



Self-Assembly, Pattern Formation and Growth Phenomena in Nano-Systems

By-

Springer. Hardcover. Book Condition: New. Hardcover. 327 pages. Dimensions: 9.5in. x 6.5in. x 0.9in.Nano-science and nanotechnology are rapidly developing scientific and technological areas that deal with physical, chemical and biological processes that occur on nano-meter scale one millionth of a millimeter. Self-organization and pattern formation play crucial role on nano-scales and promise new, effective routes to control various nano-scales processes. This book contains lecture notes written by the lecturers of the NATO Advanced Study Institute Self-Assembly, Pattern Formation and Growth Phenomena in Nano-Systems that took place in St Etienne de Tinee, France, in the fall 2004. They give examples of self-organization phenomena on micro- and nano-scale as well as examples of the interplay between phenomena on nano- and macro-scales leading to complex behavior in various physical, chemical and biological systems. They discuss such fascinating nano-scale selforganization phenomena as self-assembly of quantum dots in thin solid films, pattern formation in liquid crystals caused by light, self-organization of micro-tubules and molecular motors, as well as basic physical and chemical phenomena that lead to self-assembly of the most important molecule on the basis of which most of living organisms are built DNA. A review of general features of all pattern forming systems is...



Reviews

An incredibly great book with perfect and lucid answers. Better then never, though i am quite late in start reading this one. You will not sense monotony at whenever you want of the time (that's what catalogues are for relating to if you question me).

-- Nannie Lindgren Jr.

The most effective publication i ever go through. It really is writter in simple phrases and not hard to understand. I am just easily will get a satisfaction of looking at a written publication.

-- Ila Pfeffer IV