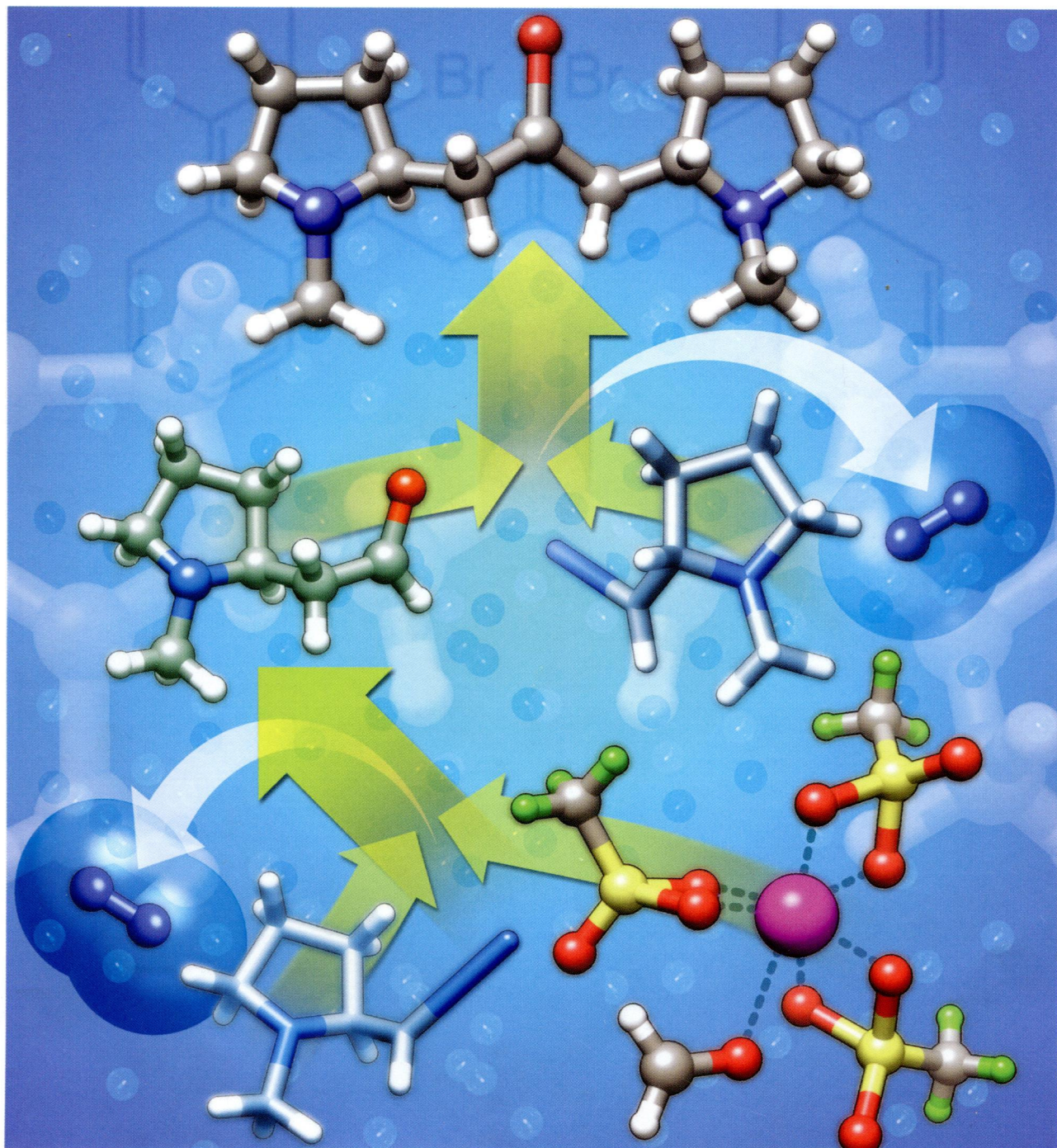


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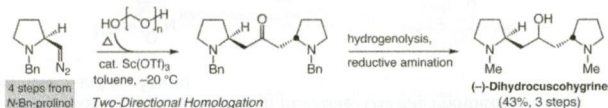
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ON THE COVER: Though challenging to prepare, nonstabilized diazoalkanes promote powerful and environmentally benign transformations. Illustrated is the one-step elaboration of a bis(pyrrolidine) alkaloid under scandium(III) catalysis by two successive diazoalkyl carbon insertion events on the C–H bonds of formaldehyde. See Wommack and Kingsbury, page 10573.

