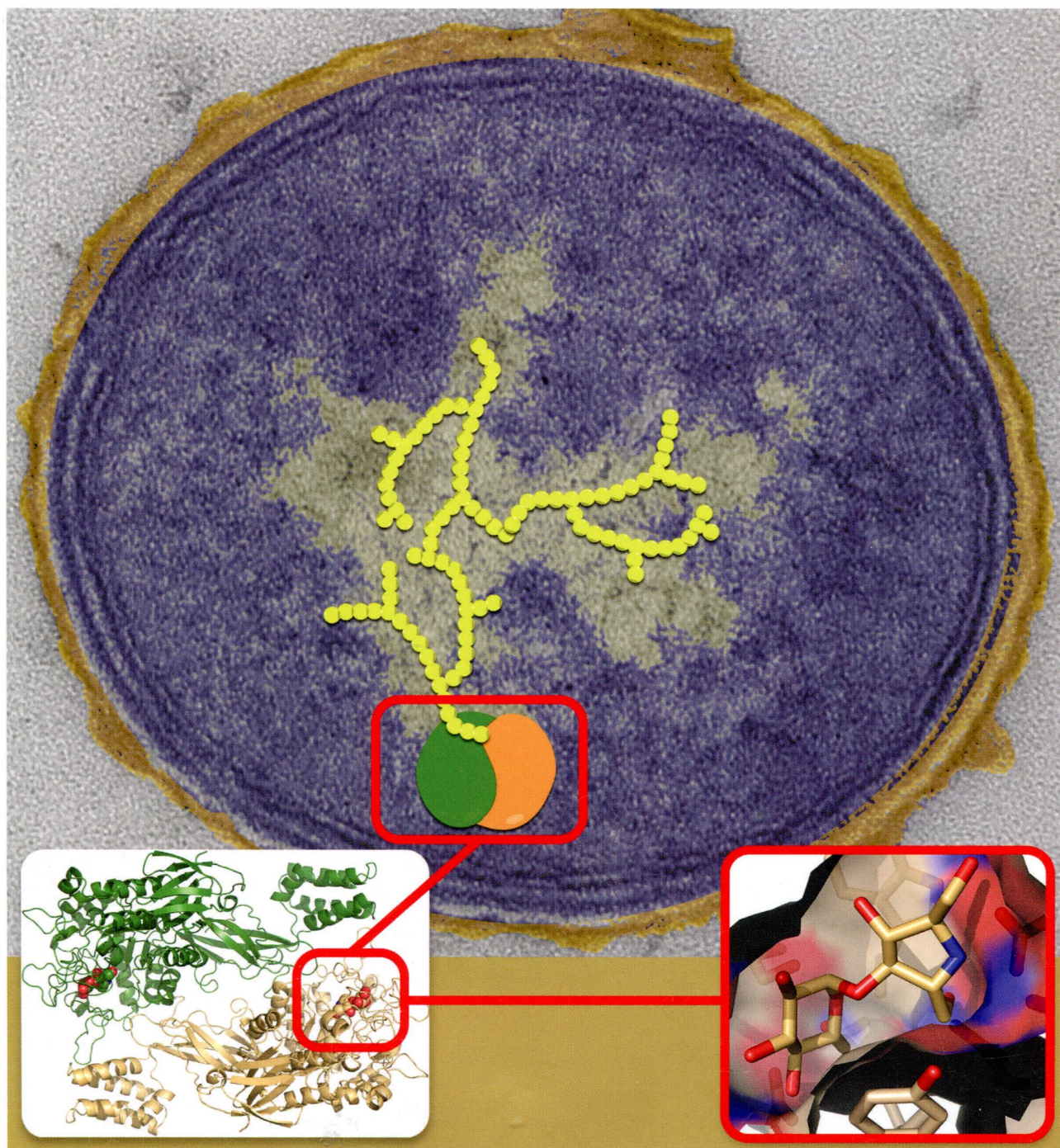


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ON THE COVER: A transmission electron micrograph of an ultrathin section of *Mycobacterium tuberculosis* (*Mtb*) at 60000X magnification stained with uranyl acetate and lead citrate for contrast. *Mtb* GlgE is a validated anti-TB drug target with maltosyl transferase activity that is, in part, responsible for α -glucan (yellow) synthesis. An iminosugar-based inhibitor of both *Mtb* GlgE and *Streptomyces coelicolor* (*Sco*) GlgEI-V279S is shown docked to *Sco* GlgEI-V279S. See Sucheck and co-workers, p 9444.

