1. Record Nr. UNINA9910830777503321 Diversity-oriented synthesis [[electronic resource]]: basics and **Titolo** applications in organic synthesis, drug discovery, and chemical biology // edited by Andrea Trabocchi Hoboken, N.J., : Wiley, c2013 Pubbl/distr/stampa **ISBN** 1-118-61811-4 1-118-61794-0 1-118-61814-9 Descrizione fisica 1 online resource (681 p.) Classificazione SCI013040 Altri autori (Persone) TrabocchiAndrea 547/.2 Disciplina Soggetti Organic compounds - Synthesis Drug development Biosynthesis 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 at the end of each chapters and index. Nota di contenuto Machine generated contents note: Foreword Stuart L. Schreiber Preface List of Contributors Abbreviations 1 The Basics of Diversity-Oriented Synthesis Kieron M. G. O'Connell, Warren R. J. D. Galloway and David R. Spring 1.1 Introduction 1.2 What is Diversity-Oriented Synthesis? 1.3 Small Molecules and Biology 1.4 Comparing DOS, TOS and Combinatorial Chemistry (Focused Library Synthesis) 1.5 Molecular Diversity 1.6 Molecular Diversity and Chemical Space 1.7 Synthetic Strategies for Creating Molecular Diversity 1.8 Reagent-Based Approaches to Diversity Generation 1.9 A Substrate-Based Approach to Skeletal Diversity Generation 1.10 Other Build/Couple/Pair Examples 1.11 Concluding Remarks 1.12 References Part I Chemical Methodology in Diversity-Oriented Synthesis 2 Strategies Applications of Multicomponent Reactions (MCRs) to Diversity-Oriented Synthesis John M. Knapp, Mark J. Kurth, Jared T. Shaw and Ashkaan Younai 2.1 Introduction 2.2 MCR Products for HTS 2.3 MCRs as Starting Points for DOS 2.4 Conclusion 2.5 References 3 Cycloaddition Reactions in Diversity-Oriented Synthesis Giovanni Muncipinto 3.1 Introduction 3.2

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Sommario/riassunto

"This book overviews diversity-oriented synthesis (DOS), one of the leading and dynamic topics in organic chemistry and drug discovery"--