

1. Record Nr.	UNINA9910876926003321
Titolo	Nonlinear dynamics of nanosystems // edited by Gunter Radons, Benno Rumpf, and Heinz Georg Schuster
Pubbl/distr/stampa	Weinheim, : Wiley-VCH Verlag GmbH & Co., 2010
ISBN	1-282-68832-4 9786612688324 3-527-62937-8 3-527-62938-6
Descrizione fisica	1 online resource (487 p.)
Classificazione	UG 3900 33.27 53.55 MAT 344f PHY 704f TEC 030f
Altri autori (Persone)	RadonsG (Gunter) RumpfBenno SchusterHeinz Georg <1943->
Disciplina	620.501515
Soggetti	Nanotechnology Nonlinear theories
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Nonlinear Dynamics of Nanosystems; List of Contributors; Contents; Preface; Part I Fluctuations; 1 Nonequilibrium Nanosystems; 2 Thermodynamics of Small Systems; 3 Quantum Dissipative Ratchets; Part II Surface Effects; 4 Dynamics of Nanoscopic Capillary Waves; 5 Nonlinear Dynamics of Surface Steps; 6 Casimir Forces and Geometry in Nanosystems; Part III Nanoelectromechanics; 7 The Duffing Oscillator for Nanoelectromechanical Systems; 8 Nonlinear Dynamics of Nanomechanical Resonators; 9 Nonlinear Dynamics in Atomic Force Microscopy and Its Control for Nanoparticle Manipulation Part IV Nanoelectronics10 Classical Correlations and Quantum Interference in Ballistic Conductors; 11 Nonlinear Response of Driven

Mesoscopic Conductors; 12 Pattern Formation and Time Delayed Feedback Control at the Nanoscale; Part V Optic-Electronic Coupling; 13 Laser-Assisted Electron Transport in Nanoscale Devices; 14 Two-Photon Photoemission of Plasmonic Nanostructures with High Temporal and Lateral Resolution; 15 Dynamics and Nonlinear Light Propagation in Complex Photonic Lattices; Index

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Sommario/riassunto

A discussion of the fundamental changes that occur when dynamical systems from the fields of nonlinear optics, solids, hydrodynamics and biophysics are scaled down to nanosize. The authors are leading scientists in the field and each of their contributions provides a broader introduction to the specific area of research. In so doing, they include both the experimental and theoretical point of view, focusing especially on the effects on the nonlinear dynamical behavior of scaling, stochasticity and quantum mechanics. For everybody working on the synthesis and integration of nanoscopic device

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