Brief Communications

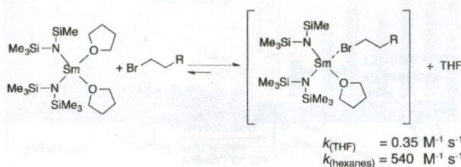
9441



dx.doi.org/10.1021/jo501819z

Solvent-Dependent Substrate Reduction by $\{Sm[N(SiMe_3)_2]_2(THF)_2\}$. An Alternative Approach for Accelerating the Rate of Substrate Reduction by Sm(II)

Tesia V. Chciuk, Göran Hilmersson, and Robert A. Flowers II*



Featured Articles

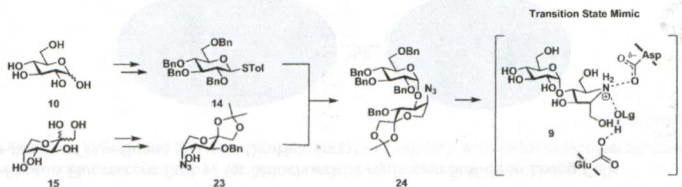
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dx.doi.org/10.1021/jo501481r

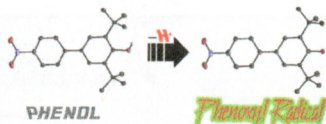
Synthesis of a Poly-hydroxypyrrolidine-Based inhibitor of *Mycobacterium tuberculosis* GlgE

Sri Kumar Veleti, Jared J. Lindenberger, Sandeep Thanna, Donald R. Ronning, and Steven J. Sucheck*



Preparation, Structural Characterization, and Thermochemistry of an Isolable 4-Arylphenoxy Radical

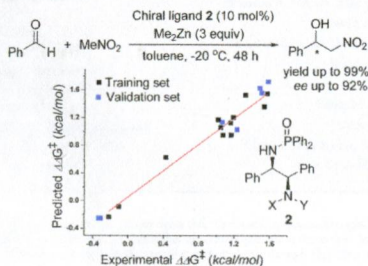
Thomas R. Porter, Werner Kaminsky, and James M. Mayer*



Articles

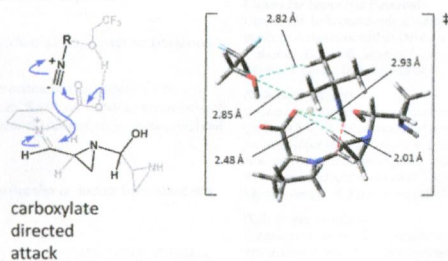
Correlating the Effects of the N-Substituent Sizes of Chiral 1,2-Amino Phosphinamide Ligands on Enantioselectivities in Catalytic Asymmetric Henry Reaction Using Physical Steric Parameters

Huayin Huang, Hua Zong, Guangling Bian, Huifeng Yue, and Ling Song*



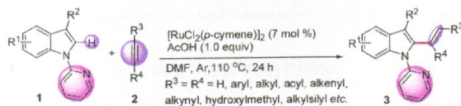
Shifting the Energy Landscape of Multicomponent Reactions Using Aziridine Aldehyde Dimers: A Mechanistic Study

Lee Belding, Serge Zaretsky, Benjamin H. Rotstein, Andrei K. Yudin,* and Travis Dudding*



Ruthenium(II)-Catalyzed Direct Addition of Indole/Pyrrrole C2–H Bonds to Alkynes

Libo Liang, Shaomin Fu, Dongen Lin, Xiao-Qi Zhang, Yuanfu Deng, Huanfeng Jiang, and Wei Zeng*

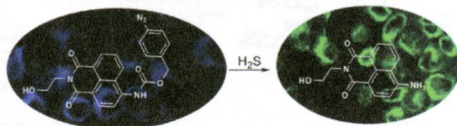


9481 5

dx.doi.org/10.1021/jo5014838

Ratiometric Two-Photon Fluorescent Probes for Mitochondrial Hydrogen Sulfide in Living Cells

Xiu-Ling Liu, Xiao-Jiao Du, Chun-Guang Dai, and Qin-Hua Song*

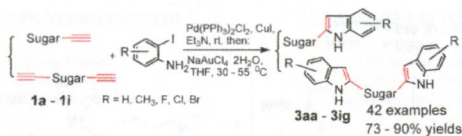


9490 5

dx.doi.org/10.1021/jo501488x

Synthesis of Substituted Mono- and Diindole C-Nucleoside Analogues from Sugar Terminal Alkynes by Sequential Sonogashira/Heteroannulation Reaction

