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Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Bio-inspired and bio-hybrid materials -- Biomimetic surfaces -- Tissue engineering -- Biomineralization -- Synthetic biology -- Artificial cells -- Drug delivery -- DNA and RNA nanotechnology -- Mimicking biological phenomena and concepts.
Sommario/riassunto	Biological systems have always inspired mankind in the creation of new systems and technologies. In recent years the interface between the biological and non-biological worlds appears increasingly blurred due to significant advances both in our understanding of biological phenomena, as well as the development of sophisticated means to manipulate molecular systems for varied applications. Biomimetics as a distinct discipline shows how biology and biological processes are manifested in diverse aspects of chemistry, physics and engineering. This book aims to methodically describe artificial and synthetic assemblies mimicking biological and living systems - from biomaterials to drug discovery to microelectronics and computer sciences.