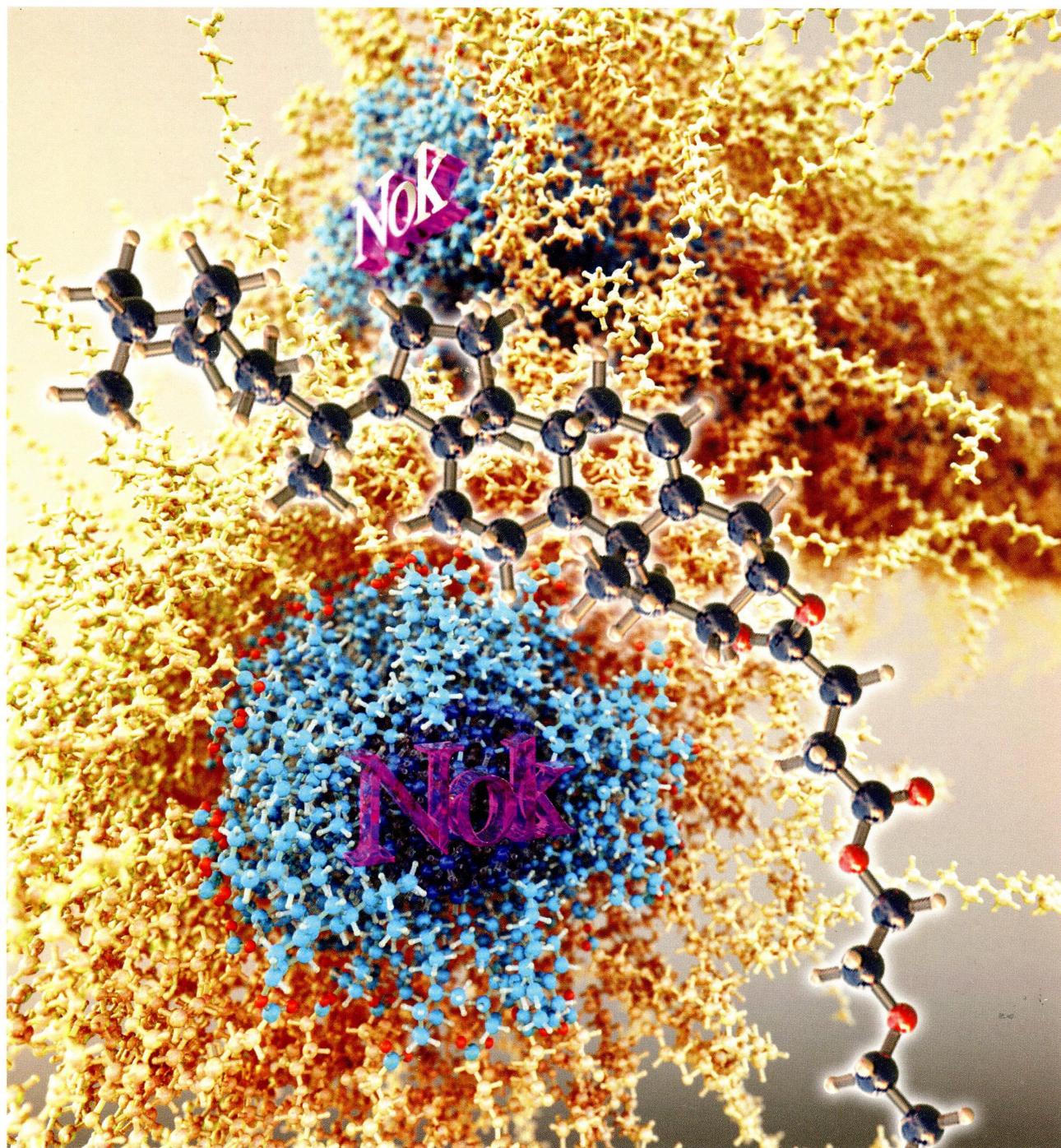


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ON THE COVER: A next generation, "designer" surfactant "Nok", derived from the phytosterol β -sitosterol, enables many types of cross-couplings to be run in water at room temperature. It was developed to provide an inexpensive alternative to its vitamin E-based precursor, TPGS-750-M. See Lipshtut and Klumphau, *J. Org. Chem.* 2014, 79 (3), 888.

