

COVER PICTURE

The cover picture shows a photograph of lightning branching itself from the sky to the earth. This is one of many examples in Nature where branching leads to special events. In the dendrimer-to-dendrimer system shown, one branch serves as the starting point for a new dendrimer system, one of whose branches continues again, similar to the traveling of lightning. This elongated dendrimer-to-dendrimer system may provide additional organization of dendrimeric (NLO) ligands. We thank Dr. Edwin van den Worm for providing us with this strike-of-lightning idea. Details of the synthesis are described in the article by A. J. Brouwer and R. M. J. Liskamp on p. 487 ff.

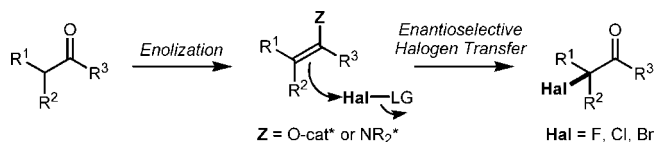


MICROREVIEW

Contents

475 S. France, A. Weatherwax, T. Lectka*

Recent Developments in Catalytic, Asymmetric α -Halogenation: A New Frontier in Asymmetric Catalysis



Keywords: Asymmetric catalysis / Enantioselectivity / Enols / Halogenation / Synthetic methods

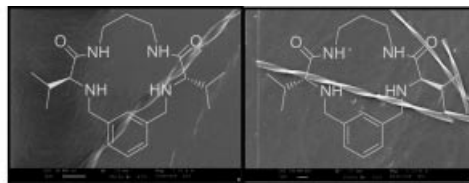
SHORT COMMUNICATION

- 481** J. Becerril, B. Escuder,* J. F. Miravet,
R. Gavara, S. V. Luis*



Understanding the Expression of Molecular Chirality in the Self-Assembly of a Peptidomimetic Organogelator

Keywords: Gels / Peptidomimetics / Self-assembly / Supramolecular chemistry

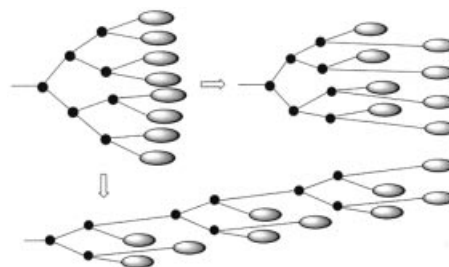


FULL PAPERS

- 487** A. J. Brouwer, R. M. J. Liskamp*

Synthesis of Novel Dendrimeric Systems containing NLO ligands

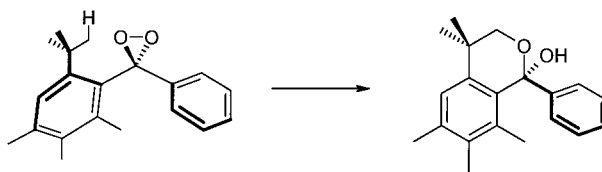
Keywords: Dendrimers / Amides / Amino acids / Synthesis design



- 496** K. Schroeder, W. Sander*

Sterically Hindered Carbonyl *O*-Oxides and Dioxiranes – (6-*tert*-Butyl-2,3,4-trimethylphenyl)phenylcarbonyl *O*-Oxide and (6-*tert*-Butyl-2,3,4-trimethylphenyl)phenyldioxirane

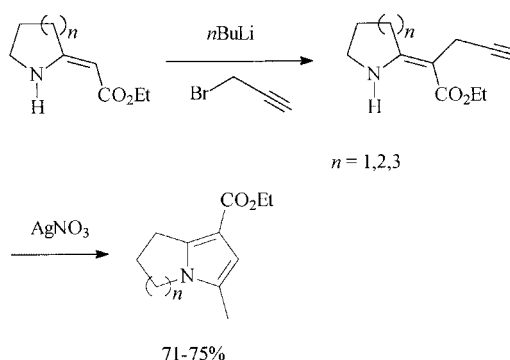
Keywords: Carbonyl oxide / Dioxirane / Photooxidation / CH activation



- 505** R. S. Robinson, M. C. Dovey,*
D. Gravestock

Silver-Catalyzed Hydroamination: Synthesis of *N*-Bridgehead Pyrroles, Incorporating a Protection-Deprotection Strategy for Preparation of Cyclic Secondary Vinylogous Carbamates

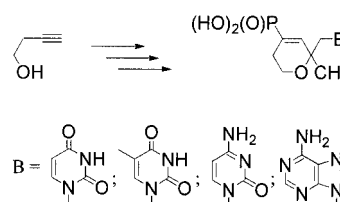
Keywords: Hydroamination / Pyrroles / Microwaves



