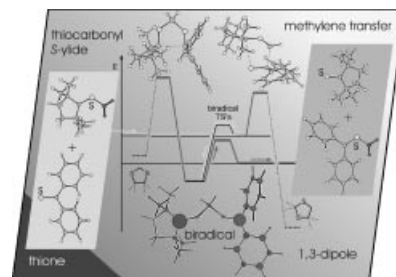


COVER PICTURE

The cover picture shows the potential energy diagram of methylene transfer from 4,4,5,5-tetramethylcyclopentane-thione *S*-methylide to thiobenzophenone via a biradical intermediate which wins over a possible formation of regioisomeric cycloadducts. Methylene transfer reactions together with 1,3-dipolar cycloadditions of other thiocarbonyl *S*-methylides to thiones are described by R. Huisgen et al. on p. 1519ff. DFT calculations on the mechanism of these reactions, concerted or stepwise, are reported by R. Sustmann et al. on p. 1505ff.



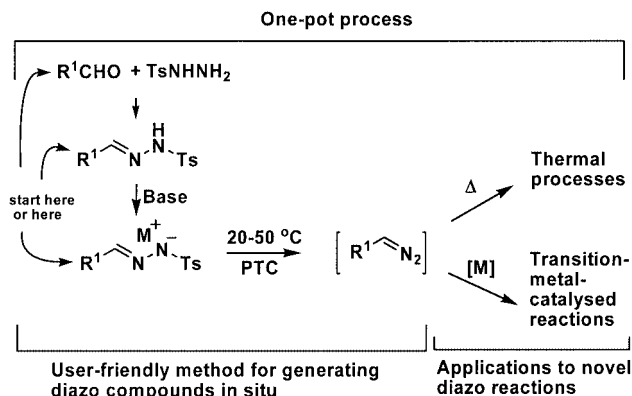
MICROREVIEW

Contents

1479 J. R. Fulton, V. K. Aggarwal,* J. de Vicente

The Use of Tosylhydrazone Salts as a Safe Alternative for Handling Diazo Compounds and Their Applications in Organic Synthesis

Keywords: Diazo compounds / Hydrazones / Bamford–Stevens reaction / Epoxidation / Aziridination / Cyclopropanation / Olefination / Pyrazoles / Homologation / Ether synthesis



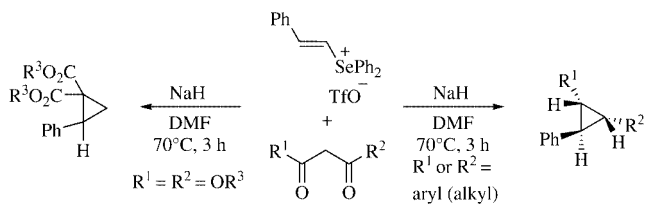
SHORT COMMUNICATIONS

1493 S. Watanabe,* I. Nakayama, T. Kataoka*



The Formation of Cyclopropane Derivatives Bearing 1,2-Dicarbonyl Groups through Tandem Michael–Favorskii-Type Reactions with (*E*)- β -Styrylselenonium Triflate

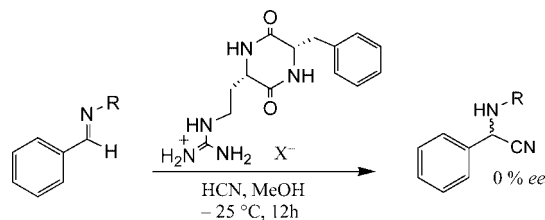
Keywords: Selenium / Domino reactions / Michael addition / Rearrangement / Ring contraction



1497 C. Becker, C. Hoben, D. Schollmeyer, G. Scherr, H. Kunz*

Investigation of Diketopiperazines Containing a Guanidino-Functionalized Sidechain as Potential Catalysts of Enantioselective Strecker Reactions