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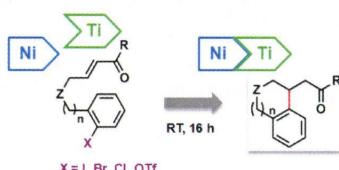
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[dx.doi.org/10.1021/jo402626u](https://doi.org/10.1021/jo402626u)

Ti/Ni-Mediated Inter- and Intramolecular Conjugate Addition of Aryl and Alkenyl Halides and Triflates

Irene R. Márquez, Delia Miguel, Alba Millán, M. Luisa Marcos, Luis Álvarez de Cienfuegos, Araceli G. Campaña,* and Juan M. Cuerva*



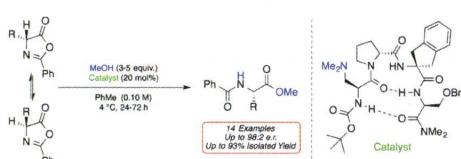
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[dx.doi.org/10.1021/jo402828f](https://doi.org/10.1021/jo402828f)

Peptide-Catalyzed Conversion of Racemic Oxazol-5(4H)-ones into Enantiomerically Enriched α -Amino Acid Derivatives

Anthony J. Metrano and Scott J. Miller*



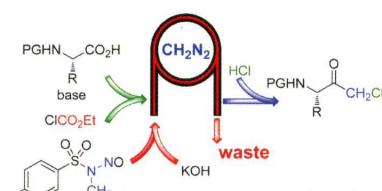
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[dx.doi.org/10.1021/jo402849z](https://doi.org/10.1021/jo402849z)

Continuous Flow Synthesis of α -Halo Ketones: Essential Building Blocks of Antiretroviral Agents

Vagner D. Pinho, Bernhard Gutmann, Leandro S. M. Miranda, Rodrigo O. M. A. de Souza, and C. Oliver Kappe*



Articles

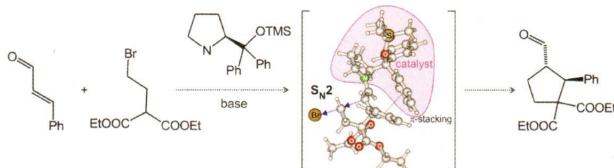
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dx.doi.org/10.1021/jo4022106

Organocatalytic Preparation of Substituted Cyclopentanes: A Mechanistic Study

Alexandra Tsybizova, Marek Remeš, Jan Veselý, Simona Hybelbauerová, and Jana Roithová*

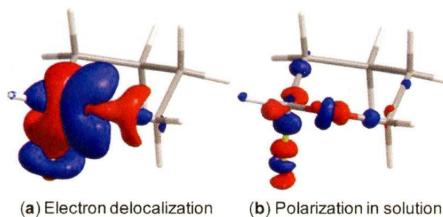


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dx.doi.org/10.1021/jo402306e

How Solvent Influences the Anomeric Effect: Roles of Hyperconjugative versus Steric Interactions on the Conformational Preference

Changwei Wang, Fuming Ying, Wei Wu,* and Yirong Mo*



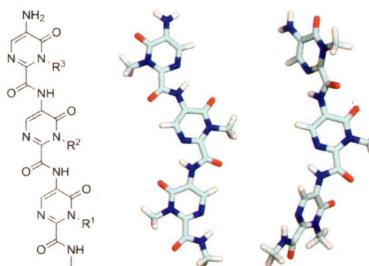
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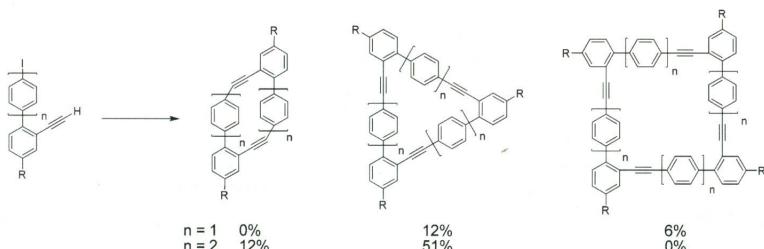
Design, Synthesis, and Conformational Analysis of Trispyrimidonamides as α -Helix Mimetics