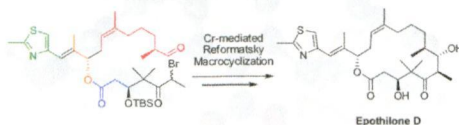
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10573 **S** [dx.doi.org/10.1021/jo401377a](https://doi.org/10.1021/jo401377a)
Synthesis of Acyclic Ketones by Catalytic, Bidirectional Homologation of Formaldehyde with Nonstabilized Diazoalkanes. Application of a Chiral Diazomethyl(pyrrolidine) in Total Syntheses of Erythrolyon Alkaloids
Andrew J. Wommack and Jason S. Kingsbury*

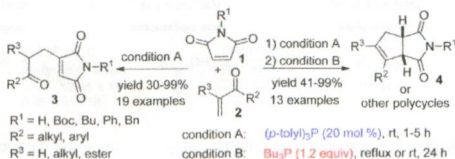


Articles

10588 **S** [dx.doi.org/10.1021/jo401355r](https://doi.org/10.1021/jo401355r)
Total Synthesis of Epothilone D: The Nerol/Macroaldolization Approach
Ludger A. Wessjohann,* Günther O. Scheid, Uwe Eichelberger, and Sumaira Umbreen

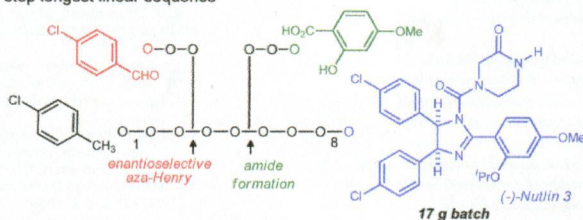


10596 **S** [dx.doi.org/10.1021/jo401363u](https://doi.org/10.1021/jo401363u)
Highly Chemoselective Rauhut–Currier Reaction between Maleimides and Enones and Dual Phosphine-Mediated One-Pot Synthesis of Bicyclic and Polycyclic Skeletons
Rong Zhou, Jianfang Wang, Jia Yu, and Zhengjie He*



Preparation of (–)-Nutlin-3 Using Enantioselective Organocatalysis at Decagram Scale

Tyler A. Davis, Anna E. Vilgelm, Ann Richmond, and Jeffrey N. Johnston*

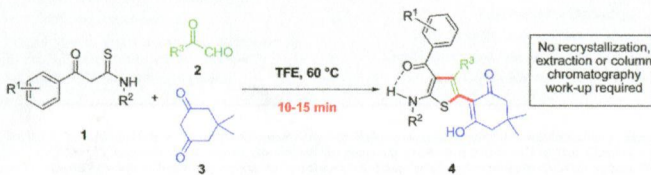
Synthesis of (–)-Nutlin-3
- 8 step longest linear sequence

10617 5

dx.doi.org/10.1021/jo401397d

Three-Component Cascade Annulation of β -Ketothioamides Promoted by $\text{CF}_3\text{CH}_2\text{OH}$: A Regioselective Synthesis of Tetrasubstituted Thiophenes