Fuyi Zhang,* Delong Mu, Liming Wang, Pengfei Du, Fen Han, and Yufen Zhao

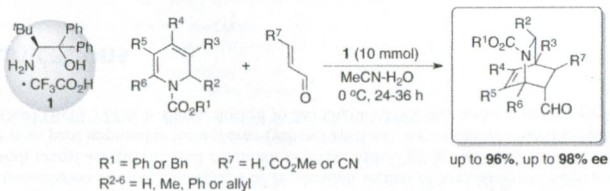


9500 5

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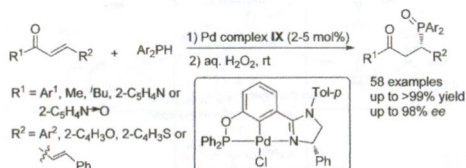
Enantioselective Diels–Alder Reaction of 1,2-Dihydropyridines with Aldehydes Using β -Amino Alcohol Organocatalyst

Yoshihito Kohari, Yuko Okuyama, Eunsang Kwon, Taniyuki Furuyama, Nagao Kobayashi, Teppei Otuki, Jun Kumagai, Chigusa Seki, Koji Uwai, Tatsuo Iwasa, and Hiroto Nakano*



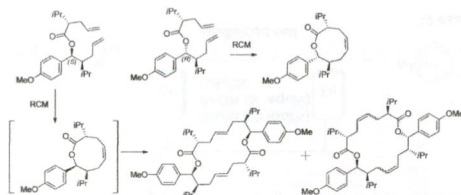
PCN Pincer Palladium(II) Complex Catalyzed Enantioselective Hydrophosphination of Enones: Synthesis of Pyridine-Functionalized Chiral Phosphine Oxides as NC_{sp}O Pincer Preligands

Xin-Qi Hao, Juan-Juan Huang, Tao Wang, Jing Lv, Jun-Fang Gong,* and Mao-Ping Song*



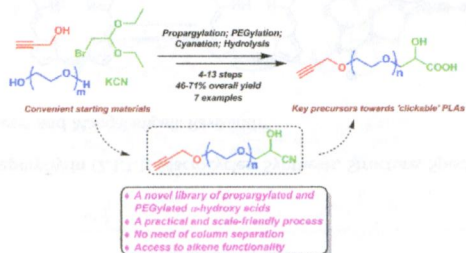
Conception and Evolution of Stereocontrolled Strategies toward Functionalized 8-Aryloctanoic Acids Related to the Total Synthesis of Aliskiren

Stephen Hanessian,* Etienne Chénard, Sébastien Guensé, and Jean-Philippe Cusson



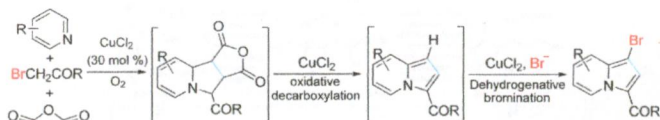
Synthesis of a Library of Propargylated and PEGylated α -Hydroxy Acids Toward "Clickable" Poly lactides via Hydrolysis of Cyanohydrin Derivatives

Quanxuan Zhang,* Hong Ren, and Gregory L. Baker

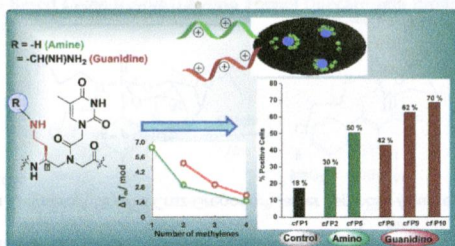


Copper(II)-Catalyzed Indolizines Formation Followed by Dehydrogenative Functionalization Cascade to Synthesize 1-Bromoindolizines

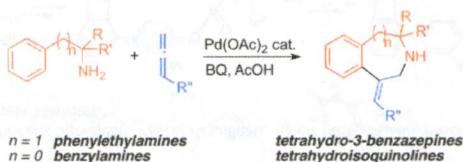
Fuyao Wang, Yongmiao Shen, Huayou Hu, Xiangshan Wang, Hui Wu, and Yun Liu*


