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Titolo	Bio-Inspired Silicon-Based Materials // edited by Paul M. Zelisko
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Descrizione fisica	1 online resource (132 p.)
Collana	Advances in Silicon Science, , 1875-3108 ; ; 5
Disciplina	546.683
Soggetti	Inorganic chemistry Polymers Biochemical engineering Biomaterials Inorganic Chemistry Polymer Sciences Biochemical Engineering
Lingua di pubblicazione	Inglese
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Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	1 Silicon in a Biological Environment -- 2 The Role of Silicates in the Synthesis of Sugars Under Prebiotic Conditions -- 3 Protease-Mediated Hydrolysis and Condensation of Tetra- and Trialkoxysilanes -- 4 Bioinspired Silica for Enzyme Immobilisation: A Comparison with Traditional Methods -- 5 On The Immobilization of Candida Antarctica Lipase B onto Surface Modified Porous Silica Gel Particles -- 6 Enzymatic Modification and Polymerization of Siloxane-Containing Materials -- 7 Design and Thermal Properties of Interpenetrating and Intercrosslinked Biosilicate Materials -- 8 Bioactive Amino Acids, Peptides and Peptidomimetics Containing Silicon.
Sommario/riassunto	The contributed volume addresses a wide range of topics including, but not limited to, biotechnology, synthetic chemistry, polymer chemistry and materials chemistry. The book will serve as a specialized review of the field of biologically inspired silicon-based structures. Researchers studying biologically inspired silicon materials chemistry will find this volume invaluable.

