Record Nr.	UNINA9910812298003321
Titolo	Strategies and tactics in organic synthesis / / edited by Michael Harmata
Pubbl/distr/stampa	Amsterdam, : Elsevier Academic Press, 2005
ISBN	1-280-63068-X 9786610630684 0-08-045884-X
Edizione	[1st ed.]
Descrizione fisica	1 online resource (501 p.)
Collana	Strategies and tactics in organic synthesis ; ; 6
Altri autori (Persone)	HarmataMichael
Disciplina	547/.2
Soggetti	Organic compounds - Synthesis Chemistry, Organic
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 and indexes.
Nota di contenuto	COVER; STRATEGIES AND TACTICS IN ORGANIC SYNTHESIS; Copyright Page; CONTENTS; CONTRIBUTORS; Foreword; Preface; Dedication; CHAPTER 1. THE TOTAL SYNTHESIS OF LUZOPEPTINS; I. Introduction; II. Background; III. Synthesis of Quinaldic Acid and gly-sar-mhv Tripeptide Fragments; IV. Synthesis and Chemistry of the Piperazic Acid Fragment; V. Initial Cyclization Experiments; VI. The Total Synthesis; VII. Epilogue; VIII. Acknowledgements; References and Footnotes; CHAPTER 2. SYNTHESIS OF GELDANAMYCIN USING GLYCOLATE ALDOL REACTIONS; I. Introduction; II. Retrosynthetic Analysis III. Ansamycin Antitumor AntibioticsIV. Synthesis of the C12-C21 Quinone Precursor Portion using Evans Asymmetric Alkylation; V. Development of Anti-Selective Glycolate Aldol Methodology Based on the 2,3-Diary1 1,4-Dioxan-5-one Template; VI. Installation of the C11-12 Hydroxy Methoxy Functionality; VII. Difficulties Associated with the C10 methyl and the C8-9 Trisubstituted Alkene; VIII. Syn Glycolate Aldol Methodology Based on the Masamune Norephedrine Auxiliary; IX. Construction of the C2-5 Diene and Macrolactamization; X. Unsuccessful RCM-Based Convergent Approach XI. Unanticipated Problematic Para-Quinone FormationXII. Successful Strategy for Para-Quinone formation Using a 1,4-Di-Protected Hydroquinone Precursor; XIII. Conclusions; References and Footnotes;

1.

	CHAPTER 3. FROM METHYLENE BRIDGED GLYCOLURIL DIMERS TO CUCURBIT[N]URIL ANALOGS WITH SOME DETOURS ALONG THE WAY; I. Introduction; II. Retrosynthetic Analysis of the Cucurbit[n]uril Family; III. A Few Lucky Breaks Lead to C- and S-Shaped Methylene Bridged Glycoluril Dimers; IV. The Hard Work; V. Three Related Synthetic Procedures Lead to S- and C-shaped Methylene Bridged Glycoluril Dimers VI. Interlude. Molecular Clips Capable of Enantiomeric Self-Recognition, Heterochiral Recognition, and Self-SortingVII. Implications for the Mechanism of CB[n] Formation and the Synthesis of Cucurbit[n]uril Derivatives; VIII. Mechanism of the S- to C-Shaped Interconversion and Implications for the Synthesis of Cucurbit[n]uril Derivatives; IX. Methylene Bridged Glycoluril Oligomers; X. Phthalhydrazides are Nucleophilic Glycoluril Surrogates; XI. Cucurbit[n]uril Analogs; XII. Conclusions; References and Footnotes CHAPTER 4. APPLICATION OF SILICON-ASSISTED INTRAMOLECULAR CROSS-COUPLING IN TOTAL SYNTHESIS OF (+)-BRASILENYNEI. Introduction and Background; II. Preliminary Studies; III. Synthetic Strategies; IV. Synthesis of (+)-Brasilenyne; V. Conformational Analysis; VI. Summary; References and Footnotes; CHAPTER 5. SAMARIUM(II) PROMOTED KETYL OLEFIN CYCLIZATIONS APPLIED TO THE TOTAL SYNTHESES OF (-)-STEGANONE AND (+)-ISOSCHIZANDRIN; I. Introduction; II. Samarium(II) Promoted Ketyl-Olefin Cyclizations; III. Total Synthesis of (-)-Steganone; IV. Total Synthesis of (+)- Isoschizandrin; V. Conclusion References and Footnotes
Sommario/riassunto	A classic in the area of organic synthesis, Strategies and Tactics in Organic Synthesis provides a forum for investigators to discuss their approach to the science and art of organic synthesis. Rather than a simple presentation of data or a second-hand analysis, we are given stories that vividly demonstrate the power of the human endeavour known as organic synthesis and the creativity and tenacity of its practitioners. First hand accounts of each project tell of the excitement of conception, the frustration of failure and the joy experienced when either rational thought and/or good fortune giv