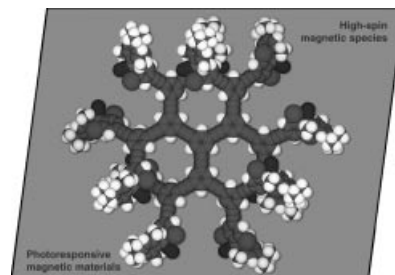


COVER PICTURE

The cover picture shows a phenylacetylene dendrimer having 12 diazo units, from which a dodecakiscarbene is generated. Diazo functional groups are usually labile and hence cannot be used as building blocks to prepare more complicated poly(diazo) compounds. We have shown that a diphenyldiazomethane prepared to generate a persistent triplet diphenylcarbene is also stable and can be used as a building block to construct poly(diazo) compounds, which can generate high-spin polycarbenes. Details are discussed in the article by H. Tomioka et al. on page 2991 ff.



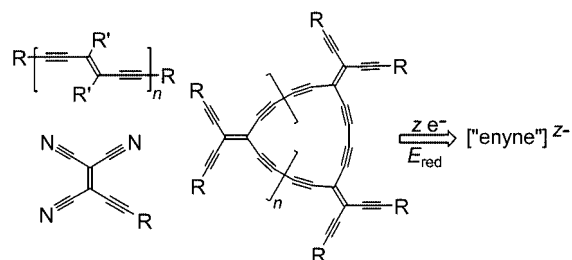
MICROREVIEWS

Contents

- 2959** J.-P. Gisselbrecht, N. N. P. Moonen,
 C. Boudon, M. B. Nielsen,* F. Diederich,*
 M. Gross*

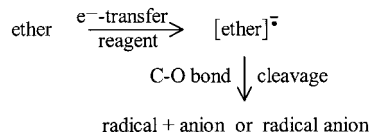
Redox Properties of Linear and Cyclic Scaffolds
 Based on Di- and Tetraethynylethene

Keywords: Alkynes / Conjugation / Diethynylethenes /
 Electrochemistry / Oligoenynes / Tetra-
 ethynylethenes



Chemical Methods for Ether-Bond Cleavage by Electron-Transfer Reagents

Keywords: Alkali metals / Cleavage reactions / Electron transfer / Radical ions / Synthetic methods



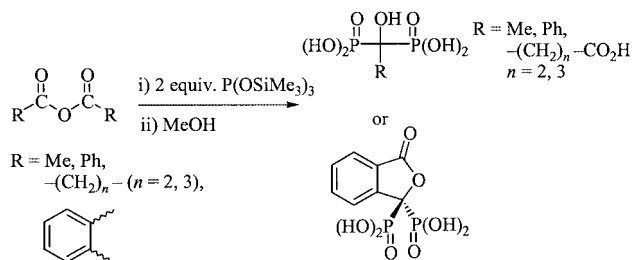
SHORT COMMUNICATIONS

2983 E. Guenin,* E. Degache, J. Liquier, M. Lecouvey



Synthesis of 1-Hydroxymethylene-1,1-bis(phosphonic acids) from Acid Anhydrides: Preparation of a New Cyclic 1-Acyloxymethylene-1,1-bis(phosphonic acid)

Keywords: Bis(phosphonates) / Anhydrides / Tris(trimethylsilyl) phosphite / Arbuzov reaction / NMR spectroscopy

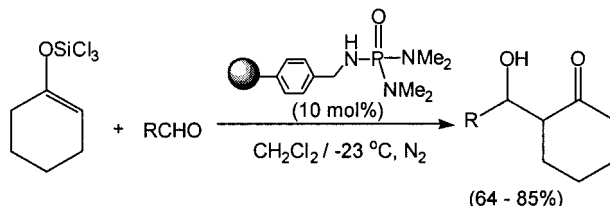


2988 R. A. Flowers II,* X. Xu, C. Timmons, G. Li*



A Polymer-Supported Phosphoramidate as a Lewis-Base Catalyst for the Catalytic Aldol Reaction