Lukas Spanier, Emanuele Ciglia, Finn K. Hansen, Krystina Kuna, Walter Frank, Holger Gohlke, and Thomas Kurz*



Synthesis and Photophysical Properties of Biphenyl and Terphenyl Arylene-Ethylenylene Macrocycles

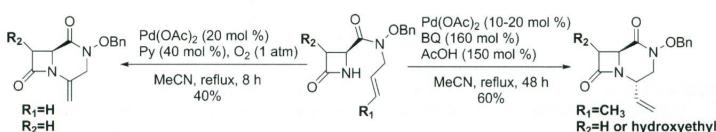
Andrew L. Korich, Ian A. McBee, Jonathan C. Bennion, Jenna I. Gifford, and Thomas S. Hughes*

**Photochromic Molecular Gyroscope with Solid State Rotational States Determined by an Azobenzene Bridge**

Patrick Commins and Miguel A. Garcia-Garibay*

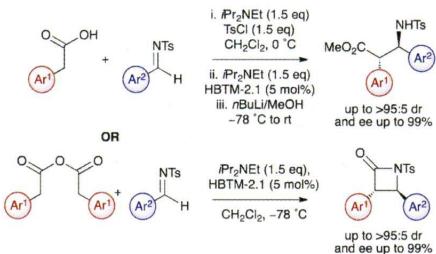
**Syntheses of Hydroxamic Acid-Containing Bicyclic β -Lactams via Palladium-Catalyzed Oxidative Amidation of Alkenes**

Maria O. Jobbins and Marvin J. Miller*



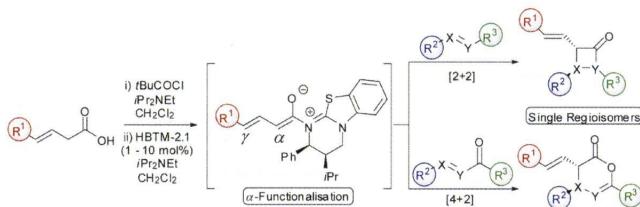
Isothiourea-Catalyzed Asymmetric Synthesis of β -Lactams and β -Amino Esters from Arylacetic Acid Derivatives and *N*-Sulfonylaldimines

Siobhan R. Smith, James Douglas, Hugues Prevet, Peter Shapland, Alexandra M. Z. Slawin, and Andrew D. Smith*



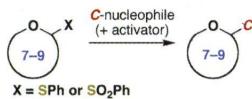
Isothiourea-Mediated Asymmetric Functionalization of 3-Alkenoic Acids

Louis C. Morrill, Samuel M. Smith, Alexandra M. Z. Slawin, and Andrew D. Smith*

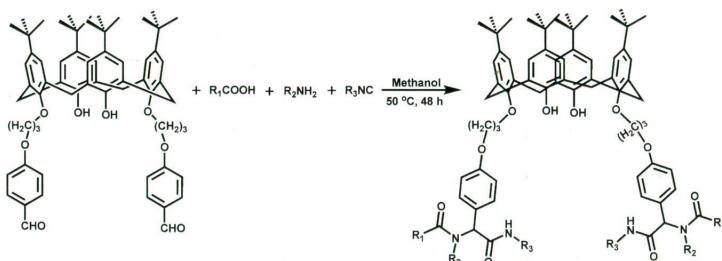


Stereoselective Synthesis of Medium-Sized Cyclic Ethers: Application of C-Glycosylation Chemistry to Seven- to Nine-Membered Lactone-Derived Thioacetals and Their Sulfone Counterparts