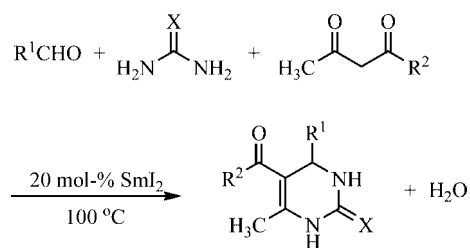
Keywords: Enantioselective catalysis / Strecker reaction / α -amino acid derivatives / Diketopiperazines



1500 X. Han, F. Xu, Y. Luo, Q. Shen*

An Efficient One-Pot Synthesis of Dihydropyrimidinones by a Samarium Diodide Catalyzed Biginelli Reaction Under Solvent-Free Conditions

Keywords: Biginelli reaction / Dihydropyrimidinone / Samarium / Catalysis / Synthetic methods



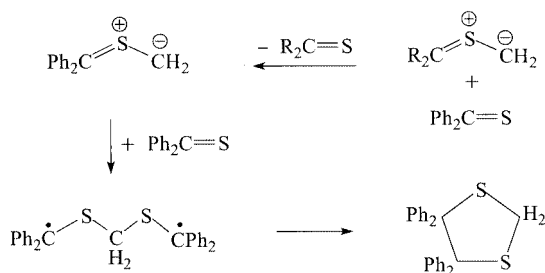
FULL PAPERS

1505 R. Sustmann,* W. Sicking, R. Huisgen



Cycloadditions and Methylene Transfer in Reactions of Substituted Thiocarbonyl *S*-Methylides with Thiobenzophenone: A Computational Study

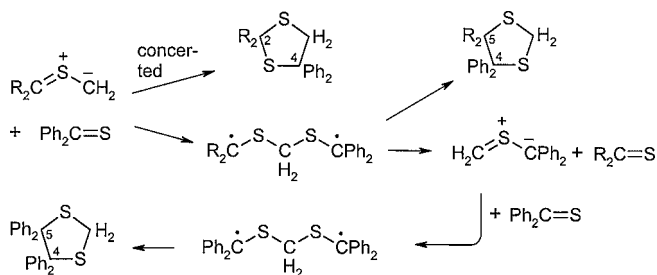
Keywords: Ab-initio calculations / DFT calculations / Cycloadditions / Thiocarbonyl ylide / Thioketone



1519 R. Huisgen,* G. Mloston, H. Giera, E. Langhals, K. Polborn, R. Sustmann

Aliphatic Thiocarbonyl Ylides and Thiobenzophenone: Experimental Study of Regiochemistry and Methylene Transfer in Cycloadditions

Keywords: Thiocarbonyl ylides / Cycloadditions / 1,3-Dithiolanes / Methylene transfer / Heterocycles

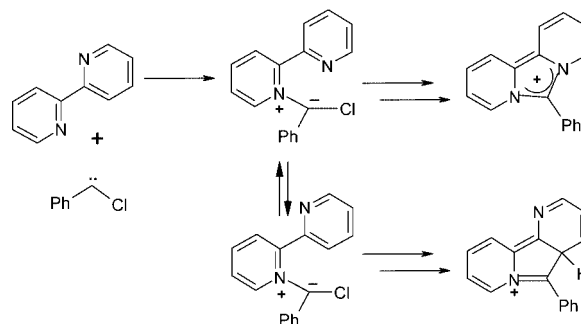


1532 R. Bonneau,* M. T. H. Liu



A Dipyridoimidazolium Salt from Phenylchlorocarbene and 2,2'-Bipyridyl: Synthesis, Reaction Mechanism, and Effect of Rotamerism

