

1. Record Nr.	UNINA9910841258303321
Titolo	Molecular recognition and polymers [[electronic resource]] : control of polymer structure and self-assembly // edited by Vincent M. Rotello, S. Thayumanavan
Pubbl/distr/stampa	Hoboken, N.J., : Wiley, c2008
ISBN	1-281-75213-4 9786611752132 0-470-38405-0 0-470-38404-2
Descrizione fisica	1 online resource (492 p.)
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Disciplina	547 547.1226
Soggetti	Biomimetic polymers Molecular recognition Supramolecular chemistry
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	MOLECULAR RECOGNITION AND POLYMERS; CONTENTS; Preface; Acknowledgments; List of Contributors; List of Figures; List of Tables; Editor Biographies; PART I FUNDAMENTALS OF SUPRAMOLECULAR POLYMERS; 1. A BRIEF INTRODUCTION TO SUPRAMOLECULAR CHEMISTRY IN A POLYMER CONTEXT; 1.1. Introduction and Background; 1.2. Main-Chain Versus Side-Chain Supramolecular Polymers; References; 2. MOLECULAR RECOGNITION USING AMPHIPHILIC MACROMOLECULES; 2.1. Introduction; 2.2. Amphiphilic Block Copolymers; 2.2.1. Nonspecific Interactions; 2.2.2. Specific Interactions; 2.3. Amphiphilic Homopolymers 2.3.1. Container Properties2.3.2. Recognition of Protein Surfaces; 2.3.3. Protein Sensing; 2.3.4. Recognition and Detection of Peptides; 2.4. Amphiphilic Dendrimers; 2.5. Conclusions; Acknowledgment; References; 3. SUPRAMOLECULAR CONTROL OF MECHANICAL PROPERTIES IN SINGLE MOLECULES, INTERFACES, AND MACROSCOPIC

MATERIALS; 3.1. Introduction and Background; 3.2. Mechanical Properties of Linear SPs; 3.3. Mechanical Properties of SP Networks; 3.4. Mechanical Properties in SPs at Interfaces; 3.5. Mechanical Forces and Supramolecular Interactions; 3.6. Conclusions; References

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Sommario/riassunto

State-of-the-art techniques for tapping the vast potential of polymers. The use of specific non-covalent interactions to control polymer structure and properties is a rapidly emerging field with applications in diverse disciplines. Molecular Recognition and Polymers covers the fundamental aspects and applications of molecular recognition-in the creation of novel polymeric materials for use in drug delivery, sensors, tissue engineering, molecular imprinting, and other areas. This reference begins by explaining the fundamentals of supramolecular polymers; it progresses to cover poly
