

1. Record Nr.	UNINA9910806884503321
Titolo	Bionanotechnology : biological self-assembly and its applications // edited by Bernd H.A. Rehm
Pubbl/distr/stampa	Norfolk, England : , : Caister Academic Press, , [2013] ©2014
ISBN	1-908230-81-9
Descrizione fisica	1 online resource (321 p.)
Disciplina	660.6
Soggetti	Biotechnology Nanotechnology Ultrastructure (Biology)
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	Contents; Contributors; Preface; Ch 01: Polyhydroxyalkanoate Inclusions: Polymer Synthesis, Self-assembly and Display Technology; Ch 02: Self-assembly and Application of Cellulosomal Components; Ch 03: Protein-aided Mineralization of Inorganic Nanostructures; Ch 04: Amyloid Fibrils as Bionanomaterials; Ch 05: Bacteriophages: Self-assembly and Applications; Ch 06: Bio-inspired Biomolecular Supramolecular Self-assemblies and their Applications; Ch 07: Virus-like Particles; Ch 08: Plant Oil Bodies and Oleosins: Structure, Function and Biotechnological Applications Ch 09: Visual Restoration using Microbial Rhodopsins Ch 10: Magnetosomes; Ch 11: Liposome-Nanoparticle Assemblies; Index
Sommario/riassunto	The emerging science of bionanotechnology refers to the harnessing of the vast diversity of self-assembling building blocks and processes for the assembly of nano-scaled structures for the manufacture of highly functional nanomaterials. Bionanotechnology is an interdisciplinary field. It combines biological principles with physical and chemical procedures to generate nano-sized building blocks and materials with specific functions and new properties. It involves the development of biologically-based procedures, the use of biological components and systems, the design of biocompatible objects a