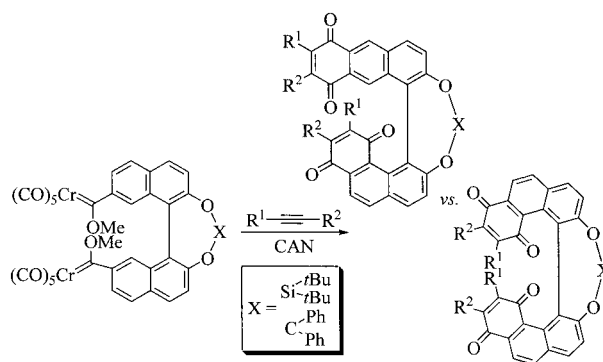
Keywords: Carbenes / Ylides / Cyclization / Intermediates / Solvent effects / Time-resolved spectroscopy



1541 J. F. Schneider, M. Nieger, K. Nättinen, B. Lewall, E. Niecke, K. H. Dötz*

Novel [6]- and [7]Helicene-Like Quinones via Mono- and Bidirectional Chromium-Templated Benzannulation of Bridged Binaphthyl Carbene Complexes

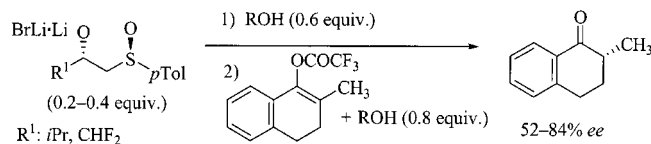
Keywords: Benzannulation / Carbene complexes / Chromium / Circular Dichroism / Cyclic voltammetry / Quinones



1561 J. Gil, M. Medio-Simon, G. Mancha, G. Asensio*

Enantioselective Protonation of the Lithium Transient Enolate of 2-Methyltetralone with 2-Sulfinyl Alcohols

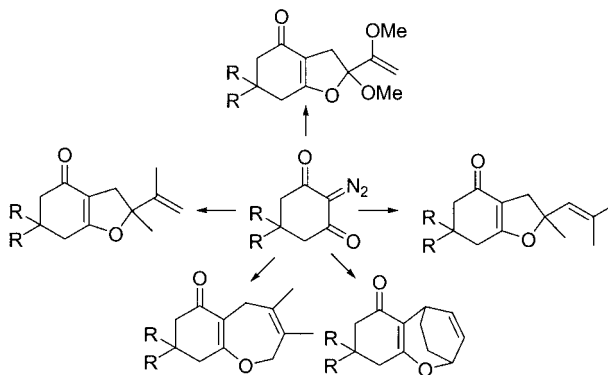
Keywords: Enantioselective protonation / Lithium enolates / 2-Sulfinyl alcohols / 2-Methyltetralone



1568 Y. R. Lee,* J. C. Hwang

Efficient Synthesis of Five- and Seven-Membered-Ring Heterocycles by Rhodium(II)-Catalyzed [3+2] and [3+4] Cycloaddition of Diazo-dicarbonyl Compounds with Conjugated Dienes

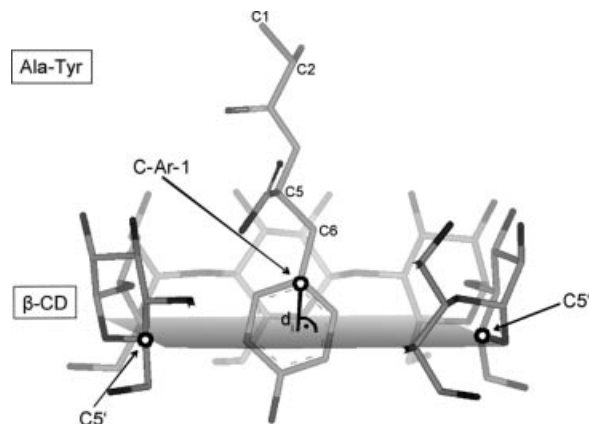
Keywords: Cycloaddition / Heterocycles / Homogeneous catalysis / Rhodium



1578 C. Kahle, R. Deubner, C. Schollmayer,
J. Scheiber, K. Baumann, U. Holzgrabe*

NMR Spectroscopic and Molecular Modelling
Studies on Cyclodextrin–Dipeptide Inclusion
Complexes