Keywords: HMPA-type derivative / Aldol reactions / Polymeric phosphoramidate

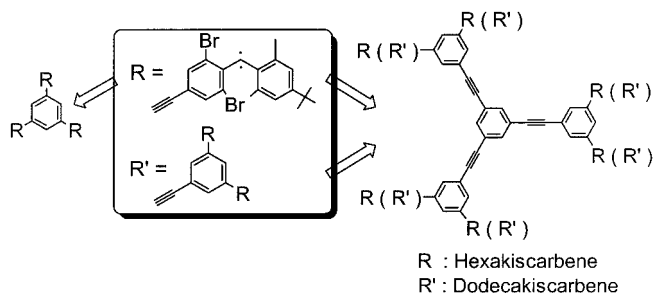


FULL PAPERS

2991 T. Itoh, T. Maemura, Y. Ohtsuka, Y. Ikari, H. Wildt, K. Hirai, H. Tomioka*

Synthesis of Phenylacetylene Dendrimers Having Sterically Congested Diazo Units and Characterization of Their Photoproducts

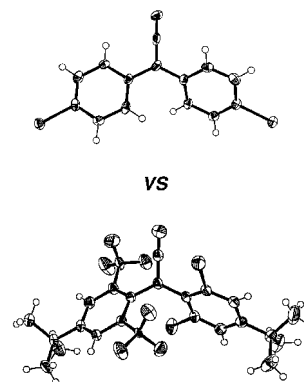
Keywords: Carbenes / Diazo compounds / Steric hindrance / Photolysis / Magnetic properties



3004 T. Iikubo, T. Itho, K. Hirai, Y. Takahashi, M. Kawano, Y. Ohashi, H. Tomioka*

X-ray Crystal Structure Study of Sterically Congested Diphenyldiazomethanes

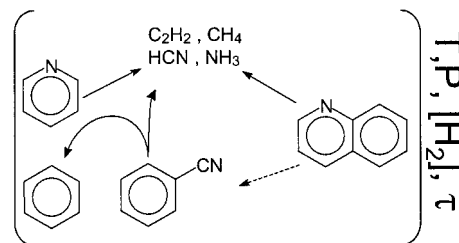
Keywords: Carbenes / Diazo compounds / Substituent effects / Steric hindrance / Structure-activity relationships



3011 M. K. Cieplik, R. Louw*

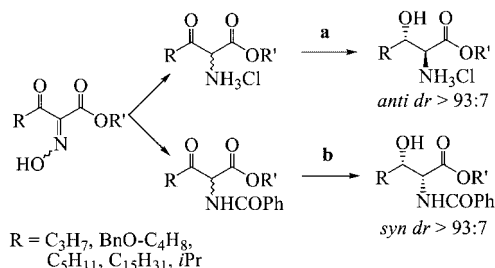
Thermal Hydrogenolysis of Nitrogen-Containing (Hetero)arenes at Elevated Temperature and Pressure

Keywords: Hydrogenolysis / Nitrogen heterocycles / NH_3 / HCN / Methanisation



3017 C. Mordant, P. Dünkermann,
V. Ratovelomanana-Vidal,* J.-P. Genet*

A Versatile Route to syn- and anti- α -Amino β -Hydroxy Esters from β -Keto Esters by Dynamic Kinetic Resolution with Ru-SYNPHOS® Catalyst

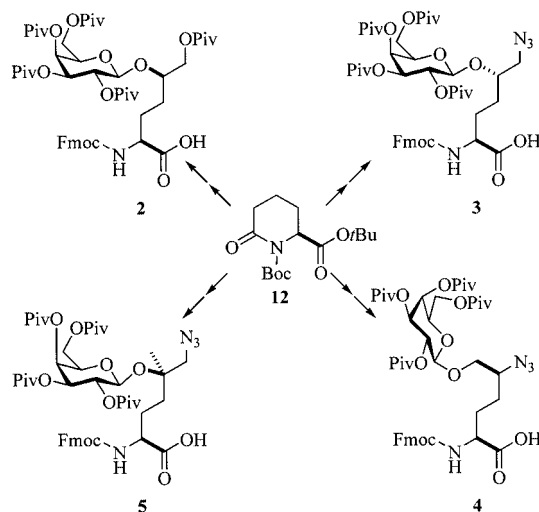


a: [Ru(S)-SYNPHOS®Br₂] **b:** [Ru(S)-SYNPHOS®Br₂]
 H_2 (12 bar), 50°C, 24 h H_2 (130 bar), 80°C
 $\text{CH}_2\text{Cl}_2 + \text{R}'\text{OH}$ 4 days, CH_2Cl_2

Keywords: α -Amino- β -hydroxy esters / Asymmetric hydrogenation / Catalysis / Dynamic kinetic resolution / Ruthenium