Li-Rong Wen,* Tao He, Ming-Chao Lan, and Ming Li*

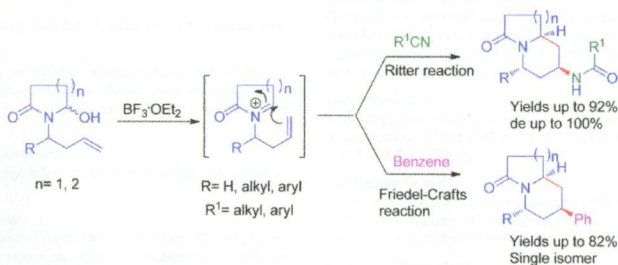


10629 5

dx.doi.org/10.1021/jo401450j

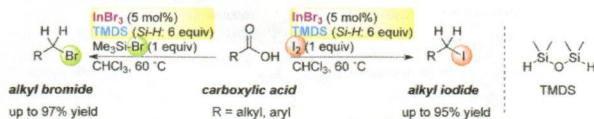
Stereoselective Synthesis of Amido and Phenyl Azabicyclic Derivatives via a Tandem Aza Prins-Ritter/Friedel–Crafts Type Reaction of Endocyclic *N*-Acyliminium Ions

Kiran Indukuri, R. Unnava, Manash J. Deha, and Anil K. Saikia*



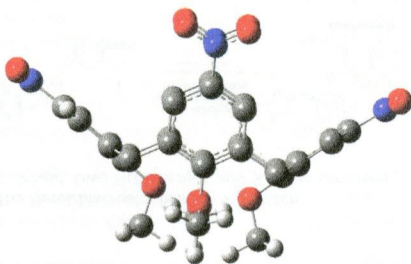
Indium(III)-Catalyzed Reductive Bromination and Iodination of Carboxylic Acids to Alkyl Bromides and Iodides: Scope, Mechanism, and One-Pot Transformation to Alkyl Halides and Amine Derivatives

Toshimitsu Moriya, Shinichiro Yoneda, Keita Kawana, Reiko Ikeda, Takeo Konakahara, and Norio Sakai*



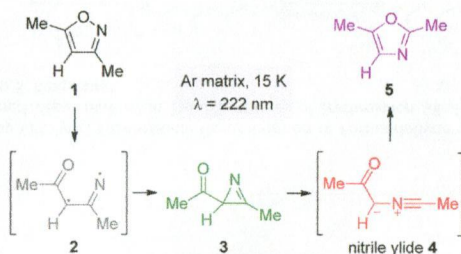
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Alan Liška, Pavel Vojtíšek, Albert J. Fry, and Jiří Ludvík*



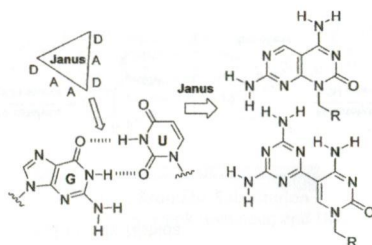
Capture of an Elusive Nitrile Ylide as an Intermediate in Isoxazole–Oxazole Photoisomerization

Cláudio M. Nunes,* Igor Reva,* and Rui Fausto



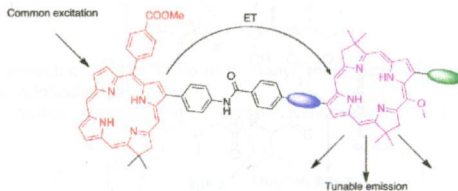
Synthesis of Janus Compounds for the Recognition of G-U Mismatched Nucleobase Pairs

Gerard Artigas and Vicente Marchán*



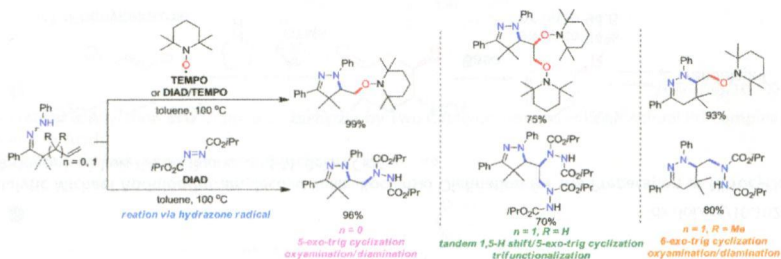
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Zhanqian Yu and Marcin Ptaszek*



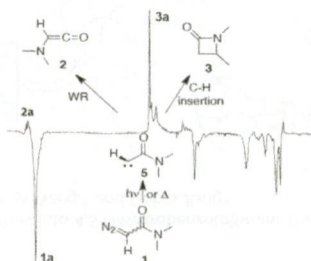
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Xiao-Yong Duan, Xiu-Long Yang, Ran Fang, Xie-Xue Peng, Wei Yu, and Bing Han*



