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Nota di contenuto	The Power of Functional Resins in Organic Synthesis; Contents; Preface; Part One: Introduction; 1: The (Classic Concept of) Solid Support; 1.1 Introduction; 1.2 Linkers/Handles; 1.3 Solid Supports; 1.3.1 Gel-Type Support; 1.3.1.1 Polystyrene (PS) Resins; 1.3.1.2 Poly(Ethylene Glycol)-Polystyrene (PEG-PS) Resins; 1.3.1.3 Hydrophilic PEG-Based Resins; 1.3.2 Modified Surface Type Supports; 1.3.2.1 Cellulose Membranes; 1.3.2.2 Polyolefinic Membranes; 1.3.2.3 Pellicular Solid Supports; Acknowledgments; References; 2: Molecularly Imprinted Polymers; 2.1 Introduction 2.2 The Concept of Molecular Imprinting2.2.1 Non-covalent Molecular Imprinting; 2.2.2 Covalent Molecular Imprinting; 2.2.3 Semi-covalent Molecular Imprinting; 2.2.4 Metal Ion Mediated Molecular Imprinting; 2.3 Formats of Molecularly Imprinted Polymers; 2.3.1 Irregularly Shaped Particles; 2.3.2 Beads; 2.3.2.1 Homogeneous Polymerization;

2.3.2.2 Heterogeneous Polymerization; 2.3.2.3 Two-Step Swelling Polymerization; 2.3.2.4 Core-Shell Polymerization; 2.3.2.5 Silica Composite Beads; 2.3.3 Films and Membranes; 2.4 Design of MIPs; 2.4.1 Functional Monomers; 2.4.2 Cross-linking Monomers
2.4.3 The Porogen2.4.4 Initiation of Polymerization; 2.4.5 Optimization of Imprinting Conditions; 2.5 Characterization of Molecularly Imprinted Polymers; 2.5.1 Characterization of Binding Properties of MIPs; 2.5.2 Characterization of Chemical and Physical Properties of MIPs; 2.6 Applications of Molecularly Imprinted Polymers; 2.6.1 Liquid Chromatography; 2.6.2 Solid-Phase Extraction; 2.6.3 Solid-Phase Binding Assay; 2.6.4 Sensors; 2.6.4.1 Optical Sensors; 2.6.4.2 Mass Sensitive Sensors; 2.6.4.3 Electrochemical Sensors; 2.6.5 Synthetic Enzymes; 2.7 Conclusions; References
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4.3.1.1 Solid-Supported Hypervalent Iodine Reagents

Sommario/riassunto

While many books cover solid phase synthesis and combinatorial synthesis, this one is unique in its exclusive coverage of the other aspects of solid-phase synthesis. As such, it contains everything you need to know -- from supported reagents, to scavengers, resins, and the synthesis of biomolecules and natural products.An invaluable companion for all chemists and biochemists working in university research and industry.