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Titolo	Design of Self-Assembling Materials / / edited by Ivan Coluzza
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Descrizione fisica	1 online resource (IX, 132 p. 26 illus., 25 illus. in color.)
Disciplina	610.28
Soggetti	Biomedical engineering Biochemical engineering Nanotechnology Biophysics Polymers Biomedical Engineering/Biotechnology Biochemical Engineering Biological and Medical Physics, Biophysics Polymer Sciences
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Design of Polymeric Self-Assembling Materials and Nanocomposites in the semi-dilute density regime: Multiscale Modeling -- Modeling the effective interactions between heterogeneously charged colloids to design responsive self-assembled materials -- A mesoscopic computational approach to DNA-based materials -- Experimental study of self-assembling systems characterized by directional interactions -- Multi-scale approach for self-Assembly and protein folding.
Sommario/riassunto	This book provides in-depth insights into assembling dynamics of proteins, DNA and other nanoparticles. The applications of basic knowledge in the development of artificial self-assembling systems will be discussed and state of the art methodology in the field will be presented. This interdisciplinary work brings together aspects of different fields of expertise such as Biology, Physics and Material Sciences and is intended for researchers, professors and graduate

students interested in the design of self-assembling materials.