Yuto Suga, Haruhiko Fuwa,* and Makoto Sasaki

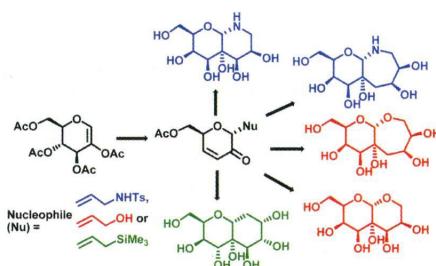


Narrow-Rim Functionalization of Calix[4]arene through Ugi-4CR: Synthesis of a Series of Calix[4]arene Peptoids
Anupriya Savithri, Sreeja Thulasi, and Ramavarma Luxmi Varma*



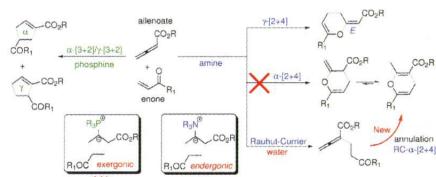
Bicyclic Hybrid Sugars as Glycosidase Inhibitors: Synthesis and Comparative Study of Inhibitory Activities of Fused Oxa-Oxa, Oxa-Aza, and Oxa-Carbasugar Hybrid Molecules

Alafia A. Ansari, Parasuraman Rajasekaran, M. Musawwer Khan, and Yashwant D. Vankar*

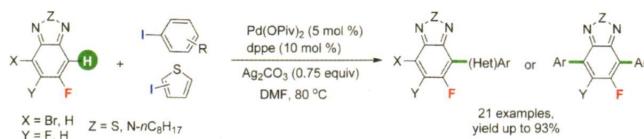


A Computational Study: Reactivity Difference between Phosphine- and Amine-Catalyzed Cycloadditions of Allenoates and Enones

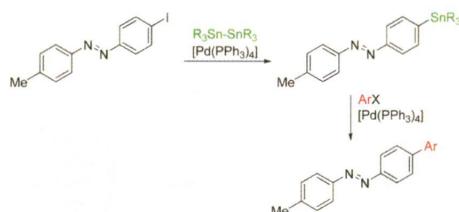
Gou-Tao Huang, Timm Lankau, and Chin-Hui Yu*



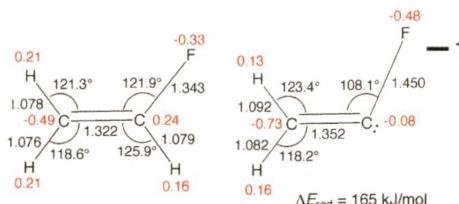
Direct (Het)Arylation of Fluorinated Benzothiadiazoles and Benzotriazole with (Het)Aryl Iodides
Chun-Yang He, Cai-Zhi Wu, Feng-Ling Qing, and Xingang Zhang*



Tin-Functionalized Azobenzenes as Nucleophiles in Stille Cross-Coupling Reactions
Jan Strueben, Paul J. Gates, and Anne Staibitz*

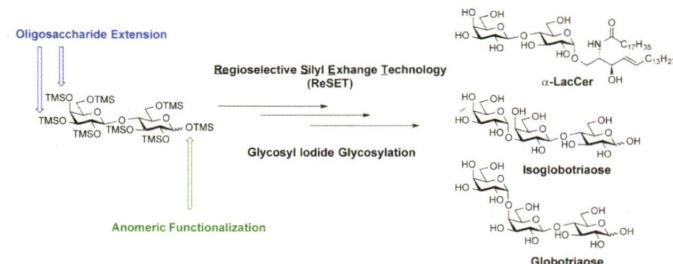


Weak Acidity of Vinyl CH Bonds Enhanced by Halogen Substitution
Norman C. Craig* and Albert R. Matlin



