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Nota di contenuto	Peptide-Nano particle Strategies, Interactions and Challenges -- Fundamentals of Peptide-Materials Interfaces -- Experimental Characterization of Peptide-Surface Interactions -- Interfacial Structure Determination -- Understanding Bio mineral Growth and Assembly for Engineering Novel Green Nanomaterials -- Understanding Molecular Recognition on Metallic and Oxidic Nanostructures from a Perspective of Computer Simulation and Theory -- Bio-Inspired Nano catalysis -- Addressable Biological Functionalization of Inorganics: Materials-Selective Fusion Proteins in Bio-Nanotechnology -- Environmental Interactions of Geo and Bio-Macromolecules with Nanomaterials --

	Mimicking Bio mineral Systems: What Have We Achieved and Where Do We Go From Here?.
Sommario/riassunto	This book focuses on the use of bio-inspired and biomimetic methods for the fabrication and activation of nanomaterials. This includes studies concerning the binding of the biomolecules to the surface of inorganic structures, structure/function relationships of the final materials, and extensive discussions on the final applications of such biomimetic materials in unique applications including energy harvesting/storage, biomedical diagnostics, and materials assembly. This book also: · Covers the sustainable features of bio-inspired nanotechnology · Includes studies on the unique applications of biomimetic materials, such as energy harvesting and biomedical diagnostics Bio-Inspired Nanotechnology: From Surface Analysis to Applications is an ideal book for researchers, students, nanomaterials engineers, bioengineers, chemists, biologists, physicists, and medical researchers.