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Soggetti	Biomedical engineering Pharmaceutical technology Systems biology Biological systems Nanotechnology Nanochemistry Biomedical Engineering and Bioengineering Pharmaceutical Sciences/Technology Systems Biology
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Nota di contenuto	Basic principles of biophysics -- Basic principles of thermodynamics -- Thermal behavior of bio- and nanomaterials and nanobiosystems -- Techniques -- Biomembranes and Dental materials; biophysical and thermodynamic considerations -- The biophysical and thermodynamic fingerprint of nanosystems. -- Thermal analysis techniques and thermodynamics -- Nanothermodynamics.
Sommario/riassunto	This book highlights the recent advances of thermodynamics and biophysics in drug delivery nanosystems and in biomedical nanodevices. The up-to-date book provides an in-depth knowledge of bio-inspired nanotechnological systems for pharmaceutical applications. Biophysics and thermodynamics, supported by mathematics, are the locomotive by which the drug transportation and the targeting processes will be achieved under the light of the modern

pharmacotherapy. They are considered as scientific tools that promote the understanding of physicochemical and thermotropic functionality and behavior of artificial cell membranes and structures like nanoparticulate systems. Therefore, this book focusses on new aspects of biophysics and thermodynamics as important elements for evaluating biomedical nanosystems, and it correlates their physicochemical, biophysical and thermodynamical behaviour with those of a living organism.