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Descrizione fisica	1 online resource (X, 666 p. 143 illus., 126 illus. in color.)
Collana	Gels Horizons: From Science to Smart Materials, , 2367-007X
Disciplina	660.6
Soggetti	Biotechnology Microtechnology Microelectromechanical systems Enzymology Nanotechnology Microsystems and MEMS
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Nota di contenuto	Immobilization: Then and Now -- Cell immobilization strategies for tissue engineering: Recent trends and future perspectives -- Strategies and advancement in growth factor immobilizable ECM for tissue engineering -- Prospects Of Cell Immobilization In Cancer Research And Immunotherapy -- Nano systems for repairing retinal degeneration -- Systemic drug delivery to the posterior segment of the eye: Overcoming blood-retinal barrier through smart drug design and nanotechnology -- The effects of irradiation with cold atmospheric-pressure plasma on cellular function -- Immobilization of biomolecules on plasma functionalized surfaces for biomedical applications -- A wide portray of Upconversion-nanoparticles: surface modification for bio-applications -- Advances in Amphiphilic Assemblies and its Immobilization in Room Temperature Supercooled Matrices. .
Sommario/riassunto	This book delves into the field of immobilizing biologically active and non-active molecules. It discusses the designing strategy of immobilization and the current state-of-the-art applications for advancing biomedical, agricultural, environmental and industrial practices. It focuses on aspects ranging from fundamental principles to

current technological advances at multi-scale levels (macro, micro, and nano) which are suitable for cell, enzyme, and nano-catalyst based applications. Written by experts from across the globe, the contents deal with illustrated examples of molecular and cellular interactions with materials/scaffolds and discussions on factors that can affect the functionality and yield of the process. With its discussions on material science, design of delivery vehicles, separation science, additive manufacturing, agriculture and environmental science, this book will be a useful reference for researchers across multiple disciplines.

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