

1. Record Nr.	UNINA9910140597403321
Titolo	Microfluidic devices in nanotechnology Fundamental concepts [[electronic resource] /] / edited by Challal S. Kumar
Pubbl/distr/stampa	Hoboken, N.J., : Wiley, c2010
ISBN	1-118-02922-4 1-282-24221-0 9786613813336 0-470-62263-6 0-470-62262-8
Descrizione fisica	1 online resource (364 p.)
Altri autori (Persone)	KumarC. S. S. R (Challa S. S. R.)
Disciplina	620.1/06
Soggetti	Microfluidic devices Nanofluids Nanotechnology Fluidic devices
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	MICROFLUIDIC DEVICES IN NANOTECHNOLOGY: Fundamental Concepts; CONTENTS; PREFACE; CONTRIBUTORS; 1: FUNDAMENTALS OF MICROFLUIDICS DEVICES; 2: SPATIOTEMPORALLY CONTROLLED NANOLITER-SCALE RECONFIGURABLE MICROFLUIDICS; 3: MICROFLUIDIC DEVICES FOR STUDYING KINETICS; 4: COMPUTATIONAL STRATEGIES FOR MICRO- AND NANOFUID DYNAMICS; 5: NANOFUIDIC DEVICES AND THEIR POTENTIAL APPLICATIONS; 6: PARTICLE TRANSPORT IN MAGNETOPHORETIC MICROSYSTEMS; 7: PARTICLES IN MICROFLUIDIC SYSTEMS; 8: IN SITU NANOPARTICLE FOCUSING WITHIN MICROFLUIDICS 9: RESIDENCE TIME DISTRIBUTION AND NANOPARTICLE FORMATION IN MICROMECHANICAL REACTORSINDEX
Sommario/riassunto	Nanotechnology, especially microfabrication, has been affecting every facet of traditional scientific disciplines. The first book on the application of microfluidic reactors in nanotechnology, Microfluidic Devices in Nanotechnology provides the fundamental aspects and potential applications of microfluidic devices, the physics of

microfluids, specific methods of chemical synthesis of nanomaterials, and more. As the first book to discuss the unique properties and capabilities of these nanomaterials in the miniaturization of devices, this text serves as a one-stop resource for nanoscien