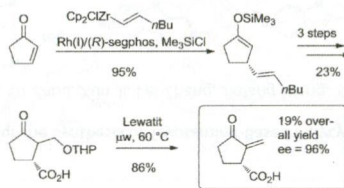
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Curt Wenstrup,* Hervé Bibas, Arvid Kuhn, Ullrich Mitschke, and Mark C. Mills



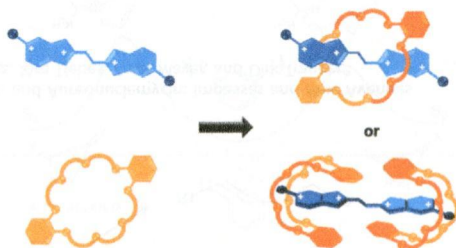
Total Synthesis of (*R*)-Sarkomycin via Asymmetric Rhodium-Catalyzed Conjugate Addition

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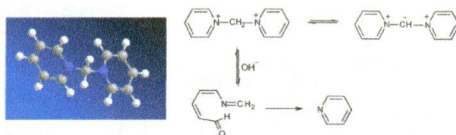
Complexation of Imidazopyridine-Based Cations with a 24-Crown-8 Ether Host: [2]Pseudorotaxane and Partially Threaded Structures

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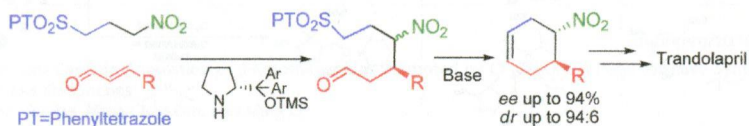
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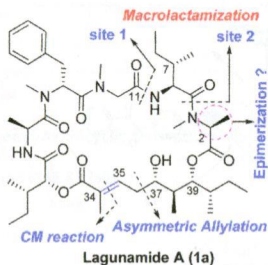
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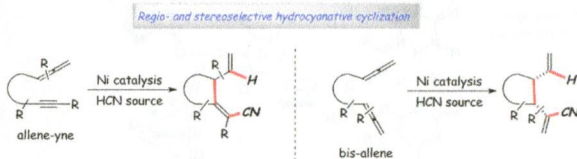
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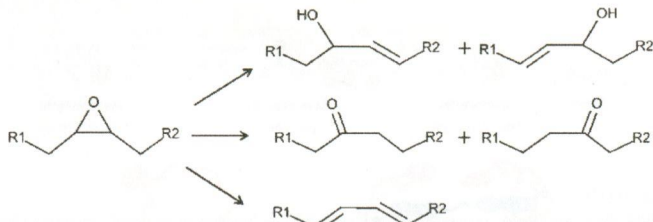
Regioselective Hydronicellation of Allenes and Its Application to the Hydrocyanative Carbocyclization Reaction of Allenes and Bis-Allenes

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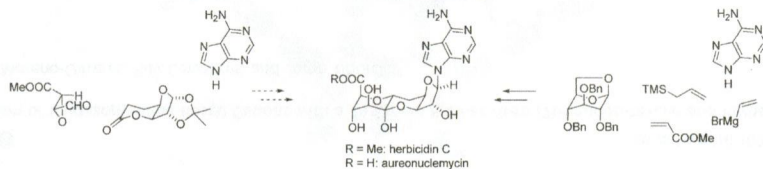
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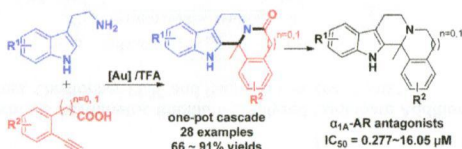


Total Synthesis of Herbicidin C and Aureonuclemycin: Impasses and New Avenues

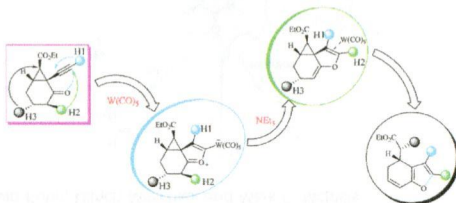
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Gold(I)-Catalyzed Cascade Approach for the Synthesis of Tryptamine-Based Polycyclic Privileged Scaffolds as α_1 -Adrenergic Receptor Antagonists

