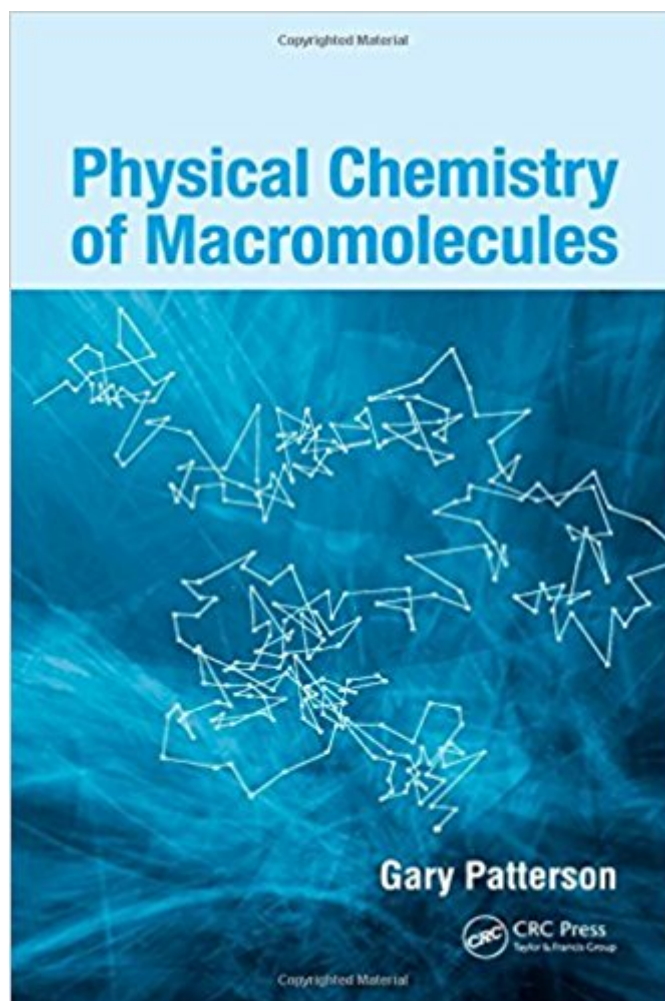


The book was found

Physical Chemistry Of Macromolecules



Synopsis

Written by a chemical physicist specializing in macromolecular physics, this book brings to life the definitive work of celebrated scientists who combined multidisciplinary perspectives to pioneer the field of polymer science. The author relates firsthand the unique environment that fostered the experimental breakthroughs underlying some of today's most widely accepted theories, mathematical principles, and models for characterizing macromolecules. *Physical Chemistry of Macromolecules* employs the unifying principles of physical chemistry to define the behavior, structure, and intermolecular properties of macromolecules in both solution and bulk states. The text explains the experimental techniques, such as light scattering, and results used to support current theories. Examining both equilibrium and transport properties, the book describes the properties of dilute, semi-dilute, and concentrated polymer solutions, including compressible fluids. It then covers amorphous liquids and glasses, and polymer networks. The final chapters discuss the properties of solutions containing stiff-chain molecules and polyelectrolytes. Topics also include the macromolecular nature of rubber elasticity, viscoelasticity, and the distribution of relaxation times associated with the glass transition. By explaining the experimental and mathematical basis for the theories and models used to define macromolecular behavior, *Physical Chemistry of Macromolecules* demonstrates how these techniques and models can be applied to analyze and predict the properties of new polymeric materials.

Book Information

Hardcover: 152 pages

Publisher: CRC Press; 1 edition (March 9, 2007)

Language: English

ISBN-10: 0824794672

ISBN-13: 978-0824794675

Product Dimensions: 0.5 x 6.5 x 9.5 inches

Shipping Weight: 12 ounces (View shipping rates and policies)

Average Customer Review: Be the first to review this item

Best Sellers Rank: #4,464,888 in Books (See Top 100 in Books) #95 in Books > Science & Math > Chemistry > Polymers & Macromolecules #1270 in Books > Science & Math > Chemistry > Physical & Theoretical > Physical Chemistry #1387 in Books > Engineering & Transportation > Engineering > Materials & Material Science > Polymers & Textiles

Customer Reviews

Carnegie Mellon University, Pittsburgh, Pennsylvania, USA

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

Physical Chemistry of Macromolecules Microcalorimetry of Macromolecules: The Physical Basis of Biological Structures Macromolecules, Volume 3: Physical Structures and Properties (v. 3) Process Chemistry of Petroleum Macromolecules (Chemical Industries) Binding and Linkage: Functional Chemistry of Biological Macromolecules Physical Chemistry Plus MasteringChemistry with eText -- Access Card Package (3rd Edition) (Engel Physical Chemistry Series) Surviving Chemistry Review Book: High School Chemistry: 2015 Revision - with NYS Chemistry Regents Exams: The Physical Setting Surviving Chemistry Guided Study Book: High School Chemistry: 2015 Revision - with NYS Chemistry Regents Exams: The Physical Setting Study Guide: Ace Organic Chemistry I - The EASY Guide to Ace Organic Chemistry I: (Organic Chemistry Study Guide, Organic Chemistry Review, Concepts, Reaction Mechanisms and Summaries) Ace General Chemistry I and II (The EASY Guide to Ace General Chemistry I and II): General Chemistry Study Guide, General Chemistry Review Polymers From the Inside Out: An Introduction to Macromolecules HPLC of Macromolecules: A Practical Approach (Practical Approach Series) Macromolecules: Volume 1: Chemical Structures and Syntheses Crystallization of Biological Macromolecules Glencoe Physical iScience Modules: Chemistry, Grade 8, Student Edition (GLEN SCI: CHEMISTRY) Quantum Chemistry & Spectroscopy Plus MasteringChemistry with eText -- Access Card Package (3rd Edition) (Engel Physical Chemistry Series) Recent Advances in the Theory of Chemical and Physical Systems: Proceedings of the 9th European Workshop on Quantum Systems in Chemistry and Physics ... in Theoretical Chemistry and Physics) Physical Chemistry: Quantum Chemistry and Molecular Interactions, Books a la Carte Plus MasteringChemistry with eText -- Access Card Package Let's Review Chemistry: The Physical Setting, 4th Edition (Let's Review: Chemistry) What is Organic Chemistry? Chemistry Book 4th Grade | Children's Chemistry Books

[Contact Us](#)

[DMCA](#)

[Privacy](#)

[FAQ & Help](#)