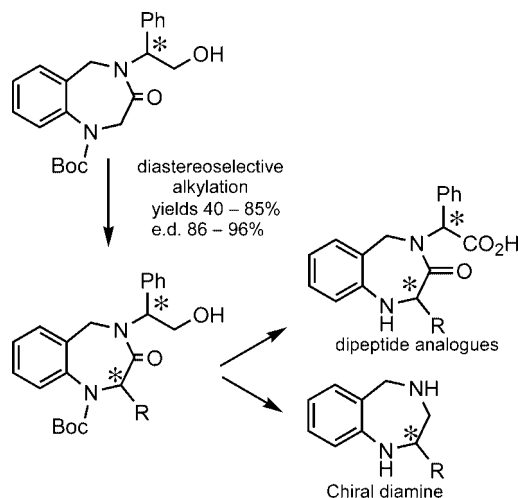
Keywords: Amino acids / Chirality / Cyclodextrins /
Molecular dynamics / NMR spectroscopy



1590 N. Cabedo, X. Pannecoucke,* J.-C. Quirion*

An Efficient Asymmetric Synthesis of 2-Substituted
1,4-Benzodiazepin-3-one as a Potential
Molecular Scaffold

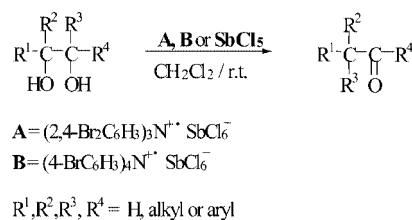
Keywords: Alkylation / Chiral auxiliaries / Lactams /
Peptidomimetics



1597 F. Ciminale, L. Lopez,* A. Nacci,
L. D'Accolti, F. Vitale

Aminium Hexachloroantimonate Salts as Latent
Sources of Antimony Pentachloride in Pinacolic
Rearrangement of Vicinal Diols

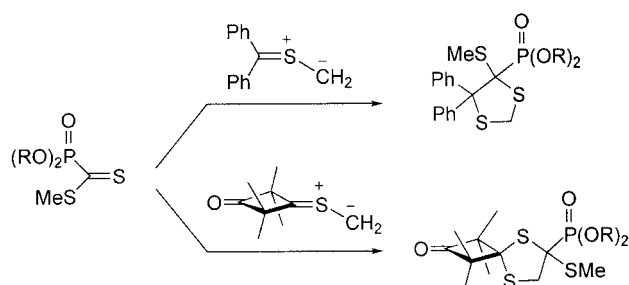
Keywords: Aminium salts / Antimony pentachloride /
Lewis acid



1604 K. Urbaniak, G. Mloston,* M. Gulea,
S. Masson,* A. Linden, H. Heimgartner*

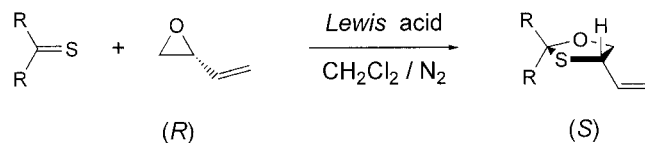
Thio- and Dithioesters as Dipolarophiles in
Reactions with Thiocarbonyl Ylides

Keywords: Cycloaddition / Dithioester / Regioelec-
tivity / Sulfur heterocycles



1613 A. Fedorov, C. Fu, A. Linden,
H. Heimgartner*

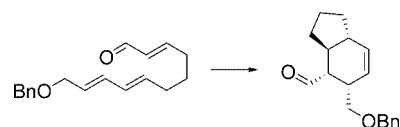
Reaction of Thioketones with (*R*)-2-Vinyl-oxirane: Regio- and Stereoselective Formation of (*S*)-4-Vinyl-1,3-oxathiolanes



Keywords: Crystal structure / Oxiranes / 1,3-Oxathiolanes / Ring-expansion / Sulfur heterocycles

