1. Record Nr. UNISA996201908803316

Titolo	Solid-phase organic synthesis [[electronic resource] /] / edited by Kevin Burgess
Pubbl/distr/stampa	New York, : Wiley-Interscience, c2000
ISBN	1-280-54169-5 9786610541690 0-471-45845-7 0-471-22824-9
Descrizione fisica	1 online resource (294 p.)
Altri autori (Persone)	BurgessKevin L. <1968->
Disciplina	547.2 547/.2
Soggetti	Organic compounds - Synthesis Solid-phase synthesis
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 index.
Nota di contenuto	CONTENTS; PREFACE; CONTRIBUTORS; 1 SOLID-PHASE SYNTHESES OF GUANIDINES; 1.1. Introduction; 1.2. Outline of Some Solution-Phase Approaches to Guanidines; 1.3. Solid-Phase Syntheses Involving Resin-Bound Electrophiles; 1.4. Solid-Phase Syntheses Involving Electrophiles in Solution; 1.5. Other Supported Guanidines; 1.6. Conclusion; References; 2 PALLADIUM-CATALYZED CARBON-CARBON BOND FORMATION ON SOLID SUPPORT; 2.1. Introduction; 2.2. Heck Reaction; 2.3. Stille Reaction; 2.4. Suzuki Reaction; 2.5. Miscellaneous Reactions; 2.6. Concluding Remarks; References 3 BENZOFUSED HETEROCYCLES VIA SOLID-PHASE S[sub(N)]AR REACTIONS3.1. Introduction; 3.2. Formation of [6,7]- and [6,8]-Fused Systems; 3.3. Formation of [6,6]-Fused Systems; 3.4. Formation of [6,5] -Fused Systems; 3.5. Conclusions and Outlook; References; 4 SOLID-PHASE SYNTHESIS OF SEQUENCE-SPECIFIC PHENYLACETYLENE OLIGOMERS; 4.1. Introduction; 4.2. Strategies; 4.3. Synthetic Tactics; 4.4. Illustrative Applications; 4.5. Scope and Limitations; 4.6. Conclusion; 4.7. Representative Procedures; References; 5 POLYMER-ASSISTED SOLUTION-PHASE METHODS FOR CHEMICAL LIBRARY

SYNTHESIS; 5.1. Introduction
5.2. Reactant Sequestration5.3. Byproduct Sequestration; 5.4. Solution-Phase Derivatization to Facilitate Polymer-Assisted Sequestration; 5.5. Soluble Bifunctional Reagents; 5.6. Polymer-Supported Substrates; 5.7. Polymer-Supported Reagents; 5.8. Polymer-Supported Catalysts; 5.9. Polymers for Reaction Quenching/Workup; 5.10. Combinations of Solid- and Solution-Phase Techniques in Organic Synthesis; 5.11. Multistep/One-Chamber Solution-Phase Synthesis; 5.12. Polymer-Assisted Technologies in Multistep Solution-Phase Syntheses; 5.13. Conclusion; References
6 SOLID-PHASE ORGANIC SYNTHESIS ON RADIATION-GRAFTED POLYMER SURFACES: APPLICATION OF SYNPHASE CROWNS TO MULTIPLE PARALLEL SYNTHESES6.1. Multiple Parallel Syntheses of Individual Compounds; 6.2. Synthetic Applications of Synphase Crowns; 6.3. Linker Development Using Synphase Crowns; 6.4. Tagging Methods for Identifying Individual Crowns; 6.5. Future Developments; References; 7 VIBRATIONAL SPECTROSCOPY FOR OPTIMIZATION OF SOLID-PHASE ORGANIC SYNTHESES; 7.1. Introduction; 7.2. Spectroscopic Methods Applicable to Different Sample Sizes; 7.3. Optimization in Solid-Phase Organic Syntheses
7.4. ConclusionReferences; 8 RECENT ADVANCES IN SOLID-PHASE SYNTHESIS OF NATURAL PRODUCTS; 8.1. Introduction; 8.2. Prostaglandins; 8.3. Epothilone a; 8.4. (S)-Zearalenone; 8.5. DL-Muscone; 8.6. Taxoid Libraries from Baccatin III; 8.7. Sarcodictyin Libraries; 8.8. Lavendustin A; 8.9. Indolyl Diketopiperazines; 8.10. Balanol Analogs; 8.11. Pseudoalkaloids from Shikimic Acid; 8.12. Conclusions; References; INDEX; A; B; C; D; E; F; G; H; I; J; K; L; M; N; O; P; Q; R; S; T; U; V; W; Y; Z

Sommario/riassunto

Solid-Phase Organic Synthesis Edited by Kevin Burgess, Texas A & M University Efficient, high-throughput chemistry is now the focus of many research laboratories. Solid-phase organic syntheses are central to many of these combinatorial and parallel screening methodologies. Consequently, they have been a major scientific theme of the 1990s and promise to remain prominent for the first part of the new millennium. Indeed, a bewildering number of papers have entered the literature on this topic; some report minor modifications enabling transformation of solution-phase methods to a so