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	<ul> <li>1.3.4.2 Intramolecular [n+2] Cyclization Reactions; 1.3.4.3</li> <li>Intermolecular [n+2+2] Cyclotrimerization Reactions; 1.3.4.4 [2+2+1]</li> <li>Cycloaddition Reactions; The Pauson-Khand Reaction</li> <li>1.3.4.5 Cycloisomerization Reactions1.3.4.6 Indole-Forming Reaction;</li> <li>1.3.4.7 Furan- and Pyrrole-Forming Reactions; 1.3.5 Reactions</li> <li>Involving Nucleophilic Addition of Carbonyl Compounds; 1.3.5.1 The</li> <li>Aldol Reaction; 1.3.5.2 Alkynylation Reactions; 1.3.5.3 Conjugate</li> <li>Addition Reactions; 1.3.6 Miscellaneous Reactions; 1.3.6.1 Transition</li> <li>Metal Catalyzed Reactions; 1.3.6.2 Lewis Acid Catalyzed Reactions;</li> <li>1.3.6.3 Sequential Reactions; References; 2 Zinc Polymetallic</li> <li>Asymmetric Catalysis; 2.1 Introduction; 2.2 Asymmetric Alternating</li> <li>Copolymerization with Dimeric Zn Complexes</li> <li>2.3 Direct Catalytic Asymmetric Aldol Reaction with Zn Polymetallic</li> <li>Catalysts2.3.1 Introduction; 2.3.2 Direct Catalytic Asymmetric Aldol</li> <li>Reaction with Methyl Ketones; 2.4 Direct Catalytic Asymmetric Aldol</li> <li>Reaction with Hydroxy Ketones; 2.4 Direct Catalytic Asymmetric Manich-Type Reactions; 2.5 Direct Catalytic Asymmetric Michael</li> <li>Reaction; 2.6 Nitroaldol (Henry) Reaction; 2.7 Conclusions; References;</li> <li>3 Group 13-Alkali Metal Heterobimetallic Asymmetric Catalysis; 3.1</li> <li>Introduction; 3.2 Catalytic Asymmetric Michael Reaction of Stabilized</li> <li>Carbon Nucleophiles</li> <li>3.2.1 Development of ALB - The First Example of a Group 13-Alkali</li> <li>Metal Heterobimetallic Catalysts - Self-Assembly of</li> <li>Heterobimetallic Catalysts and Reactive Nucleophiles; 3.3.1 Ring-Opening Reaction with Thiols; 3.3.2 Ring-Opening Reaction with</li> <li>Phenolic Oxygen - Development of a Novel Linked-BINOL Complex; 3.4</li> <li>Catalytic Asymmetric Mannich Reactions; 3.4.1 Direct Catalytic</li> <li>Asymmetric Mannich-Type Reaction of Unmodified Ketones</li> <li>3.4.2 Enantio- and Diastereoselective Catalytic Nitro-Manni</li></ul>
Sommario/riassunto	This first book to comprehensively cover this hot topic presents the information hitherto scattered throughout smaller reviews or single book chapters to provide an introduction to this rapidly expanding field. In ten chapters, the international team of expert authors treats asymmetric syntheses, new transformations, and organometallic reactions using homo- and hetero-bimetallic catalysts. Written for advanced researchers, this very timely publication is of significant benefit to organic and organometallic chemists in both academia and industry.