

Librería
Bonilla y Asociados
desde 1950



Título:

Autor:

Precio: \$980.00

Editorial:

Año: 2009

Tema:

Edición: 1^a

Sinopsis

ISBN: 9789812834966

This monograph represents an extension of the author's original PhD thesis and includes a more thorough discussion on the concepts and mathematics behind his research works on the foam model, as applied to studying issues of phase stability and elasticity for various non-closed packed structures found in fuzzy and colloidal crystals, as well as on a renormalization-group analysis regarding the critical behavior of loop polymers upon which topological constraints are imposed. The common thread behind these two research works is their demonstration of the importance and effectiveness of utilizing geometrical and topological concepts for modeling and understanding soft systems undergoing phase transitions.

Contents:

The Big Picture:

Modern Physics at a Glance

Geometry and Phase Transitions, in General:

Phase Transitions and Critical Phenomena

Overview of Density-Functional Theory

Survey of Solid Geometry and Topology

Geometry and Phase Transitions, in Colloidal Crystals:

Lattice Free Energy via the Foam Model

Phases of Charged Colloidal Crystals

Elasticity of Colloidal Crystals

Geometry and Phase Transitions, in Topologically Constrained Polymers:

Topologically Constrained Polymers in Theta Solution