1620 S. A. Selkälä, A. M. P. Koskinen*

Preparation of Bicyclo[4.3.0]nonanes by an Organocatalytic Intramolecular Diels–Alder Reaction

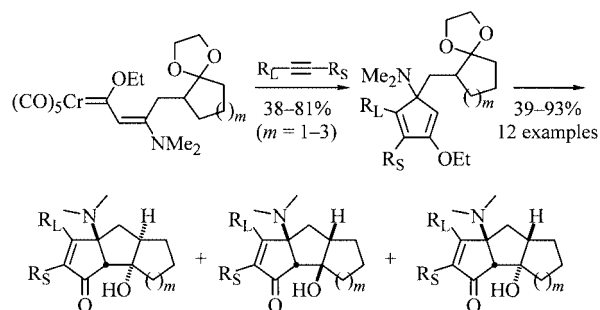


Keywords: Natural products / Enantioselectivity / Cycloaddition / Organocatalysis

1625 Y.-T. Wu, D. Vidovic, J. Magull,
A. de Meijere*



A New Access to Multifunctional Linear Triquinanes and Their Homologues via α,β -Unsaturated Fischer Carbene Complexes

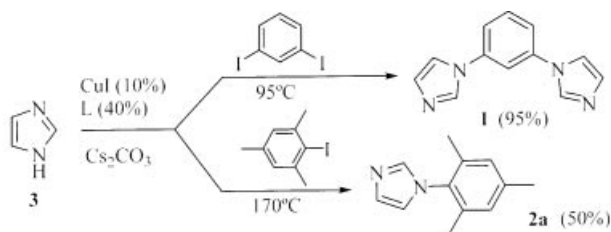


Keywords: Template synthesis / Fused-ring systems / Ketones / Cycloaddition / Cyclization / Aldol reactions

1637 E. Alcalde,* I. Dinarès,* S. Rodríguez,
C. Garcia de Miguel



Synthetic Approaches to Sterically Hindered *N*-Arylimidazoles through Copper-Catalysed Coupling Reactions

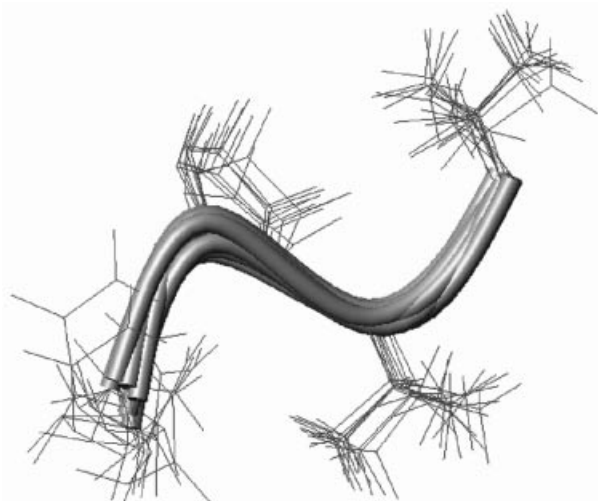


Keywords: Arylation / Benzimidazole / Imidazole / *N*-Heterocyclic carbenes / Ullman-type condensation

- 1644** C. Spezzacatena, A. Pepe, L. M. Green,
L. B. Sandberg, B. Boicchio,
A. M. Tamburro*

Synthesis, Solution Structure and Biological Activity of Val-Val-Pro-Gln, a Bioactive Elastin Peptide

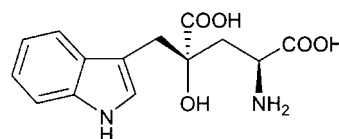
Keywords: Peptides / Elastin / Biological activity



- 1652** A. Bassoli,* G. Borgonovo, G. Busnelli,
G. Morini, M. G. B Drew

Monatin and Its Stereoisomers: Chemoenzymatic Synthesis and Taste Properties

Keywords: Sweet taste / Monatin / Natural compounds / Stereoselective synthesis / Chemoenzymatic synthesis