3027 J. Marin, A. Violette, J.-P. Briand,
G. Guichard*

Galactosylated 5-Hydroxylysine Mimetics for Glycopeptide Synthesis

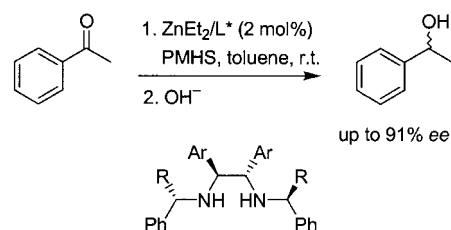


Keywords: Amino acids / Hydroxylation / Glycopeptides / Glycosylations / Lactams / Ortho-ester

3040 V. Bette, A. Mortreux,* F. Ferioli,
G. Martelli, D. Savoia,* J.-F. Carpentier*

New Chiral 1,2-Diamines and Their Use in Zinc-Catalyzed Asymmetric Hydrosilylation of Acetophenone

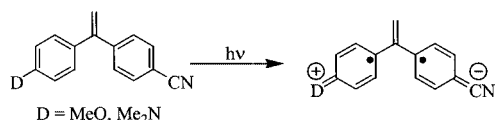
Keywords: Asymmetric catalysis / Diamine ligands / Hydrosilylation / PMHS / Zinc



- 3046** C. A. van Walree,* V. E. M. Kaats-Richters,
S. J. Veen, B. Wieczorek, J. H. van der Wiel,
B. C. van der Wiel



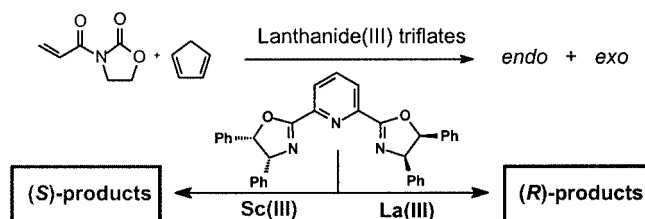
Charge-Transfer Interactions in 4-Donor 4'-
Acceptor Substituted 1,1-Diphenylethenes



Keywords: Charge transfer / Conjugation / Donor-
acceptor systems / Solvatochromism

- 3057** G. Desimoni,* G. Faita, M. Guala,
A. Laurenti

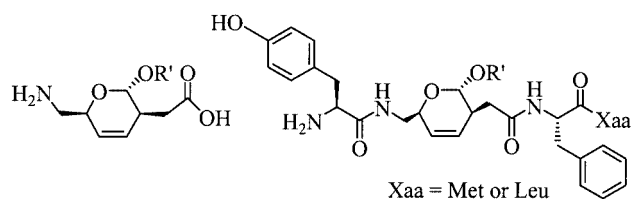
Synergistic Effect of Pybox Substituents and
Lanthanide Cations in Reversing the Asymmet-
ric Induction in the Catalysed Diels–Alder Re-
action between 3-Acryloyl-1,3-oxazolidin-2-one
and Cyclopentadiene



Keywords: Asymmetric catalysis / Cations / Cyclo-
addition / Substituent effects

- 3063** A. Montero, E. Mann,* B. Herradón*

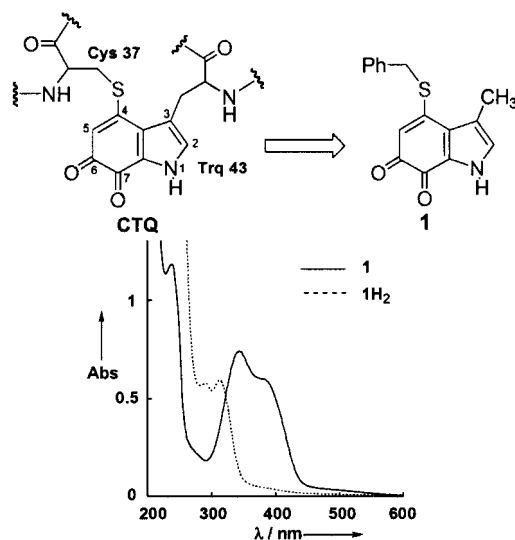
Preparation of Sugar Amino Acids by Claisen-
Johnson Rearrangement: Synthesis and Incor-
poration into Enkephalin Analogues



Keywords: Amino acids / Carbohydrates / Enkephalin /
Peptidomimetics / Sigmatropic rearrange-
ment