Zeng Li, Jing Li, Nan Yang, Ying Chen, Yu Zhou, Xun Ji, Lei Zhang, Jinfang Wang, Xin Xie,* and Hong Liu*

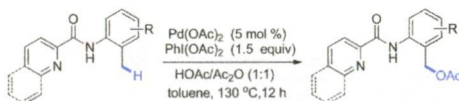
How the Bicyclo[4.1.0] Substrate Isomerizes into 4,5-Dihydrobenzo[*b*]furan: The Contribution from $W(\text{CO})_5$ and NEt_3

Jingxi Wu, Mian Wang, Lisheng Wang, Jianyi Wang,* and Linbin Jiang*

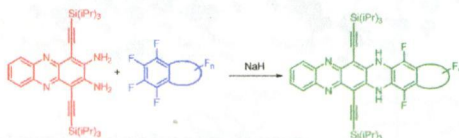


Palladium-Catalyzed Oxidative Acetoxylation of Benzylic C–H Bond Using Bidentate Auxiliary

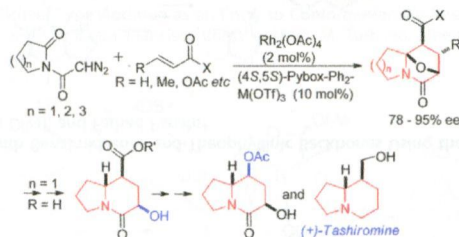
Long Ju, Jinhong Yao, Zaihong Wu, Zhanxiang Liu,* and Yuhong Zhang*

**Partially Fluorinated Tetraazaacenes by Nucleophilic Aromatic Substitution**

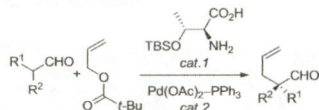
Jens U. Engelhart, Benjamin D. Lindner, Olena Tverskoy, Frank Rominger, and Uwe H. F. Bunz*

**Chiral Lewis Acid Catalyzed Asymmetric Cycloadditions of Carbonyl Ylides Generated from Diazoimide Derivatives and Their Synthetic Applications to Indolizidine Alkaloids**

Hiroyuki Suga,* Yuta Hashimoto, Shingo Yasumura, Ryota Takezawa, Kennosuke Itoh, and Akikazu Kakehi

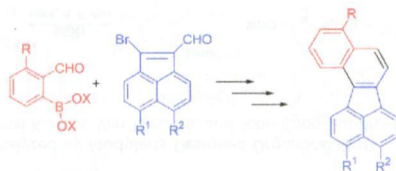
**Direct Asymmetric α -Allylation of α -Branched Aldehydes by Two Catalytic Systems with an Achiral Pd Complex and a Chiral Primary α -Amino Acid**

Masanori Yoshida,* Tatsuaki Terumine, Erika Masaki, and Shoji Hara



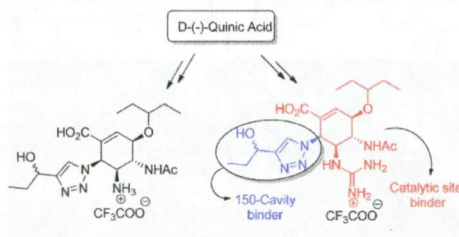
Total Synthesis of the Natural Product Benzo[*j*]fluoranthene-4,9-diol: An Approach to the Synthesis of Oxygenated Benzo[*j*]fluoranthenes

Santosh Lahore, Umesh Narkhede, Lucio Merlini, and Sabrina Dallavalle*



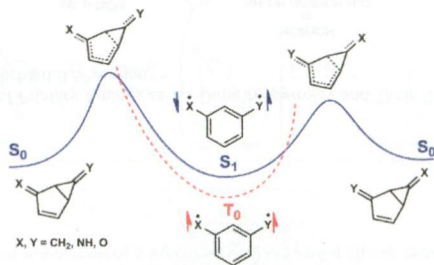
Exploitation of the Catalytic Site and 150 Cavity for Design of Influenza A Neuraminidase Inhibitors