Influence of Pendant Chiral C⁷-(Alkylideneamino/Guanidino) Cationic Side-chains of PNA Backbone on Hybridization with Complementary DNA/RNA and Cell Permeability

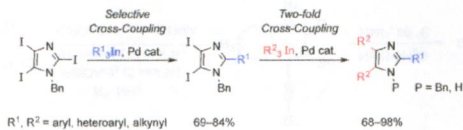
Deepak R. Jain, Libi Anandi V, Mayurika Lahiri, and Krishna N. Ganesh*


Catalytic C–H Activation of Phenylethylamines or Benzylamines and Their Annulation with Allenes

Aleix Rodríguez, Joan Albert, Xavier Ariza,* Jordi Garcia,* Jaume Granell, Jaume Farràs, Andrea La Mela, and Ernesto Nicolás


Triorganotin Reagents in Selective Palladium-Catalyzed Cross-Coupling with Iodoimidazoles: Synthesis of Neurodazine

Cristina Pérez-Caaveiro, José Pérez Sestelo, M. Montserrat Martínez,* and Luis A. Sarandeses*



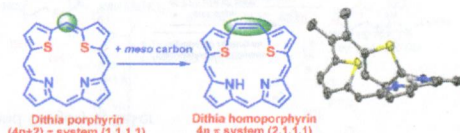
One-Pot Synthesis of High Molecular Weight Synthetic Heteroprotein Dimers Driven by Charge Complementarity Electrostatic Interactions

David Hvasanov, Ekaterina V. Nam, Joshua R. Peterson, Dithapon Pornsaksit, Jörg Wiedenmann, Christopher P. Marquis, and Pall Thordarson*



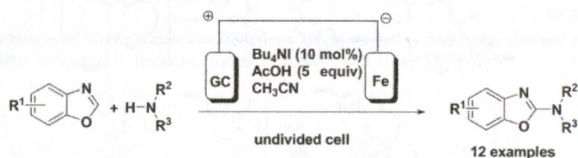
Stable Nonaromatic [20]Dithiaporphyrin (2.1.1.1) Macrocycles: Synthesis, Structure, Spectral, Electrochemical, and Metal Ion Sensing Studies

Emandi Ganapathi, Way-Zen Lee,* and Mangalampalli Ravikanth*



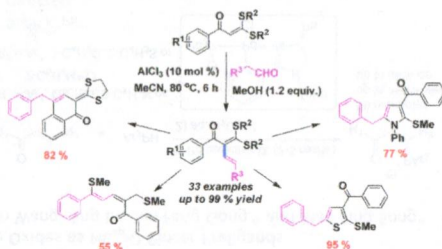
Electrochemically Initiated Oxidative Amination of Benzoxazoles Using Tetraalkylammonium Halides As Redox Catalysts

Wei-Jing Gao, Wei-Cui Li, Cheng-Chu Zeng,* Hong-Yu Tian, Li-Ming Hu, and R. Daniel Little*



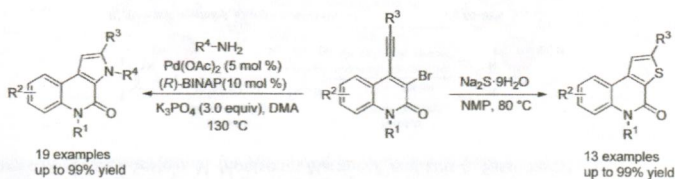
Synthesis of Densely Substituted 1,3-Butadienes through Acid-Catalyzed Alkenylations of α -Oxoketene Dithioacetals with Aldehydes

Changhui Liu and Yanlong Gu*



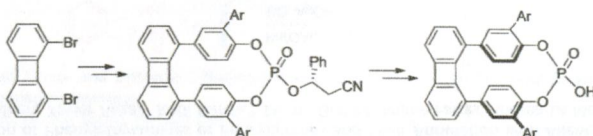
Access to Functionalized 3*H*-Pyrrolo[2,3-*c*]quinolin-4(5*H*)-ones and Thieno[2,3-*c*]quinolin-4(5*H*)-ones via Domino Reaction of 4-Alkynyl-3-bromoquinolin-2(1*H*)-ones

Zhiyong Wang,* Lijun Xue, Yiyi He, Licong Weng, and Ling Fang*



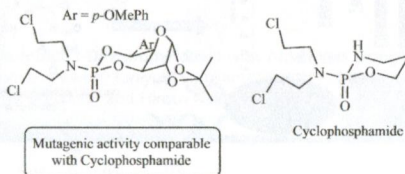
Planar Chiral Phosphoric Acids with Biphenylene-Tethered Paracyclophane Scaffolds: Synthesis, Characterization, and Catalytic Screening

