

1. Record Nr.	UNINA9910140767303321
Titolo	Biocatalysis in polymer chemistry [[electronic resource] /] / edited by Katja Loos
Pubbl/distr/stampa	Weinheim, Germany, : Wiley-VCH, 2011
ISBN	3-527-63255-7 1-282-81783-3 9786612817830 3-527-63253-0 3-527-63254-9
Edizione	[4th ed.]
Descrizione fisica	1 online resource (465 p.)
Altri autori (Persone)	LoosKatja
Disciplina	668.9
Soggetti	Polymers - Biotechnology Polymerization Polymers Enzymes
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	Biocatalysis in Polymer Chemistry; Contents; Preface; List of Contributors; List of Abbreviations; 1: Monomers and Macromonomers from Renewable Resources; 2: Enzyme Immobilization on Layered and Nanostructured Materials; 3: Improved Immobilization Supports for Candida Antarctica Lipase B; 4: Enzymatic Polymerization of Polyester; 5: Enzyme-Catalyzed Synthesis of Polyamides and Polypeptides; 6: Enzymatic Polymerization of Vinyl Polymers; 7: Enzymatic Polymerization of Phenolic Monomers; 8: Enzymatic Synthesis of Polyaniline and Other Electrically Conductive Polymers 9: Enzymatic Polymerizations of Polysaccharides 10: Polymerases for Biosynthesis of Storage Compounds; 11: Chiral Polymers by Lipase Catalysis; 12: Enzymes in the Synthesis of Block and Graft Copolymers; 13: Biocatalytic Polymerization in Exotic Solvents; 14: Molecular Modeling Approach to Enzymatic Polymerization; 15: Enzymatic Polymer Modification; 16: Enzymatic Polysaccharide Degradation; Index
Sommario/riassunto	Searching for green and environmentally friendly polymerization

methods by using enzymes? This first handbook on this hot and essential topic contains the whole chain of knowledge of biocatalysis in polymer chemistry in both a comprehensive and compact form. International leading experts cover all important aspects, from enzymatic monomer synthesis to polymer modification and degradation. While the major focus of the book is on enzymatic polymerizations of the polymer classes reported so far, industrial contributions are also included, making this invaluable reading for biochemists and pol