- 3074** Y. Murakami, Y. Tachi, S. Itoh*

A Model Compound of the Novel Organic
Cofactor CTQ (Cysteine Tryptophylquinone) of
Quinohemoprotein Amine Dehydrogenase

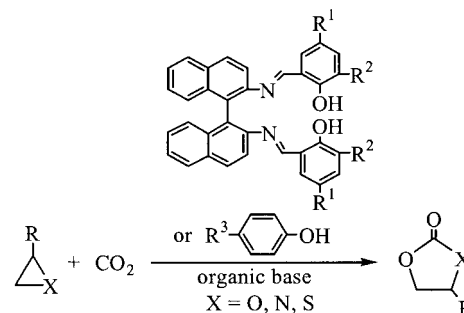


Keywords: Amine dehydrogenases / Cofactors / Post-
translational modification / Quinones /
Quinoprotein

3080 Y.-M. Shen, W.-L. Duan, M. Shi*

Chemical Fixation of Carbon Dioxide Co-Catalyzed by a Combination of Schiff Bases or Phenols and Organic Bases

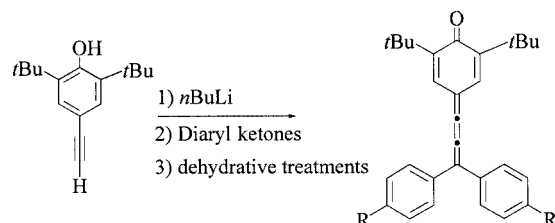
Keywords: Aziridines / Carbon dioxide fixation / Epoxides / Schiff bases



3090 T. Kawase,* N. Nishigaki, H. Kurata, M. Oda*

2,6-Di-*tert*-butyl-4-(3,3-diarylpropadienylydene)-2,5-cyclohexadien-1-ones, the First Stable *p*-Quinopropadienes

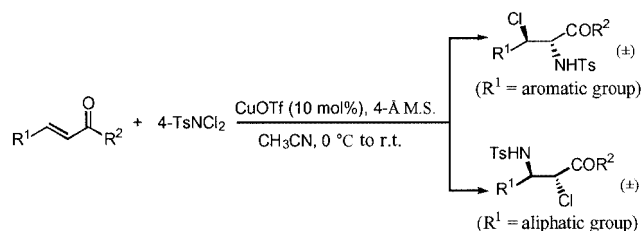
Keywords: Chromophores / Cumulenes / Quinones / Redox chemistry



3097 D. Chen, C. Timmons, S. Chao, G. Li*

Regio- and Stereoselective Copper-Catalyzed Synthesis of Vicinal Haloamino Ketones from α,β -Unsaturated Ketones

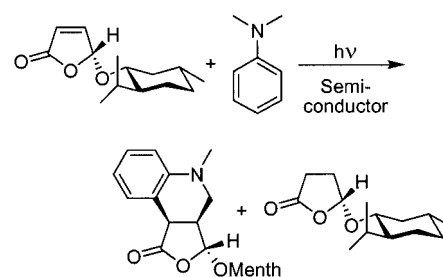
Keywords: Aminohalogenation / α,β -Unsaturated ketones / Haloamines



3102 S. Marinković, N. Hoffmann*

Diastereoselective Radical Tandem Addition-Cyclization Reactions of Aromatic Tertiary Amines by Semiconductor-Sensitized Photochemical Electron Transfer

Keywords: Radical reactions / Electron transfer / Heterogeneous catalysis / Nitrogen heterocycles / Isotopic labeling

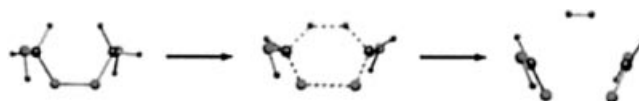


3108 W. R. Thiel



Hydrogen Evolution from Peroxides – a Concerted Reaction

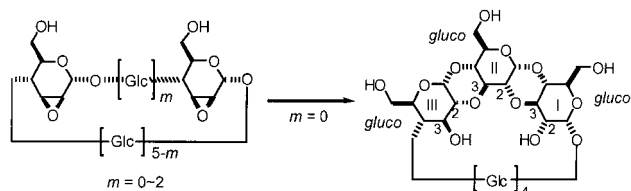
Keywords: DFT calculations / Electrocyclic reactions / Hydrogen / Peroxides