Kévin Isaac, Jérémy Stemper, Vincent Servajean, Pascal Retailleau, Julien Pastor, Gilles Frison, Karl Kaupmees, Ivo Leito, Jean-François Betzer,* and Angela Marinetti*

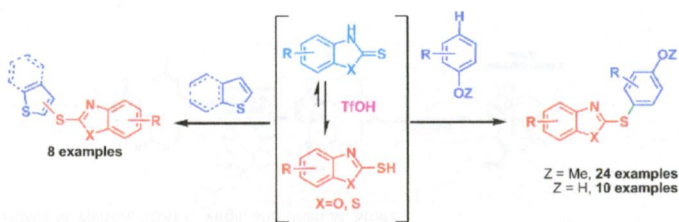


Further Evidence on the Favorable Role of the Anomeric Effect on the Cleavage of HepDirect and Cyclophosphamide Prodrugs

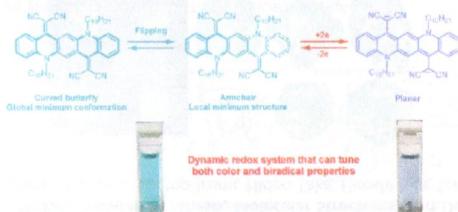
Fernando Sartillo-Piscil,* Leticia Quintero,* Silvano Cruz-Gregorio,* Javier Espinosa-Aguirre, Carmen M. Elinos-Baez, Herbert Höpfl, and Abel Serrano



Regioselective Thiolation of Arenes and Heteroarenes: C–H Functionalization Strategy for C–S Bond Formation
 Begur Vasanthkumar Varun and Kandikere Ramaiah Prabhu*



Dynamic Behavior, Electrochromism, and Two-Photon Absorption of Dicyanomethylenated Quinacridone
 Takashi Takeda,* Hiroyuki Sugihara, Yasutaka Suzuki, Jun Kawamata, and Tomoyuki Akutagawa*

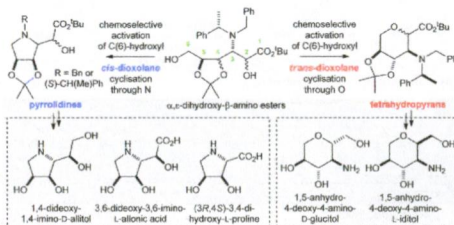


Synthesis of Dihydrobenzoheterocycles through Al(OTf)₃-Mediated Cascade Cyclization and Ionic Hydrogenation
 Yulin Tian, Xiaojian Wang,* Qiong Xiao, Chenbin Sun, and Dali Yin*



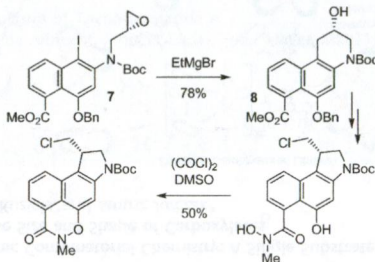
Stereospecific Cyclization Strategies for α,ϵ -Dihydroxy- β -amino Esters: Asymmetric Syntheses of Imino and Amino Sugars

Stephen G. Davies,* Emma M. Foster, James A. Lee, Paul M. Roberts, and James E. Thomson



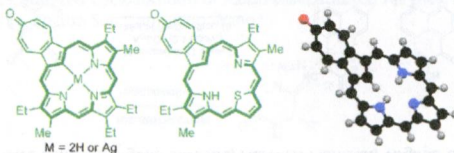
Asymmetric Synthesis of a CBI-Based Cyclic *N*-Acyl *O*-Amino Phenol Duocarmycin Prodrug

Mika Uematsu and Dale L. Boger*



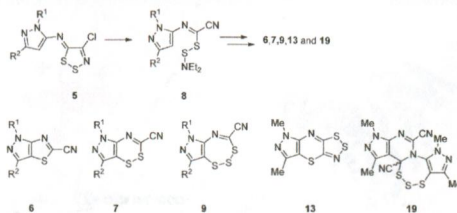
Tropone-Fused Carporphyrins

Timothy D. Lash,* Gean C. Gilot, and Deyaa I. AbuSalim



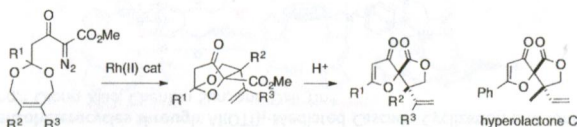
Synthesis of Fused 1,2,4-Dithiazines and 1,2,3,5-Trithiazepines