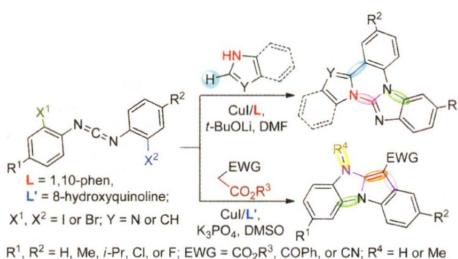
Integrating ReSET with Glycosyl Iodide Glycosylation in Step-Economy Syntheses of Tumor-Associated Carbohydrate Antigens and Immunogenic Glycolipids

Hsiao-Wu Hsieh, Matthew W. Schombs, and Jacquelyn Gervay-Hague*



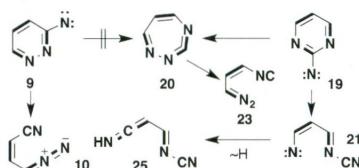
Copper-Catalyzed Domino Addition/Double Cyclization: An Approach to Polycyclic Benzimidazole Derivatives

Guodong Yuan, Haiquan Liu, Jilong Gao, Kangjian Yang, Qingsheng Niu, Hui Mao, Xiaoxia Wang, and Xin Lv*



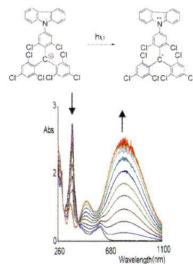
3-Pyridazinylnitrenes and 2-Pyrimidinylnitrenes

Sebastian Torker, David Kvaskoff, and Curt Wentrup*



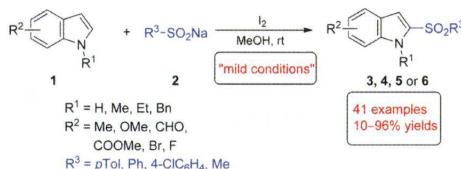
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Lluís Fajari, Robert Papoušek, Marta Reig, Enric Brillas, José Luis Jordà, Oriol Vallcorba, Jordi Rius, Dolores Velasco, and Luis Juliá*



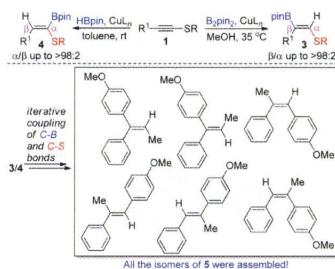
Regioselective C2 Sulfenylation of Indoles Mediated by Molecular Iodine

Praewpan Katrun, Charoensak Mueangkaew, Manat Pohmakotr, Vichai Reutrakul, Thaworn Jaipetch, Darunee Soorukram, and Chutima Kuhakarn*

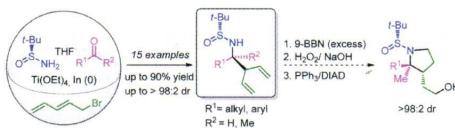


Synthesis of (Z)-1-Thio- and (Z)-2-Thio-1-alkenyl Boronates via Copper-Catalyzed Regiodivergent Hydroboration of Thiaoacetyles: An Experimental and Theoretical Study

Gangguo Zhu,* Wei Kong, Hui Feng, and Zhaosheng Qian*



Regio- and Stereoselective Aminopentadienylation of Carbonyl Compounds
Irene Bosque, Emine Bagdatli, Francisco Foubelo, and Jose C. Gonzalez-Gomez*



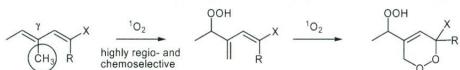
Synthesis and Characterization of Binary-Complex Models of Ureas and 1,3-Dicarbonyl Compounds: Deeper Insights into Reaction Mechanisms Using Snap-Shot Structural Analysis

Takumi Azuma, Yusuke Kobayashi, Ken Sakata, Takahiro Sasamori, Norihiro Tokitoh, and Yoshiji Takemoto*



Ene–Diene Transmissive Cycloaddition Reactions with Singlet Oxygen: The *Vinylogous Gem Effect* and Its Use for Polyoxyfunctionalization of Dienes

