The book was found

# Statistical Physics Of Macromolecules (Polymers And Complex Materials)



Alexander Yu. Grosberg Alexei R. Khokhlov

AIP Series in Polymers and Complex Materials



## Synopsis

Market: Specialists and graduate students in polymer physics, statistical physics, physical chemistry of polymers, materials science, molecular biophysics, and chemical engineering. This introductory volume presents in-depth descriptions of fundamental concepts as well as key industrial applications in polymer physical chemistry and molecular biophysics. Topics include statistical theories of polymer solutions, melts, polymer liquid crystals, polymer networks, and polyelectrolytes; statistics of ideal chains; the viscoelastic behavior of polymer systems; and various features of biopolymers, DNA, and proteins.

### **Book Information**

Series: Polymers and Complex Materials Hardcover: 350 pages Publisher: American Institute of Physics; 1994 edition (March 13, 2002) Language: English ISBN-10: 1563960710 ISBN-13: 978-1563960710 Product Dimensions: 6.1 x 0.9 x 9.2 inches Shipping Weight: 1.5 pounds Average Customer Review: 4.0 out of 5 stars Â See all reviews (1 customer review) Best Sellers Rank: #474,260 in Books (See Top 100 in Books) #10 in Books > Science & Math > Chemistry > Polymers & Macromolecules #44 in Books > Science & Math > Physics > Nuclear Physics > Atomic & Nuclear Physics #126 in Books > Science & Math > Physics > Solid-State Physics

#### **Customer Reviews**

I bought this book AFTER I bought polymer physics books by de Gennes, Doi and Edwards, and Yamakawa. I don't recommend you do it in this order! Grosberg and Khokhlov's book is, in my opinion, the best one to start off with. It judiciously takes a scaling-type approach to certain discussions (in a manner similar to de Gennes) and more rigorous mathematical developments in others (similar to Doi and Edwards, but never as detailed as Yamakawa). I particularly like the way the book is arranged. Each short section (they're usually about 2 or 3 pages or so) begins with a bold face sentence which tells the main idea of the section to follow. This keeps the book coherent even when you want to skip sections. I would recommend this as your first book in polymer physics, though a reasonable background in statistical mechanics is necessary to understand the material (although very reliable sources have told me that the new book by Rubinstein and Colby is supposed to be excellent as well, but it just came out and I haven't had a chance to read it).

#### Download to continue reading...

Statistical Physics of Macromolecules (Polymers and Complex Materials) 7 More Psychological Complexes That You Didn't Know Existed: Cinderella Complex, Superman Complex, Napoleon Complex, Messiah Complex, Phaedra Complex, ... Complex (Transcend Mediocrity Book 125) Physical Properties of Polymers Handbook (AIP Series in Polymers & Complex Materials) Polymers From the Inside Out: An Introduction to Macromolecules LES and DNS of Ignition Process and Complex Structure Flames with Local Extinction (AIP Conference Proceedings / Mathematical and Statistical Physics) Thermodynamics With Quantum Statistical Illustrations. Monographs in Statistical Physics and Thermodynamics, Volume 2 The Solid State: An Introduction to the Physics of Crystals for Students of Physics, Materials Science, and Engineering (Oxford Physics Series) Polymers: Chemistry and Physics of Modern Materials, Third Edition Polymers: Chemistry and Physics of Modern Materials Statistical Physics, Third Edition, Part 1: Volume 5 (Course of Theoretical Physics, Volume 5) Elementary Stochastic Calculus With Finance in View (Advanced Series on Statistical Science & Applied Probability, Vol 6) (Advanced Series on Statistical Science and Applied Probability) THE GRONNEDAL-IKA ALKALINE COMPLEX, SOUTH GREENLAND: THE STRUCTURE AND GEOLOGICAL HISTORY OF THE COMPLEX. A First Course in Complex Analysis with Applications (Jones and Bartlett Publishers Series in Mathematics: Complex) Introduction to Nonextensive Statistical Mechanics: Approaching a Complex World How Goats Can Fight Poverty: Complex problems do not always need complex solutions Polymers: Physical Properties, (Methods in Experimental Physics Volume 16 Part C) Materials Processing: A Unified Approach to Processing of Metals, Ceramics and Polymers Materials Science of Polymers for Engineers Time Warps, String Edits, and Macromolecules: The Theory and Practice of Sequence Comparison Binding and Linkage: Functional Chemistry of Biological Macromolecules

<u>Dmca</u>