3113 K. Fujita,* T. Fujioka, H. Shimada,
K. Ohta, A. Yoshino, Y. Okabe,
M. Fukudome, D.-Q. Yuan



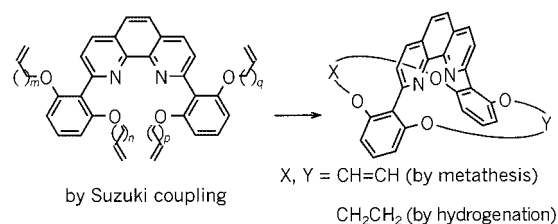
Construction of a Fused Polycyclic Wall within the Cyclodextrin Belt To Ensure a Distorted Cavity: An Unusual *trans*-Diequatorial Ring-Opening Reaction of Cyclodextrin Epoxide Rings



Keywords: Cyclodextrins / Epoxides / Nucleophilic substitution

3119 U. Lüning,* F. Fahrenkrug

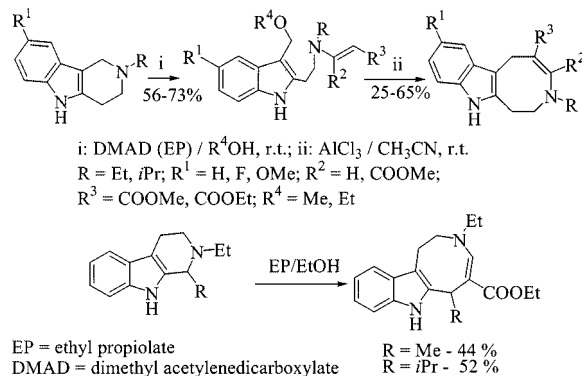
Synthesis of Concave 1,10-Phenanthrolines by a Combination of Suzuki Coupling, Ring Closing Metathesis and Hydrogenation



Keywords: Cross-coupling / Cyclization / Macrocycles / Metathesis / Supramolecular chemistry

3128 L. G. Voskressensky,* T. N. Borisova,
L. N. Kulikova, A. V. Varlamov, M. Catto,
C. Altomare, A. Carotti

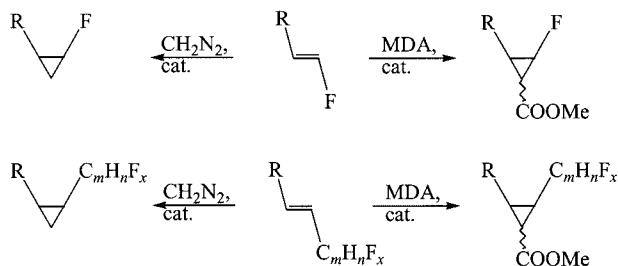
Tandem Cleavage of Hydrogenated β - and γ -Carbolines – New Practical Synthesis of Tetrahydroazocino[4,5-*b*]indoles and Tetrahydroazocino[5,4-*b*]indoles Showing Acetylcholinesterase Inhibitory Activity



Keywords: Acetylcholinesterase inhibition / Azocine / Fused-ring systems / Nitrogen heterocycles / Ring expansion

3136 E. V. Guseva, N. V. Volchlov, Y. V. Tomilov,*
O. M. Nefedov

Catalytic Cyclopropanation of Fluorine-Containing Alkenes and Dienes with Diazomethane and Methyl Diazoacetate



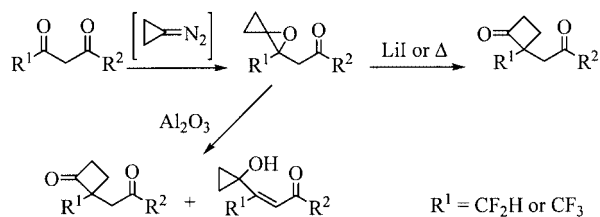
Keywords: Cycloaddition / Diazo compounds / Fluorine / Homogeneous catalysis

3145

Y. V. Tomilov,* E. V. Guseva,
I. V. Kostuchenko, B. I. Ugrak,
E. V. Shulishov, O. M. Nefedov

Fluorinated β -Diketones in Reactions with
Diazocyclopropane Generated in situ

Keywords: Cycloaddition / Diazo compounds /
Fluorine / Isomerization / Ketones / Spiro
compounds



3154

C. A. Volk, H. Lippert, E. Lichte, M. Köck*

Two New Haliclamines from the Arctic Sponge
Haliclona viscosa

Keywords: Marine natural products / Alkaloids

