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Nota di contenuto	Cinchona Alkaloids in Synthesis and Catalysis: Ligands, Immobilization and Organocatalysis; Contents; Preface; Biography; List of Contributors; 1 An Overview of Cinchona Alkaloids in Chemistry; 1.1 Brief History; 1.2 Active Sites in Cinchona Alkaloids and Their Derivatives; 1.3 Structural Information on Cinchona Alkaloids; 1.4 How This Book Is Organized; References; Part One: Cinchona Alkaloid Derivatives as Chirality Inducers in Metal-Catalyzed Reactions; 2 Cinchona Alkaloids as Chirality Transmitters in Metal-Catalyzed Asymmetric Reductions; 2.1 Introduction 2.2 Homogeneous Systems for Ketone Reductions 2.3 Heterogeneous Pt and Pd Catalysts Modified with Cinchona Alkaloids; 2.3.1 Background; 2.3.2 Catalysts; 2.3.3 Modifiers and Solvents; 2.3.4 Substrate Scope for Pt Catalysts; 2.3.4.1 -Keto Acid Derivatives; 2.3.4.2 ,-Diketo Esters; 2.3.4.3 Fluorinated Ketones; 2.3.4.4 -Keto Acetals; 2.3.4.5 -Keto

Ethers; 2.3.4.6 Miscellaneous Ketones; 2.3.5 Substrate Scope for Pd Catalysts; 2.4 Industrial Applications; 2.5 Conclusions; References; 3 Cinchona Alkaloids as Chiral Ligands in Asymmetric Oxidations; 3.1 Introduction
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4.3.3 Pauson-Khand Reaction

Sommario/riassunto

This comprehensive review of cinchona-based chirality inducers and their applications covers every topic, including ligands, immobilization and organocatalysis. Each chapter summarizes the scope and limitations of the new methods and technologies, while the final chapter contains carefully selected working procedures of cinchona alkaloid-promoted reactions organized according to reaction type. Invaluable reading for anyone wanting to learn about the current state of this hot topic.