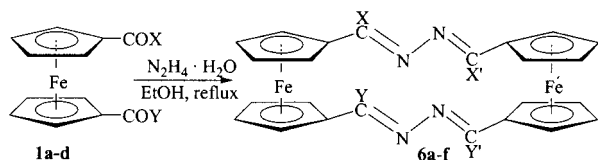


(2S,4S)-Monatin

- 1659** P. Sohár,* A. Csámpai, Á. Abrán, G. Túrós,
E. Vass, V. Kudar, K. Újszászy, B. Fábán

Macrocyclic Double Ferrocenes, Their Stereostructure, and an IR and NMR Spectroscopic, X-ray Crystallographic, and Conformational and Dynamic Investigation

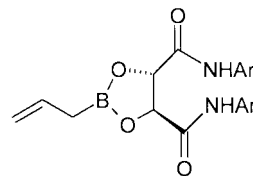
Keywords: Density functional calculations / Ferrocene / Ferrocenophane / Molecular dynamics / Structure determination



- 1665** W. Chen,* Y. Liu, Z. Chen

A Highly Efficient and Practical New Allylboronate Tartramide for the Asymmetric Allylboration of Achiral Aldehydes

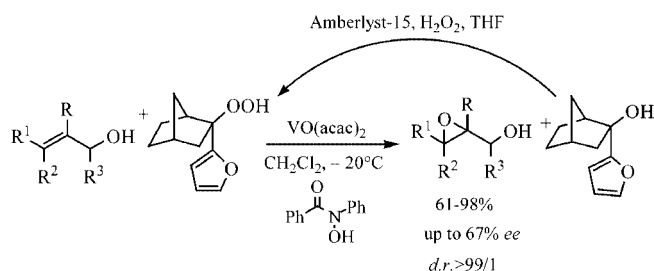
Keywords: Asymmetric synthesis / Alcohols / Allylation / Allylboration



- 1669** A. Lattanzi,* S. Piccirillo, A. Scettri

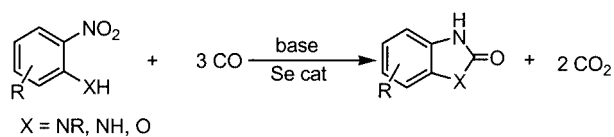
Vanadium-Catalyzed Asymmetric Epoxidation of Allylic Alcohols Mediated by (+)-Norcamphor-Derived Hydroperoxide

Keywords: Optically pure hydroperoxides / Asymmetric synthesis / Epoxidation / Vanadium / Kinetic resolution / Diastereoselectivity



1675 X. Wang, G. Ling, Y. Xue, S. Lu*

Selenium-Catalyzed Reductive Carbonylation of 2-Nitrophenols to 2-Benzoxazolones

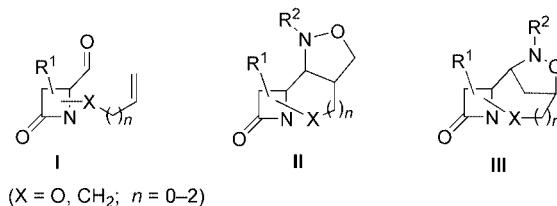


Keywords: Carbonylation / Nitrophenols / Phase-transfer catalysis / Reduction / Selenium

1680 B. Alcaide,* E. Sáez



Diastereoselective Route to Novel Fused or Bridged Tricyclic β -Lactams through Intramolecular Nitron–Alkene Cycloaddition of 2-Azetidinone-Tethered Alkenylaldehydes – Synthetic Applications to Carbacephams and Cyclic β -Amino Acid Derivatives



Keywords: Lactams / Nitrogen heterocycles / Cycloaddition / Polycycles / Aldehydes / Amino acids / Amino alcohols