Maria Koyioni, Maria Manoli, and Panayiotis A. Koutentis*

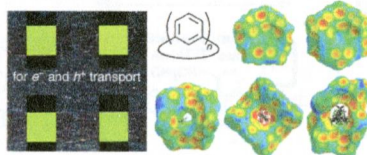


Intramolecular Oxonium Ylide Formation—[2,3] Sigmatropic Rearrangement of Diazocarbonyl-Substituted Cyclic Unsaturated Acetals: A Formal Synthesis of Hyperlactone C

David M. Hodgson,* Stanislav Man, Kimberley J. Powell, Ziga Perko, Minxiang Zeng, Elena Moreno-Clavijo, Amber L. Thompson, and Michael D. Moore

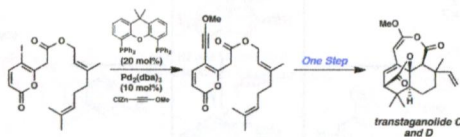
Cyclo-*meta*-phenylene Revisited: Nickel-Mediated Synthesis, Molecular Structures, and Device Applications

Jing Yang Xue, Koki Ikemoto, Norihisa Takahashi, Tomoo Izumi, Hideo Taka, Hiroshi Kita, Sota Sato,* and Hiroyuki Isobe*



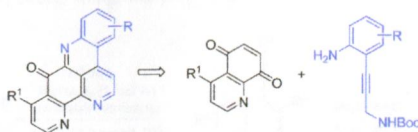
The Total Syntheses of Basiliolide C, epi-Basiliolide C, and Protecting-Group-Free Total Syntheses of Transtaganolides C and D

Jonny R. Gordon, Hosea M. Nelson, Scott C. Virgil, and Brian M. Stoltz*

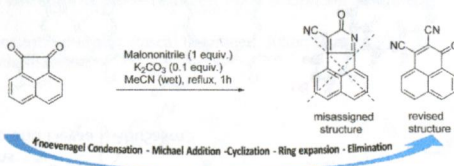


Total Synthesis of Ascididemin-Type Alkaloids Using Alkyne Building Blocks

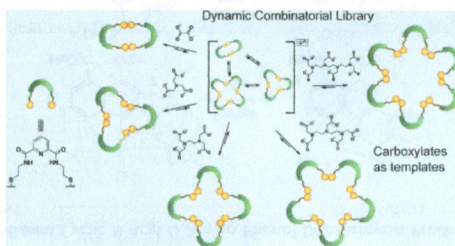
Hao Yin, Naiyu Shan, Shaozhong Wang,* and Zhu-Jun Yao

**1-Oxo-1*H*-phenalene-2,3-dicarbonitrile Heteroaromatic Scaffold: Revised Structure and Mechanistic Studies**

Romaric Lenk, Arnaud Tessier, Pierre Lefranc, Virginie Silvestre, Aurélien Planchat, Virginie Blot, Didier Dubreuil, and Jacques Lebreton*

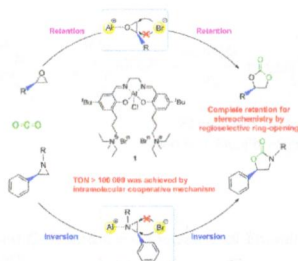
**"Choose-a-Size" Approach in Dynamic Combinatorial Chemistry: A Single Substrate Dynamic Combinatorial Library of Oligomacrocycles That Adapts to the Size and Shape of Carboxylates**

Filip Ulatowski, Agnieszka Sadowska-Kuzioła, and Janusz Jurczak*



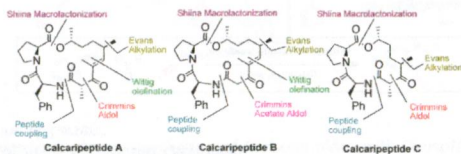
Bifunctional Aluminum Catalyst for CO₂ Fixation: Regioselective Ring Opening of Three-Membered Heterocyclic Compounds

