1. Record Nr. UNINA9910253867303321

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Titolo	Pharmaceutical Nanotechnology : Fundamentals and Practical Applications / / by Costas Demetzos
Pubbl/distr/stampa	Singapore : , : Springer Singapore : , : Imprint : Adis, , 2016
ISBN	981-10-0791-8
Edizione	[1st ed. 2016.]
Descrizione fisica	1 online resource (XXVIII, 203 p. 44 illus., 17 illus. in color.)
Disciplina	615.19
Soggetti	Pharmaceutical technology Pharmacy Chemotherapy Pharmaceutical Sciences/Technology Pharmacotherapy
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Part I -- 1. Introduction to Nanotechnology -- 2. Fundamentals of Physical Pharmacy: The Biophysics of Nanosystems -- Part II -- 3. Application of Nanotechnology in Imaging and Diagnostics -- 4. Application of Nanotechnology in Drug Delivery and Targeting -- Part III -- 5. Application of Nanotechnology in Modified Release Systems -- 6. Nano- and Bio- Toxicity -- 7. Regulatory Framework for Nanomedicines.
Sommario/riassunto	This textbook explains the fundamental aspects of nanotechnology and fills the gap between bio-inspired nanotechnological systems and functionality of living organisms, introducing new insights to their physicochemical, biophysical and thermodynamic behaviour. Addressed to all those involved in recent advances in pharmaceutics, this book is divided in three major parts: Part A refers to the physicochemical and thermodynamics aspects of nanosystems, wherein their biophysical behaviour is correlated with that of the cells of living organisms; Part B refers to the application of nanotechnology in imaging, diagnostics and therapeutics; Part C is focused on issues regarding safety and nanotoxicity of nanosystems, and the regulatory framework that surrounds these. The text promotes the concept that biophysics,

thermodynamics and nanotechnology are considered to be emerging tools that, when approached within regulatory boundaries, provide new and integrated knowledge for the production of new medicines.