Pal John Pal Adabala, Eric B. LeGresley, Nicole Bance, Masahiro Niikura, and B. Mario Pinto*



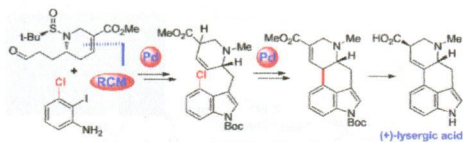
Potential Nonadiabatic Reactions: Ring-Opening 4,6-Dimethylidenebicyclo[3.1.0]hex-2-ene Derivatives to Aromatic Reactive Intermediates

Kyle S. Stumetz, Jason T. Nadeau, and Matthew E. Cremeens*



Total Synthesis of (+)-Lysergic Acid

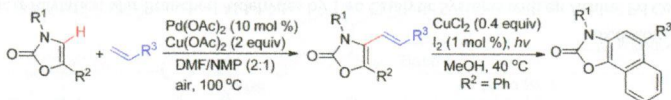
Qiang Liu, Yu-An Zhang, Ping Xu, and Yanxing Jia*

**10894** 

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Palladium-Catalyzed Direct Alkenylation of 2-Oxazolones: An Entry to 3,4,5-Trisubstituted 2-Oxazolones

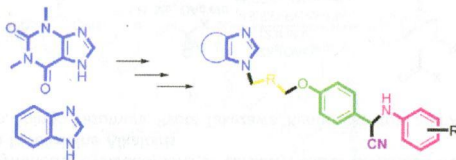
Zenghui Lu, Fang Luo, Lina Wang, and Gangguo Zhu*

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Synthesis of α -Aminonitriles with Benzimidazolic and Theophyllinic Backbones Using the Strecker Reaction

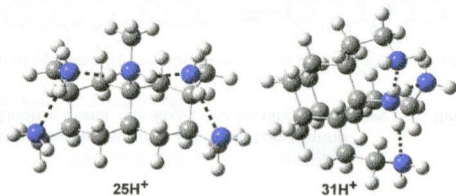
Ali Khalafi-Nezhad,* Masoumeh Divar, and Farhad Panahi*

**10909** 

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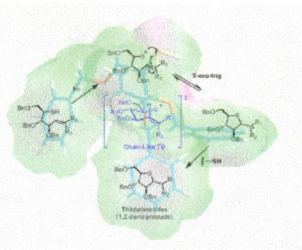
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Applications of 5-exo-trig Thiyyl Radical Cyclizations for the Synthesis of Thiosugars

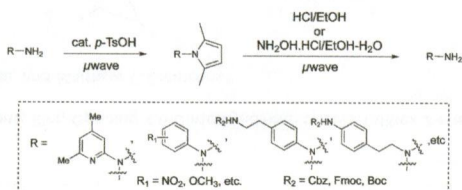
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Microwave-Assisted Protection of Primary Amines as 2,5-Dimethylpyrroles and Their Orthogonal Deprotection

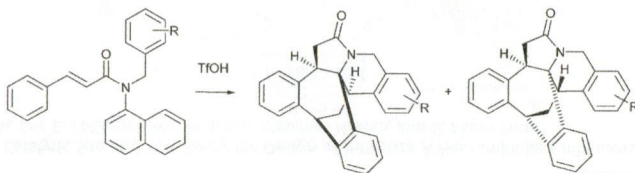
Amit Walia, Soosung Kang, and Richard B Silverman*

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The Triflic Acid-Mediated Cyclization Reactions of *N*-Cinnamoyl-1-Naphthylamines

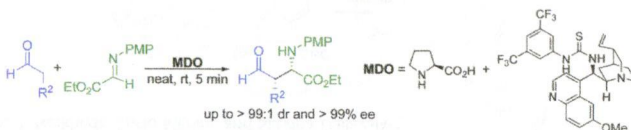
Frank D. King,* Abil E. Aliev, Stephen Caddick, and Derek A. Tocher

