1. Record Nr. UNINA9910821673803321 Stereoselective multiple bond-forming transformations in organic **Titolo** synthesis / / edited by Jean Rodriguez and Damien Bonne; foreword by Dieter Enders; contributors, Muriel Amatore [and thirty-nine others] Hoboken, New Jersey:,: Wiley,, 2015 Pubbl/distr/stampa ©2015 **ISBN** 1-119-00642-2 1-119-00622-8 1-119-00632-5 Descrizione fisica 1 online resource (472 p.) Disciplina 547.2 Soggetti Organic compounds - Synthesis Stereochemistry Chemical reactions Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Includes bibliographical references at the end of each chapters and Nota di bibliografia index. Nota di contenuto Cover; Title Page; Copyright; Contents; List of Contributors; Foreword; Preface; Chapter 1 Definitions and Classifications of MBFTs; 1.1 Introduction; 1.2 Definitions; 1.3 Conclusion and Outlook; References; Part I Stereoselective Synthesis of Heterocycles; Chapter 2 Five-Membered Heterocycles; 2.1 Introduction; 2.2 Monocyclic Targets; 2.2.1 1,3-Dipolar Cycloaddition; 2.2.2 Michael Addition-Initiated Domino Process; 2.2.3 Multicomponent Reactions; 2.2.4 Carbohalogenation Reactions; 2.2.5 Radical Processes; 2.3 Fused Polycyclic Targets; 2.3.1 Cycloaddition Reactions 2.3.2 Domino Cyclization Reactions 2.4 Bridged Polycyclic Targets; 2.5 Conclusion and Outlook; References; Chapter 3 Six-Membered Heterocycles: 3.1 Introduction: 3.2 Monocyclic Targets: 3.2.1 Nitrogen-Only Heterocycles; 3.2.2 Oxygen-Containing Heterocycles; 3.3 Fused Polycyclic Targets; 3.3.1 Nitrogen-Only Fused Polycyclic Targets; 3.3.2 Oxygen-Containing Fused Polycyclic Targets; 3.3.3 Sulfur-Containing Fused Polycyclic Targets; 3.4 Bridged Polycyclic Targets; 3.4.1 General

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Sommario/riassunto

Make synthesis more green, efficient, and economical Stereoselective multiple bond-forming transformations (MBFTs), which use one synthetic operation to selectively create at least two chemical bonds, decrease the total number of steps and increase atom economy while maximizing structural complexity and the functional diversity. In consequence, they reduce the amount of waste, money, and negative environmental impact of chemical processes. Combining such an important research topic with green chemistry, this book helps chemists identify sustainable stereoselective MBFTs. Along with the discu