1. Record Nr. UNISA996466680403316

Titolo	Field Theoretical Tools for Polymer and Particle Physics [[electronic resource] /] / edited by Hildegard Meyer-Ortmanns, Andreas Klümper
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 1998
ISBN	3-540-69747-0
Edizione	[1st ed. 1998.]
Descrizione fisica	1 online resource (XVI, 260 p.)
Collana	Lecture Notes in Physics, , 0075-8450 ; ; 508
Disciplina	530.4/13
Soggetti	Algebra Chemical engineering Physics Elementary particles (Physics) Quantum field theory Industrial Chemistry/Chemical Engineering Physics, general Mathematical Methods in Physics Numerical and Computational Physics, Simulation Elementary Particles, Quantum Field Theory
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di contenuto	Random walks in polymer physics -- Random walks in field theory -- Polymer expansion in particle physics -- Polymers, spin models and field theory -- Reaction-diffusion mechanisms and quantum spin systems -- Bosonization in particle physics -- Hadronization in particle physics -- The hybrid monte carlo algorithm for quantum chromodynamics -- The hybrid monte carlo method for polymer chains -- Simulations of toy proteins -- Two lectures on phase mixing: Nucleation and symmetry restoration -- Neural networks and confidence limit estimates -- The gross-neveu model and QCDs chiral phase transition -- The TBA, the gross-neveu model, and polyacetylene -- Solitons in polyacetylene.
Sommario/riassunto	The book is written for advanced graduate students. The topics have been selected to present methods and models that have applications in

		both particle physics and polymer physics. The lectures may serve as a guide through more recent research activities and illustrate the applicability of joint methods in different contexts. The book deals with analytic tools (e.g. random walk models, polymer expansion), numerical tools (e.g. Langevin dynamics), and common models (the three-dimensional Gross-Neveu-Model).
2.	Record Nr.	UNINA9910254164203321
	Titolo	Springer Handbook of Nanotechnology / / edited by Bharat Bhushan
	Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2017
	ISBN	3-662-54357-5
	Edizione	[4th ed. 2017.]
	Descrizione fisica	1 online resource (1500 p. 1288 illus. in color.)
	Collana	Springer Handbooks, , 2522-8692
	Disciplina	620.5
	Soggetti	Nanotechnology Nanoscience Nanostructures Nanochemistry Nanotechnology and Microengineering Nanoscale Science and Technology
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
	Note generali	"With 1325 figures and 100 tables."
	Nota di bibliografia	Includes bibliographical references and index.
	Nota di contenuto	Introduction -- Micro/Nanofabrication Techniques -- Nanomaterials and Nanostructures -- MEMS/NEMS -- BioMEMS/NEMS -- Nanometrology -- Bio/Nanotribology and Bio/Nanomechanics -- Molecularly-Thick Films for Lubrication -- Biomimetics and Bioinspired Surfaces -- Micro/Nanodevice Reliability -- Nanotechnology in Social Context, Environments, Health and Safety Issues, and Nanotechnology Education.
	Sommario/riassunto	This comprehensive handbook has become the definitive reference work in the field of nanoscience and nanotechnology, and this 4th edition incorporates a number of recent new developments. It

integrates nanofabrication, nanomaterials, nanodevices, nanomechanics, nanotribology, materials science, and reliability engineering knowledge in just one volume. Furthermore, it discusses various nanostructures; micro/nanofabrication; micro/nanodevices and biomicro/nanodevices, as well as scanning probe microscopy; nanotribology and nanomechanics; molecularly thick films; industrial applications and nanodevice reliability; societal, environmental, health and safety issues; and nanotechnology education. In this new edition, written by an international team of over 140 distinguished experts and put together by an experienced editor with a comprehensive understanding of the field, almost all the chapters are either new or substantially revised and expanded, with new topics of interest added. It is an essential resource for anyone working in the rapidly evolving field of key technology, including mechanical and electrical engineers, materials scientists, physicists, and chemists.