1. Record Nr. UNINA9910673903303321

Titolo	Magnetic Nanoparticles / / edited by Evgeny Katz
Pubbl/distr/stampa	Basel : , : MDPI - Multidisciplinary Digital Publishing Institute, , 2020
Descrizione fisica	1 online resource (406 pages) : illustrations
Disciplina	668.4
Soggetti	Synthetic products
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Sommario/riassunto	The present book covers all research areas related to magnetic nanoparticles, magnetic nanorods, and other magnetic nanospecies, their preparation, characterization, and various applications, specifically emphasizing biomedical applications. The chapters written by the leading experts cover different subareas of the science and technology related to various magnetic nanospecies--providing broad coverage of this multifaceted area and its applications. The different topics addressed in this book will be of great interest to the interdisciplinary community active in the area of nanoscience and nanotechnology. It is hoped that this collection and its various chapters will be important and beneficial for researchers and students working in various areas related to bionanotechnology, materials science, biosensor applications, medicine, and many others. Furthermore, this book is aimed at attracting young scientists and introducing them to this field, in addition to providing newcomers with an enormous collection of literature references.

2.

Record Nr.	UNINA9910484132603321
Autore	Siegert Wolfgang
Titolo	Local Lyapunov exponents : sublimiting growth rates of linear random differential equations / / Wolfgang Siegert
Pubbl/distr/stampa	Berlin, : Springer, 2009
ISBN	9783540859642 3540859640
Edizione	[1st ed. 2009.]
Descrizione fisica	1 online resource (IX, 254 p.)
Collana	Lecture notes in mathematics ; ; 1963
Classificazione	MAT 606f SI 850 60F1060H1037H1534F0434C1158J3591B2837N1092D1592D25
Disciplina	515.35
Soggetti	Lyapunov exponents Differential equations
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references (p. 239-251) and index.
Nota di contenuto	Linear differential systems with parameter excitation -- Locality and time scales of the underlying non-degenerate stochastic system: Freidlin-Wentzell theory -- Exit probabilities for degenerate systems -- Local Lyapunov exponents.
Sommario/riassunto	Establishing a new concept of local Lyapunov exponents the author brings together two separate theories, namely Lyapunov exponents and the theory of large deviations. Specifically, a linear differential system is considered which is controlled by a stochastic process that during a suitable noise-intensity-dependent time is trapped near one of its so-called metastable states. The local Lyapunov exponent is then introduced as the exponential growth rate of the linear system on this time scale. Unlike classical Lyapunov exponents, which involve a limit as time increases to infinity in a fixed system, here the system itself changes as the noise intensity converges, too.