Título: Recent Advances In Applied Nonlinear Dynamics With Numerical Analysis - Fraction

Autor: Changpin LI

Precio: $1318.98

Editorial:

Año: 2013

Tema:

Edición: 1ª

Sinopsis

ISBN: 9789814436458

Nonlinear dynamics is still a hot and challenging topic. In this edited book, we focus on fractional dynamics, infinite dimensional dynamics defined by the partial differential equation, network dynamics, fractal dynamics, and their numerical analysis and simulation.

Fractional dynamics is a new topic in the research field of nonlinear dynamics which has attracted increasing interest due to its potential applications in the real world, such as modeling memory processes and materials. In this part, basic theory for fractional differential equations and numerical simulations for these equations will be introduced and discussed.

In the infinite dimensional dynamics part, we emphasize on numerical calculation and theoretical analysis, including constructing various numerical methods and computing the corresponding limit sets, etc.

In the last part, we show interest in network dynamics and fractal dynamics together with numerical simulations as well as their applications.

Readership: Senior undergraduates, postgraduates and experts in nonlinear dynamics with numerical analysis