- 512** V. K. Brel,* V. K. Belsky, A. I. Stash,
V. E. Zavodnik, P. J. Stang

Synthesis and Molecular Structure of New Unsaturated Analogues of Nucleotides Containing Six-Membered Rings

Keywords: Antiviral agents / Bioorganic chemistry / Nucleotides / Phosphonates

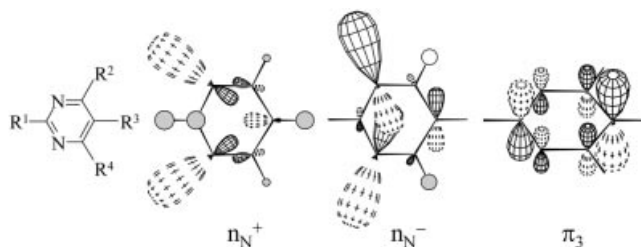


522 U. Lottermoser, P. Rademacher,* M. Mazik,
K. Kowski



Photoelectron Spectra and Electronic Structures
of Substituted Pyrimidines

Keywords: Photoelectron spectroscopy / Density functional theory calculations / Electronic structure / Ionisation potentials / Linear free energy correlation / Multiple linear regression analysis



532 E. Holtz, V. Köhler, B. Appel, P. Langer*

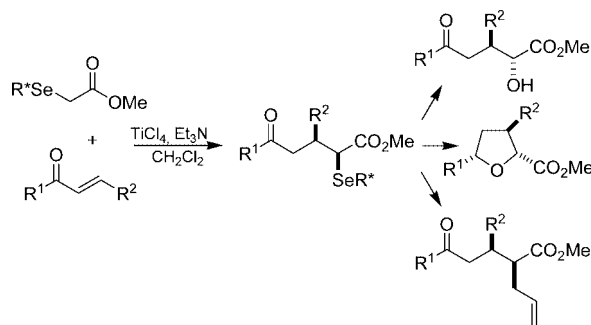
Efficient Synthesis of Functionalised 4-Hydroxy-
cyclopent-2-en-1-ones by Cyclisation of 1,3-Bis-
(silyl) Enol Ethers and 1,3-Dicarbonyl Dianions
with 1,2-Diketones



Keywords: Aldol reactions / Cyclisations / Dianions / Regioselectivity / Silyl enol ethers

543 M. Tiecco,* L. Testaferri, F. Marini,
S. Sternativo, C. Santi, L. Bagnoli,
A. Temperini

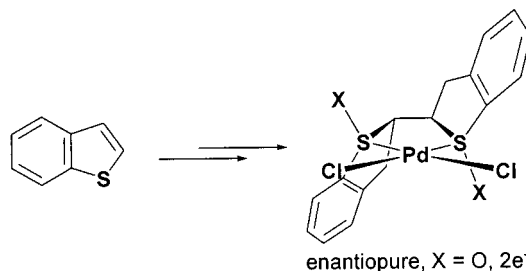
Conjugated Additions of Selenium Containing
Enolates to Enones – Enantioselective Synthesis
of δ -Oxo- α -Seleno Esters and Their Facile
Transformations



Keywords: Asymmetric synthesis / Organoselenium reagents / Nucleophilic additions / Titanium enolates

552 D. Madec, F. Mingoia, D. M. Macovei,
G. Maitro, G. Giambastiani, G. Poli*

New Enantiopure Bis(thioether) and Bis(sulf-
oxide) Ligands from Benzothiophene



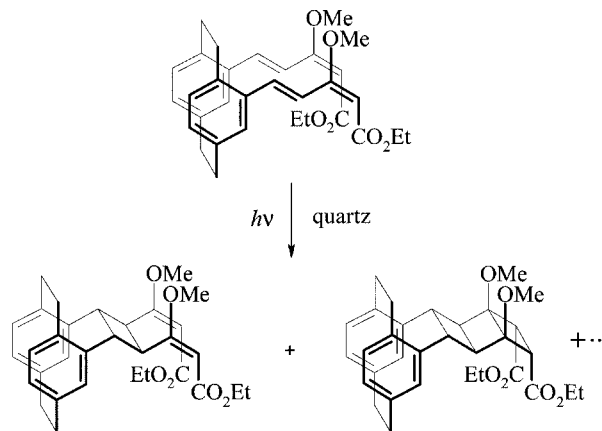
Keywords: Oxidative coupling / Palladium / S ligands / Sulfoxides

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H. Greiving, H. Hopf,* P. G. Jones,
P. Bubenitschek, J.-P. Desvergne,
H. Bouas-Laurent

Synthesis, Structure and Photoreactivity of
Several Cinnamophane Vinylogs

Keywords: [2+2]Photocycloaddition / Paracyclo-
phanes / X-ray structural analysis /
Cinnamic esters / Cyclobutanes

