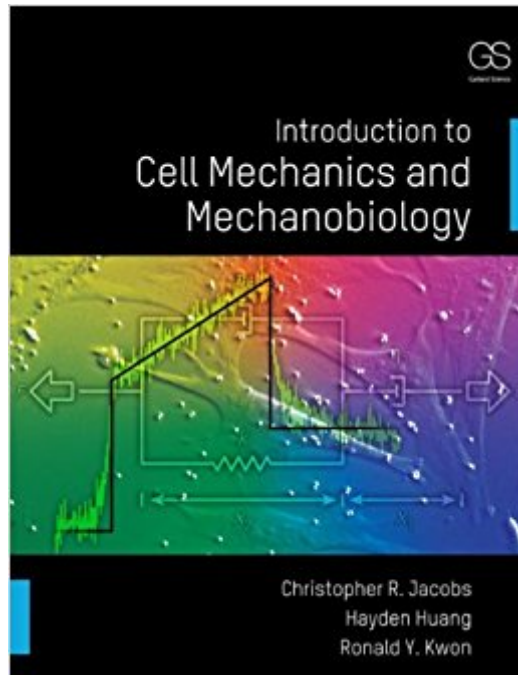


The book was found

# Introduction To Cell Mechanics And Mechanobiology



## Synopsis

Introduction to Cell Mechanics and Mechanobiology is designed for a one-semester course in the mechanics of the cell offered to advanced undergraduate and graduate students in biomedical engineering, bioengineering, and mechanical engineering. It teaches a quantitative understanding of the way cells detect, modify, and respond to the physical properties within the cell environment. Coverage includes the mechanics of single molecules, polymers, polymer networks, two-dimensional membranes, whole-cell mechanics, and mechanobiology, as well as primer chapters on solid, fluid, and statistical mechanics, and cell biology. Introduction to Cell Mechanics and Mechanobiology is the first cell mechanics textbook to be geared specifically toward students with diverse backgrounds in engineering and biology.

## Book Information

Paperback: 350 pages

Publisher: Garland Science; 1 edition (November 16, 2012)

Language: English

ISBN-10: 0824798511

ISBN-13: 978-0815344254

ASIN: 0815344252

Product Dimensions: 0.8 x 8.5 x 11 inches

Shipping Weight: 1.8 pounds (View shipping rates and policies)

Average Customer Review: 3.8 out of 5 stars 4 customer reviews

Best Sellers Rank: #392,394 in Books (See Top 100 in Books) #74 in [Books > Science & Math > Biological Sciences > Biophysics](#) #101 in [Books > Textbooks > Medicine & Health Sciences > Medicine > Basic Sciences > Biochemistry](#) #182 in [Books > Medical Books > Basic Sciences > Cell Biology](#)

## Customer Reviews

"The new text from Jacobs, Huang, and Kwon is fully worthy of the honor of being the first text reviewed in Cellular and Molecular Bioengineering. After reading through the clear, simple, but rigorous text, I can say that their work does far more than just tie together some important notes in a single binding....this text is potentially transformative for the field, much in the way that the famous texts by Beer and Johnston, in the 1960s were transformative for the undergraduate study of mechanics of materials and machines." - Cellular and Molecular Bioengineering "This excellent book by a group of internationally recognized authors meets a real existing need in

contemporary bioengineering education, and it does it effectively and successfully....The book was exactly what I wanted; it was entirely devoted to cell-scale problems, with numerous examples, each providing the relevant engineering or mathematical formulation, at a level suitable for good undergrad BME students....All chapters are comprehensible, logically-built and concise, and each is supported by high-quality graphics which add very much to the clarity of the contents...this book is a 'must-have'." - Computer Methods in Biomechanics and Biomedical Engineering

“[Introduction to Cell Mechanics and Mechanobiology] touches on all the main current techniques used to apply force to cells and to measure the forces exerted by cells. the physics behind them is well explained and derived. The book sets up a good context for why one would want to study mechanobiology and gives some good tips for designing an experiment, taking into account the fundamental differences in biology and engineering practices.” - Yale Journal of Biology and Medicine

Easy to read, good support. Help to understand the mechanical impact on cells

Great text book for undergraduate cell mechanics courses!

A++++ Fast ship Item just as described

Overall pretty horrendous textbook, filled with errors involving important equations and typos. Would highly recommend waiting until the second edition comes out so that all the errors have been fixed. Gives good insight on basic principles but frustrating to use as a reliable reference.

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

Biomechanics and Mechanobiology of Aneurysms (Studies in Mechanobiology, Tissue Engineering and Biomaterials) (Volume 7) Introduction to Cell Mechanics and Mechanobiology Introduction to Cell and Tissue Culture: Theory and Technique (Introductory Cell and Molecular Biology Techniques) Cell Phones and Distracted Driving (Cell Phones and Society) Making Cell Groups Work: Navigating the Transformation to a Cell-Based Church Introduction to Practical Peridynamics: Computational Solid Mechanics Without Stress and Strain (Frontier Research in Computation and Mechanics of Materials) Biofluid Mechanics, Second Edition: An Introduction to Fluid Mechanics, Macrocirculation, and Microcirculation (Biomedical Engineering) Advanced Molecular Quantum Mechanics: An Introduction to Relativistic Quantum Mechanics and the Quantum Theory of Radiation (Studies in Chemical Physics) Computational Fluid Mechanics and Heat Transfer, Third

Edition (Series in Computational and Physical Processes in Mechanics and Thermal Sciences)  
Computational Fluid Mechanics and Heat Transfer, Second Edition (Series in Computational and  
Physical Processes in Mechanics and Thermal Sciences) Reinforced Concrete: Mechanics and  
Design (4th Edition) (Civil Engineering and Engineering Mechanics) Fracture and Fatigue Control in  
Structures: Applications of Fracture Mechanics (Prentice-Hall International Series in Civil  
Engineering and Engineering Mechanics) Mechanics of Materials (Computational Mechanics and  
Applied Analysis) Probabilistic fracture mechanics and reliability (Engineering Applications of  
Fracture Mechanics) Fracture Mechanics of Concrete: Applications of Fracture Mechanics to  
Concrete, Rock and Other Quasi-Brittle Materials Engineering Mechanics: Statics Plus  
MasteringEngineering with Pearson eText -- Access Card Package (14th Edition) (Hibbeler, The  
Engineering Mechanics: Statics & Dynamics Series, 14th Edition) Dynamic Fracture Mechanics  
(Cambridge Monographs on Mechanics) Quantum Mechanics: Re-engineering Your Life With  
Quantum Mechanics & Affirmations Histology and Cell Biology: An Introduction to Pathology: With  
STUDENT CONSULT Online Access, 2e Cell and Molecular Biology: An Introduction

[Contact Us](#)

[DMCA](#)

[Privacy](#)

[FAQ & Help](#)