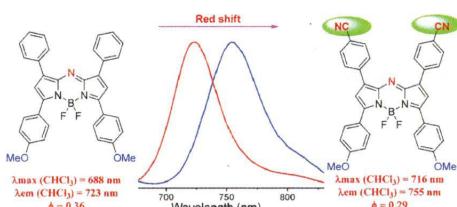
Angelika Eske, Bernd Goldfuss, Axel G. Griesbeck,* Alan de Kiff, Margarethe Kleczka, Matthias Leven, Jörg-M. Neudörfl, and Moritz Vollmer



Notes

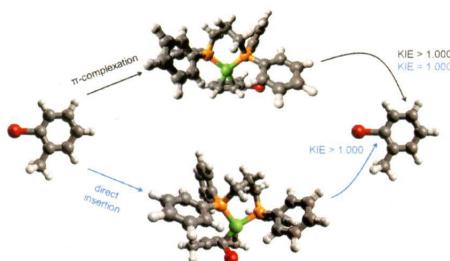
Accessing Near-Infrared-Absorbing BF_2 -Azadipyrromethenes via a Push–Pull Effect

Lijuan Jiao,* Yayang Wu, Sufan Wang,* Xiaoke Hu, Ping Zhang, Changjiang Yu, Kebing Cong, Qianli Meng, Erhong Hao, and M. Graça H. Vicente*

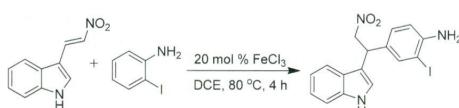


π -Complexation in Nickel-Catalyzed Cross-Coupling Reactions

S. Kyle Sontag, Jenna A. Bilbrey, N. Eric Huddleston, Gareth R. Sheppard, Wesley D. Allen,* and Jason Locklin*

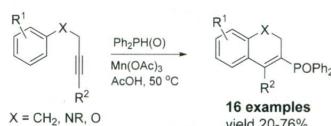
FeCl₃ Catalyzed Regioselective C-Alkylation of Indolylnitroalkenes with Amino Group Substituted Arenes

Manoj R. Zanwar, Veeraburao Kavala, Sachin D. Gawande, Chun-Wei Kuo, Wen-Chang Huang,* Ting-Shen Kuo, Hsiu-Ni Huang, Chiu-Hui He, and Ching-Fa Yao*



Manganese(III)-Mediated Selective Diphenylphosphinoyl Radical Reaction of 1,4-Diaryl-1-butynes for the Synthesis of 2-Phosphinoylated 3,4-Dihydronaphthalenes

Da-Peng Li, Xiang-Qiang Pan, Li-Tao An, Jian-Ping Zou,* and Wei Zhang*



Synthesis of Selenazoles by in Situ Cycloisomerization of Propargyl Selenoamides Using Oxygen–Selenium Exchange Reaction

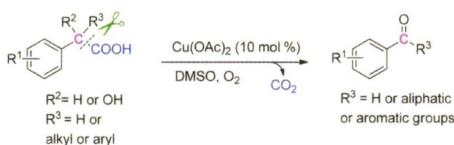
Chiara Pizzo and S. Graciela Mahler*



Functionalization of Homodiamantane: Oxygen Insertion Reactions without Rearrangement with Dimethyldioxirane
 Andrey A. Fokin,* Tatyana S. Zhuk, Alexander E. Pashenko, Valeriy V. Osipov, Pavel A. Gunchenko, Michael Serafin, and Peter R. Schreiner*



Aldehydes and Ketones Formation: Copper-Catalyzed Aerobic Oxidative Decarboxylation of Phenylacetic Acids and α -Hydroxyphenylacetic Acids
 Qiang Feng and Qiuling Song*



Additions and Corrections

Correction to Direct Bis-Arylation of Cyclobutanecarboxamide via Double C–H Activation: An Auxiliary-Aided Diastereoselective Pd-Catalyzed Access to Trisubstituted Cyclobutane Scaffolds Having Three Contiguous Stereocenters and an All-*cis* Stereochemistry

Ramarao Parella, Bojan Gopalakrishnan, and Srinivasarao Arulananda Babu*