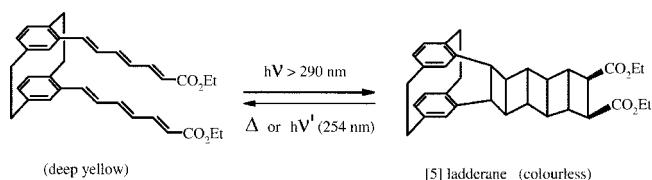


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H. Hopf,* H. Greiving, C. Beck, I. Dix,
P. G. Jones, J.-P. Desvergne,
H. Bouas-Laurent

One-Pot Preparation of $[n]$ Ladderanes by
[2 π + 2 π] Photocycloaddition

Keywords: Cyclophanes / Cinnamate vinyls /
[2 π + 2 π] photocycloaddition / $[n]$ -
Ladderanes



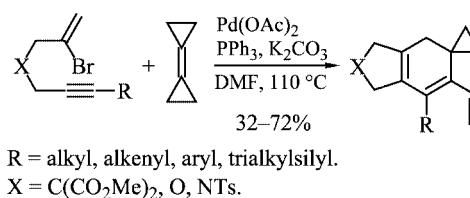
582

M. Schelper, A. de Meijere*



Facile Construction of Spirocyclopropanated Bi-,
Tri- and Tetracyclic Skeletons by Novel Cas-
cades Involving Intra- and Intermolecular Heck
Reactions of 2-Bromo-1,6-enynes and Bicyclo-
propylidene

Keywords: Cyclopropane / Palladium / Transition
metal / Cascade reactions / Electrocycli-
zation

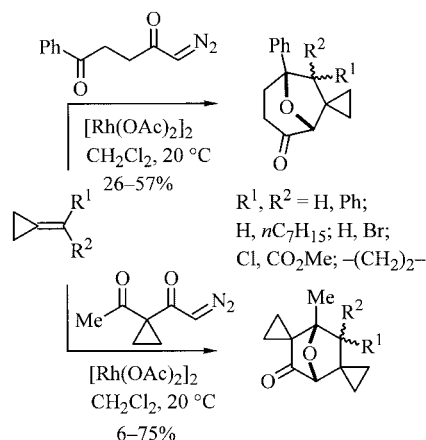


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A. P. Molchanov, V. V. Diev, J. Magull,
D. Vidović, S. I. Kozhshkov, A. de Meijere,*
R. R. Kostikov

Carbonyl Ylide Cycloadditions to C,C-Double
Bonds of Methylene cyclopropanes

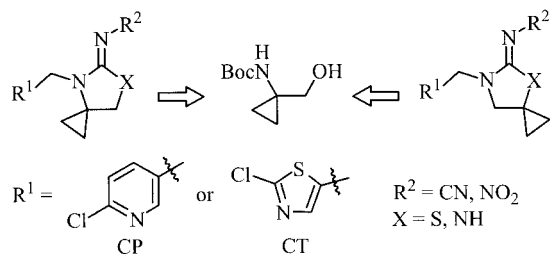
Keywords: Bicyclopropylidene / Carbonyl ylides /
Dipolar cycloaddition / Methylene cyclo-
propane / Strained molecules



- 600** F. Brackmann, D. S. Yufit, J. A. K. Howard,
M. Es-Sayed, A. de Meijere*

Synthesis of Spirocyclopropanated Analogues of
Imidacloprid and Thiacloprid

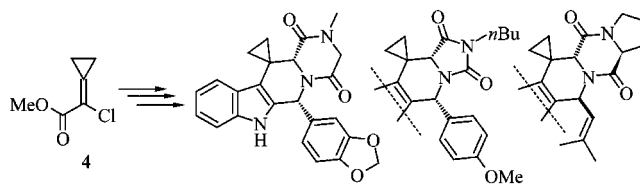
Keywords: Cyclopropanes / Pesticides / Ring contraction / Spiro compounds



- 610** M. Limbach, S. Dalai, A. Janssen,
M. Es-Sayed, J. Magull, A. de Meijere*

Addition of Indole to Methyl 2-Chloro-2-cyclopropylideneacetate en Route to Spirocyclopropanated Analogues of Demethoxyfunitremorgine C and Tadalafil

Keywords: Natural products / Peptidomimetics / Heterocycles / Small ring systems / Building blocks



CORRECTION

- 618** J. P. Ley,* J.-M. Hilmer, B. Weber,
G. Krammer, I. L. Gatfield, H.-J. Bertram

Stereoselective Enzymatic Synthesis of *cis*-
Pellitorine, a Taste Active Alkamide Naturally
Occurring in Tarragon

Keywords: Chemosensates / Alkamides / Acylation /
Biotransformations / Diastereoselectivity