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Altri autori (Persone)	RadonsG (Gunter) RumpfBenno SchusterHeinz Georg <1943->
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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
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