Wei-Min Ren,* Ye Liu, and Xiao-Bing Lu*



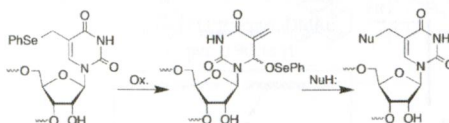
Stereoselective Total Synthesis of Marine Cyclodepsipeptide Calcaripeptides A–C

Sayantana Das and Rajib Kumar Goswami*

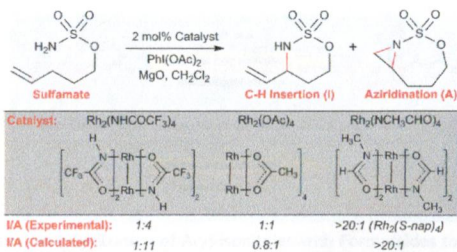


Interstrand Cross-Link and Bioconjugate Formation in RNA from a Modified Nucleotide

Jack L. Sloane and Marc M. Greenberg*



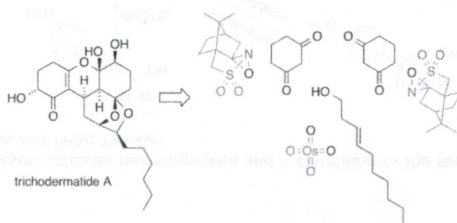
Mechanistic Investigation of Dirhodium-Catalyzed Intramolecular Allylic C–H Amination versus Alkene Aziridination
Xuepeng Zhang, Huiying Xu, and Cunyuan Zhao*



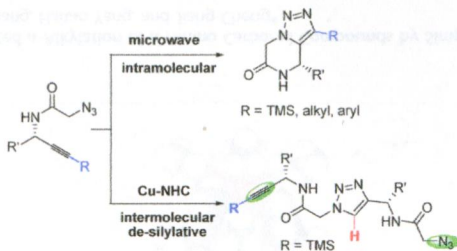
Notes

Total Synthesis of the Proposed Structure of Trichodermitide A

Eddie Myers, Elena Herrero-Gómez, Irina Albrecht, Jennifer Lachs, Peter Mayer, Matti Hanni, Christian Ochsenfeld,* and Dirk Trauner*

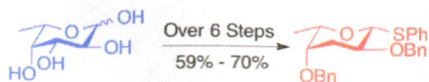


Microwave-Assisted or Cu–NHC-Catalyzed Cycloaddition of Azido-Disubstituted Alkynes: Bifurcation of Reaction Pathways
Yuyu Xia, Ling-yan Chen, Shang Lv, Zhihua Sun,* and Bing Wang*

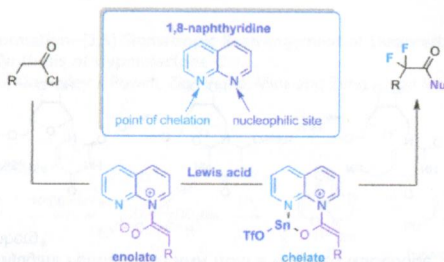


Gram-Scale Synthesis of an Armed Colitose Thioglycoside

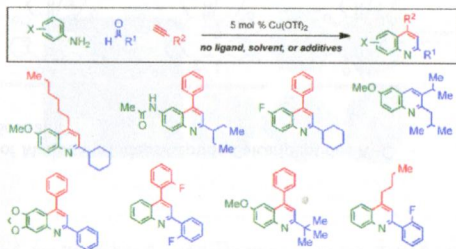
Dina Lloyd and Clay S. Bennett*

**A Chelating Nucleophile Plays a Starring Role: 1,8-Naphthyridine-Catalyzed Polycomponent α,α -Difluorination of Acid Chlorides**

Andrew Griswold, Steven Bloom, and Thomas Lectka*

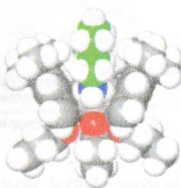
**One-Step Catalytic Synthesis of Alkyl-Substituted Quinolines**

Courtney E. Meyet and Catharine H. Larsen*

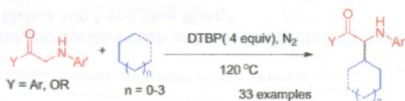


Endo-Complexation of Alkylammonium Ions by Calix[4]arene Cavity: Facilitating Cation- π Interactions through the Weakly Coordinating Anion Approach

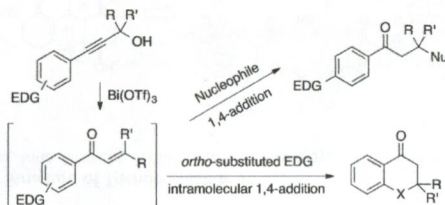
Carmen Talotta,* Carmine Gaeta, and Placido Neri*

