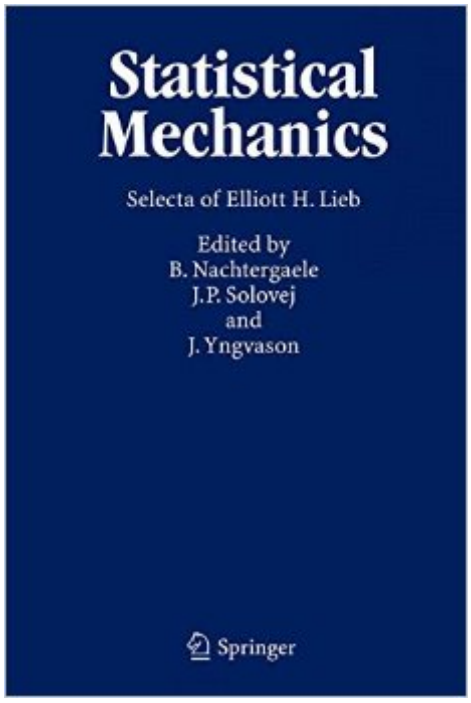
Statistical Mechanics: Selecta Of Elliott H. Lieb



Synopsis

In Statistical Physics one of the ambitious goals is to derive rigorously, from statistical mechanics, the thermodynamic properties of models with realistic forces. Elliott Lieb is a mathematical physicist who meets the challenge of statistical mechanics head on, taking nothing for granted and not being content until the purported consequences have been shown, by rigorous analysis, to follow from the premises. The present volume contains a selection of his contributions to the field, in particular papers dealing with general properties of Coulomb systems, phase transitions in systems with a continuous symmetry, lattice crystals, and entropy inequalities. It also includesÂ work on classical thermodynamics, a discipline that, despite many claims to the contrary, is logically independent of statistical mechanics and deserves a rigorous and unambiguous foundation of its own. The articles in this volumeÂ have beenÂ carefully annotated by the editors.

Book Information

Hardcover: 508 pages

Publisher: Springer; 2004 edition (January 12, 2005)

Language: English

ISBN-10: 3540222979

ISBN-13: 978-3540222972

Product Dimensions: 6.1 x 1.1 x 9.2 inches

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

Average Customer Review: Be the first to review this item

Best Sellers Rank: #3,068,879 in Books (See Top 100 in Books) #74 inÂ Books > Science & Math > Physics > Entropy #714 inÂ Books > Science & Math > Mathematics > Pure Mathematics > Functional Analysis #1264 inÂ Books > Science & Math > Physics > Solid-State Physics

Nonextensive Statistical Mechanics: Approaching a Complex World Introductory Statistical Mechanics (Oxford Science Publications) The Principles of Statistical Mechanics (Dover Books on Physics) Nonequilibrium Statistical Mechanics Robotics: The Beginner's Guide to Robotic Building, Technology, Mechanics, and Processes (Robotics, Mechanics, Technology, Robotic Building, Science) Soil Mechanics in Highway Engineering (Series on Rock and Soil Mechanics) Reinforced Concrete: Mechanics and Design (4th Edition) (Civil Engineering and Engineering Mechanics) Mechanics II: Mechanics of Materials + Computational Fluid Mechanics and Heat Transfer, Third Edition (Series in Computational and Physical Processes in Mechanics and Thermal Sciences) Statistical Analysis of fMRI Data (MIT Press) Statistical Digital Signal Processing and Modeling Ending Spam: Bayesian Content Filtering and the Art of Statistical Language Classification