Pattern Formations and Oscillatory Phenomena

From Shuichi Kinoshita
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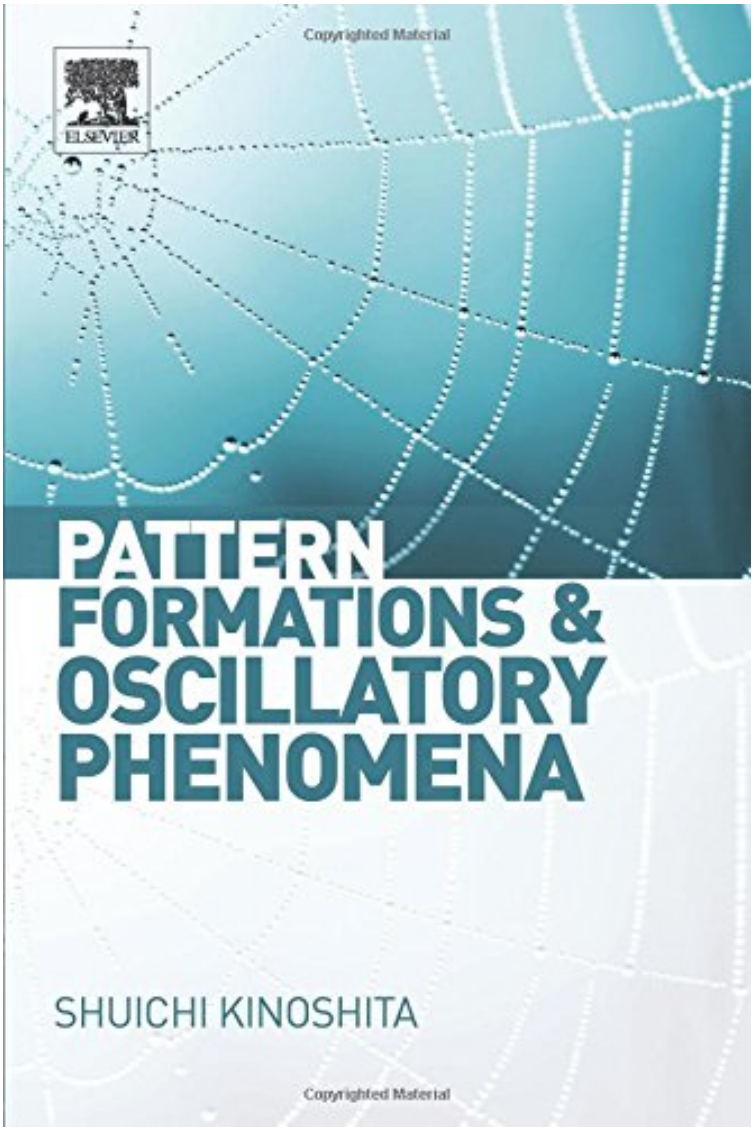

#4438937 in Books Shuichi Kinoshita 2013-06-07 2013-05-24Original language:EnglishPDF # 1 9.00 x .62 x 6.00l, .99 #File Name: 0123970148280 pagesPattern Formations and Oscillatory Phenomena | File size: 42.Mb

From Shuichi Kinoshita : Pattern Formations and Oscillatory Phenomena before purchasing it in order to gage whether or not it would be worth my time, and all praised Pattern Formations and Oscillatory Phenomena:

Patterns and their formations appear throughout nature, and are studied to analyze different problems in science and

make predictions across a wide range of disciplines including biology, physics, mathematics, chemistry, material science, and nanoscience. With the emergence of nanoscience and the ability for researchers and scientists to study living systems at the biological level, pattern formation research has become even more essential. This book is an accessible first of its kind guide for scientists, researchers, engineers, and students who require a general introduction to this research area, in order to gain a deeper analytical understanding of the most recent observations and experiments by top researchers in physics. Pattern Formations describes the most up-to-date status of this developing field and analyzes the physical phenomena behind a wide range of interesting topics commonly known in the scientific community. The study of pattern formations as a research field will continue to grow as scientists expand their understanding of naturally occurring patterns and mimic nature to help solve complex problems. This research area is becoming more highly recognized due to its contributions to signal processing, computer analysis, image processing, complex networks development, advancements in optics and photonics, crystallography, metallurgy, drug delivery (chemotherapy) and the further understanding of gene regulation. The only introductory reference book which places special emphasis on the theoretical analyses of experiments in this rapidly growing field of pattern formationA wide range of physical applications make this book highly interdisciplinaryExplanations of observations and experiments deepen the readers understanding of this developing research field

"Intending this book as an accessible guide to a growing field, editor Kinoshita has shaped it to walk between the many theoretical or mathematical books that are available, and those that report experimental methods without scientific explanation." --Reference Research Book News, October 2013 From the Back CoverPatterns and their formations appear throughout nature, and are studied to analyze different problems in science and make predictions across a wide range of disciplines including biology, physics, mathematics, chemistry, material science, and nanoscience. With the emergence of nanoscience and the ability for researchers and scientists to study living systems at the biological level, pattern formation research has become even more essential. This book is an accessible first of its kind guide for scientists, researchers, engineers, and students who require a general introduction to this research area, in order to gain a deeper analytical understanding of the most recent observations and experiments by top researchers in physics. Pattern Formations describes the most up-to-date status of this developing field and analyzes the physical phenomena behind a wide range of interesting topics commonly known in the scientific community. The study of pattern formations as a research field will continue to grow as scientists expand their understanding of naturally occurring patterns and mimic nature to help solve complex problems. This research area is becoming more highly recognized due to its contributions to signal processing, computer analysis, image processing, complex networks development, advancements in optics and photonics, crystallography, metallurgy, drug delivery (chemotherapy) and the further understanding of gene regulation.