Record Nr.	UNINA9910140597103321
Titolo	Microfluidic devices in nanotechnology Applications [[electronic resource] /] / edited by Challa S. Kumar
Pubbl/distr/stampa	Hoboken, N.J., : Wiley, c2010
ISBN	1-118-02933-X 1-282-68789-1 9786612687891 0-470-62255-5 0-470-62254-7
Descrizione fisica	1 online resource (421 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: Applications; CONTENTS; PREFACE; CONTRIBUTORS; 1: MICROFLUIDICS FOR NANONEUROSCIENCE; 2: NANOPOROUS MEMBRANE-BASED MICROFLUIDIC BIOSENSORS; 3: NANOPARTICLE-BASED MICROFLUIDIFIC BIOSENSORS; 4: MICROFLUIDIC ENZYMATIC REACTORS USING NANOPARTICLES; 5: MICROFLUIDIC DEVICES FOR NANODRUG DELIVERY; 6: MICROCHIP AND CAPILLARY ELECTROPHORESIS USING NANOPARTICLES; 7: PILLARS AND PILLAR ARRAYS INTEGRATED IN MICROFLUIDIC CHANNELS: FABRICATION METHODS AND APPLICATIONS IN MOLECULAR AND CELL BIOLOGY; 8: NANOCATALYSIS IN MICROREACTOR FOR FUELS 9: MICROFLUIDIC SYNTHESIS OF IRON OXIDE AND OXYHYDROXIDE NANOPARTICLES10: METAL NANOPARTICLE SYNTHESIS IN MICROREACTORS; INDEX
Sommario/riassunto	Explores the latest applications arising from the intersection of nanotechnology and microfluidics In the past two decades,

1.

microfluidics research has seen phenomenal growth, with many new and emerging applications in fields ranging from chemistry, physics, and biology to engineering. With the emergence of nanotechnology, microfluidics is currently undergoing dramatic changes, embracing the rising field of nanofluidics. This volume reviews the latest devices and applications stemming from the merging of nanotechnology with microfludics in such areas as drug discovery, bio-sensing, catalysi