

The book was found

Colloids And The Depletion Interaction (Lecture Notes In Physics)



Synopsis

Colloids are submicron particles that are ubiquitous in nature (milk, clay, blood) and industrial products (paints, drilling fluids, food). In recent decades it has become clear that adding depletants such as polymers or small colloids to colloidal dispersions allows one to tune the interactions between the colloids and in this way control the stability, structure and rheological properties of colloidal dispersions. This book offers a concise introduction to the fundamentals of depletion effects and their influence on the phase behavior of colloidal dispersions. Throughout the book, conceptual explanations are accompanied by experimental and computer simulation results. From the review by Kurt Binder: "They have succeeded in writing a monograph that is a very well balanced compromise between a very pedagogic introduction, suitable for students and other newcomers, and reviews of the advanced research trends in the field. Thus each chapter contains many and up to date references, but in the initial sections of the chapters, there are suggested exercises which will help the interested reader to recapitulate the main points of the treatment and to deepen his understanding of the subject. Only elementary knowledge of statistical thermodynamics is needed as a background for understanding the derivations presented in this book; thus this text is suitable also for advanced teaching purposes, useful of courses which deal with the physics for soft condensed matter.Â There does not yet exist any other book with a similar scope.....The readability of this book is furthermore enhanced by a list of symbols, and index of keywords, and last not least by a large number of figures, including many pedagogic sketches which were specifically prepared for this book. Thus, this book promises to be very useful for students and related applied sciences alike." Eur. Phys. J. E (2015) 38: 73

Book Information

File Size: 4956 KB

Print Length: 234 pages

Publisher: Springer; 2011 edition (May 23, 2011)

Publication Date: May 23, 2011

Sold by:Â Digital Services LLC

Language: English

ASIN: B00S15C7V6

Text-to-Speech: Enabled

X-Ray: Not Enabled

Word Wise: Enabled

Lending: Not Enabled

Enhanced Typesetting: Not Enabled

Best Sellers Rank: #1,058,132 Paid in Kindle Store (See Top 100 Paid in Kindle Store) #40 in Kindle Store > Kindle eBooks > Engineering & Transportation > Engineering > Chemical > Polymer Chemistry #40 in Kindle Store > Kindle eBooks > Engineering & Transportation > Engineering > Materials Science > Polymer Science #45 in Kindle Store > Kindle eBooks > Nonfiction > Science > Physics > Dynamics > Fluid Dynamics

Customer Reviews

cannot find a better book describing depletion interaction at this moment. Although it is free online, I still like the hard copy.

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

Colloids and the Depletion Interaction (Lecture Notes in Physics) Physics from Symmetry (Undergraduate Lecture Notes in Physics) Interaction Design: Beyond Human-Computer Interaction Inside Interesting Integrals: A Collection of Sneaky Tricks, Sly Substitutions, and Numerous Other Stupendously Clever, Awesomely Wicked, and ... (Undergraduate Lecture Notes in Physics) Electrodynamics: The Field-Free Approach: Electrostatics, Magnetism, Induction, Relativity and Field Theory (Undergraduate Lecture Notes in Physics) The History and Science of the Manhattan Project (Undergraduate Lecture Notes in Physics) Landau Theory Of Phase Transitions, The: Application To Structural, Incommensurate, Magnetic And Liquid Crystal Systems (World Scientific Lecture Notes in Physics) Quantum Thermodynamics: Emergence of Thermodynamic Behavior Within Composite Quantum Systems (Lecture Notes in Physics) Quantum Chromodynamics on the Lattice: An Introductory Presentation (Lecture Notes in Physics) Progress in Understanding of Polymer Crystallization (Lecture Notes in Physics) An Introduction to Interfaces and Colloids: The Bridge to Nanoscience Introduction to Soft Matter: Polymers, Colloids, Amphiphiles and Liquid Crystals The Solid State: An Introduction to the Physics of Crystals for Students of Physics, Materials Science, and Engineering (Oxford Physics Series) Generalized Convexity and Optimization: Theory and Applications (Lecture Notes in Economics and Mathematical Systems) Identification of Nonlinear Systems Using Neural Networks and Polynomial Models: A Block-Oriented Approach (Lecture Notes in Control and Information Sciences) Hardware and Software: Verification and Testing: 11th International Haifa Verification Conference, HVC 2015, Haifa, Israel, November 17-19, 2015, Proceedings (Lecture Notes in Computer Science) Biological Wastewater Treatment, Second Edition, Revised and Expanded (Lecture Notes in Pure and Applied

Mathematics) The DSM V and the Concept of Mental Illness - Lecture Notes and Articles Software Engineering for Large-Scale Multi-Agent Systems: Research Issues and Practical Applications (Lecture Notes in Computer Science) Cryptography and Coding: 6th IMA International Conference, Cirencester, UK, December 17-19, 1997, Proceedings (Lecture Notes in Computer Science)

[Dmca](#)