**Di-*tert*-butyl Peroxide-Promoted α -Alkylation of α -Amino Carbonyl Compounds by Simple Alkanes**

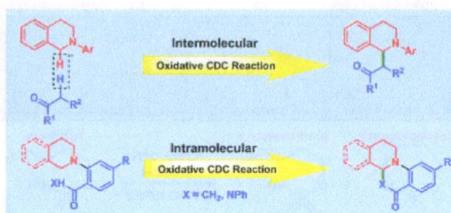
Haibo Peng, Jin-Tao Yu, Yan Jiang, Haitao Yang, and Jiang Cheng*

**Bi(OTf)₃-Catalyzed Tandem Meyer–Schuster Rearrangement and 1,4-Addition to the Resulting Vinyl Ketone**

Noriko Okamoto, Takuya Sueda, and Reiko Yanada*

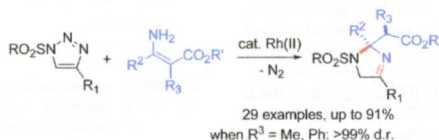
**Aerobic Oxidative Mannich Reaction Promoted by Catalytic Amounts of Stable Radical Cation Salt**

Congde Huo,* Mingxia Wu, Xiaodong Jia, Haisheng Xie, Yong Yuan, and Jing Tang



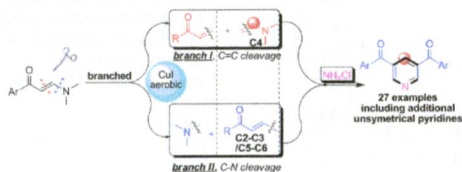
From Triazoles to Imidazolines through the Sequential N–H Insertion of α -Imino Rhodium–Carbenes into β -Enamino Esters/Enamine–Imine Tautomerization/Conjugate Addition Cascade

Hyun Ji Jeon, Da Jung Jung, Ju Hyun Kim, Youngmee Kim, Jean Bouffard, and Sang-gi Lee*



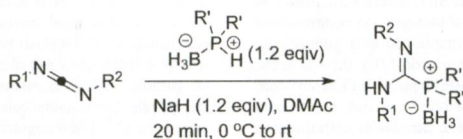
Domino Reactions Involving the Branched C–N and C=C Cleavage of Enaminones Toward Pyridines Synthesis

Jie-Ping Wan,* Youyi Zhou, and Shuo Cao



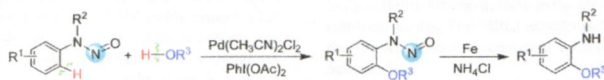
Synthesis of Phosphaguanidines by Hydrophosphination of Carbodiimides with Phosphine Boranes

Carl A. Busacca,* John A. Milligan, Eakkaphon Rattanangkool, Cyrus Ramavaram, Anji Chen, Anjan K. Saha, Zhibin Li, Heewon Lee, Steven J. Geib, Guijun Wang, Chris H. Senanayake, and Peter Wipf*



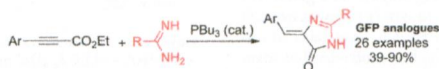
Palladium-Catalyzed *N*-Nitroso-Directed C–H Alkoxylation of Arenes and Subsequent Formation of 2-Alkoxy-*N*-alkylarylamines

Tingting Gao and Peipei Sun*



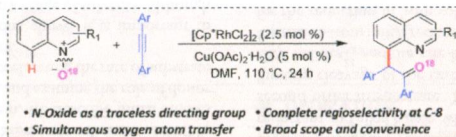
A Phosphine-Catalyzed Preparation of 4-Arylidene-5-imidazolones

Sandra Gabillet, Olivier Loreau, Simon Specklin, Evelia Rasalofonjatovo, and Frédéric Taran*



Rh(III)-Catalyzed Traceless Coupling of Quinoline *N*-Oxides with Internal Diarylalkynes

Upendra Sharma, Yoonsu Park, and Sukbok Chang*



FeCl₃-Promoted Carboxamidation and Cyclization of Aryl Isonitriles with Formamides toward Phenanthridine-6-carboxamides

Hai-Yong Tu, Yu-Rong Liu, Jing-Jing Chu, Bo-Lun Hu, and Xing-Guo Zhang*

