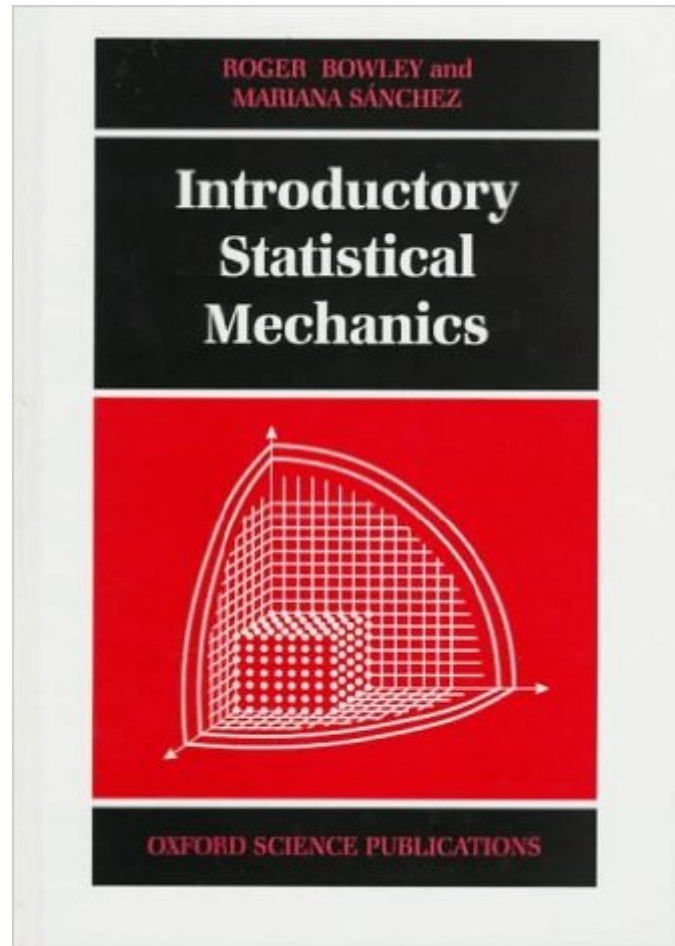


The book was found

Introductory Statistical Mechanics (Oxford Science Publications)



Synopsis

The aim of this book is to explain the ideas and techniques of statistical mechanics in a simple and progressive way, starting from the laws of thermodynamics and simple ideas of quantum mechanics. The reader is led through progressively more complex problems with all the mathematical detail explained. This work should be of interest to second or third year undergraduate students of physics or chemistry.

Book Information

Series: Oxford Science Publications

Hardcover: 304 pages

Publisher: Oxford University Press (September 26, 1996)

Language: English

ISBN-10: 0198517947

ISBN-13: 978-0198517948

Product Dimensions: 6.8 x 0.8 x 9.9 inches

Shipping Weight: 1.4 pounds

Average Customer Review: 4.0 out of 5 stars [See all reviews](#) (3 customer reviews)

Best Sellers Rank: #3,471,138 in Books (See Top 100 in Books) #84 in [Books > Science & Math > Physics > Entropy](#) #2000 in [Books > Science & Math > Physics > Mechanics](#) #2848 in [Books > Textbooks > Science & Mathematics > Mechanics](#)

Customer Reviews

I recommend this book to anyone who is taking an undergraduate course in stat mech. I also recommend it to beginning GRADUATE students of stat mech. I used it for my own graduate coursework and I found it to be extremely helpful. This book provides a clean, uncluttered presentation of the principles of stat mech; does not lose sight of the physical reasons behind the mathematical manipulations; and most helpful of all, contains a good set of problems WITH SOLUTIONS! It has been more helpful to me in my graduate work than any graduate-level book! In a next edition, maybe the authors can include a gentle introduction to the new renormalization group theory of phase transitions, and also increase the number and depth of problems. If you plan on studying stat mech, get this book.

I found this book to be a great introduction to statistical mechanics. The thermodynamic chapters (which are mostly at the very beginning and very end of the book) left a lot to be desired. The

authors did, however, relate stat mech ideas back to thermo topics, which helped motivate the subject. Finally, I would not recommend this book to be used as a self-study book. I read the chapters before the lectures and found that I repeatedly needed the lecture information (i.e. info not in the book) in order to do the homework problems.

You cannot beat this book for help reviewing for prelims or comps. The problems are typical of what you would find on a stat mech prelim, and the answers are in the back of the book. Combine this with Schoeder's An Introduction to Thermal Physics for a total Thermo + Stat Mech course. The book is also very helpful during grad-level Stat Mech courses. It makes a great companion to Pathria's Statistical Mechanics, Second Edition.

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

Introductory Statistical Mechanics (Oxford Science Publications) Elementary Stochastic Calculus With Finance in View (Advanced Series on Statistical Science & Applied Probability, Vol 6) (Advanced Series on Statistical Science and Applied Probability) Introductory Statistical Mechanics Statistical Mechanics: Entropy, Order Parameters and Complexity (Oxford Master Series in Physics) Introduction to Modern Colloid Science (Oxford Science Publications) Thermodynamics With Quantum Statistical Illustrations. Monographs in Statistical Physics and Thermodynamics, Volume 2 The Electronic Structure and Chemistry of Solids (Oxford Science Publications) Infectious Diseases of Humans: Dynamics and Control (Oxford Science Publications) Feline Immunology and Immunodeficiency (Oxford Science Publications) Electrochemistry: Principles, Methods, and Applications (Oxford Science Publications) The Meaning of Quantum Theory: A Guide for Students of Chemistry and Physics (Oxford Science Publications) The Mathematical Olympiad Handbook: An Introduction to Problem Solving Based on the First 32 British Mathematical Olympiads 1965-1996 (Oxford Science Publications) A Course in Group Theory (Oxford Science Publications) The Theory of the Riemann Zeta-Function (Oxford Science Publications) Data Analysis: A Bayesian Tutorial (Oxford Science Publications) Nuclear and Particle Physics (Oxford Science Publications) Robotics: The Beginner's Guide to Robotic Building, Technology, Mechanics, and Processes (Robotics, Mechanics, Technology, Robotic Building, Science) Introductory R: A Beginner's Guide to Data Visualisation, Statistical Analysis and Programming in R Thermodynamics and Statistical Mechanics: An Integrated Approach (Cambridge Series in Chemical Engineering) Statistical Mechanics: Selecta of Elliott H. Lieb

[Dmca](#)