10947 **5**

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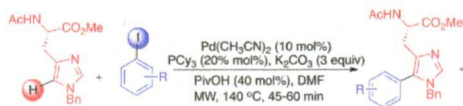
List-Barbas–Mannich Reaction Catalyzed by Modularly Designed Organocatalysts

Sandun Perera, Debarshi Sinha, Nirmal K. Rana, Van Trieu-Do, and John Cong-Gui Zhao*



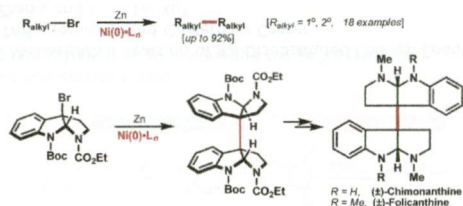
Palladium-Catalyzed Regioselective C-5 Arylation of Protected L-Histidine: Microwave-Assisted C–H Activation Adjacent to Donor Arm

Amit Mahindra, Nitin Bagra, and Rahul Jain*



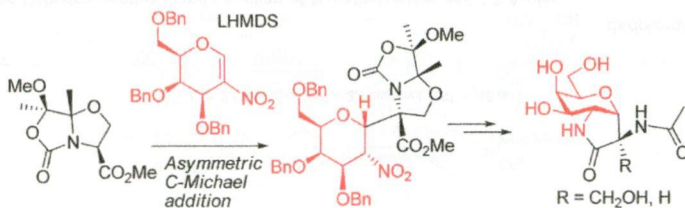
Ni-Catalyzed Reductive Homocoupling of Unactivated Alkyl Bromides at Room Temperature and Its Synthetic Application

Yu Peng,* Long Luo, Chang-Song Yan, Jian-Jian Zhang, and Ya-Wen Wang



A Double Diastereoselective Michael-Type Addition as an Entry to Conformationally Restricted Tn Antigen Mimics

Carlos Aydillo, Claudio D. Navo, Jesús H. Busto, Francisco Corzana, María M. Zurbano, Alberto Avenzoa,* and Jesús M. Peregrina*



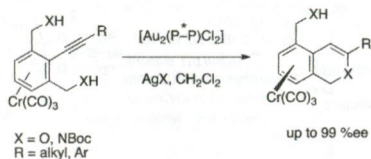
Synthesis of Functionalized Tetracyanocyclopentadienides from Tetracyanothiophene and Sulfones

Takeo Sakai,* Shohei Seo, Junpei Matsuoka, and Yuji Mori*



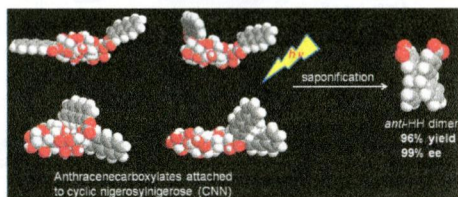
Gold(I)-Catalyzed Asymmetric Induction of Planar Chirality by Intramolecular Nucleophilic Addition to Chromium-Complexed Alkynylarenes: Asymmetric Synthesis of Planar Chiral (1*H*-Isochromene and 1,2-Dihydroisoquinoline)chromium Complexes

Masato Murai, Yumi Sota, Yūki Onohara, Jun'ichi Uenishi, and Motokazu Uemura*



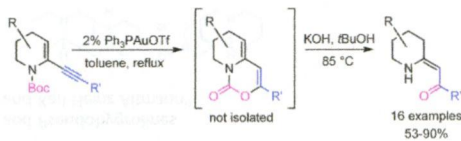
Diastereodifferentiating Photocyclodimerization of 2-Anthracenecarboxylates Tethered to a Cyclic Tetrasaccharide Scaffold: Critical Control of Photoreactivity and Stereoselectivity

Gaku Fukuhara,* Tomohiro Nakamura, Yuko Kawanami, Cheng Yang, Tadashi Mori, Hiroyuki Hiramatsu, Yasufumi Dan-oh, Tomoyuki Nishimoto, Kazuo Tsujimoto, and Yoshihisa Inoue*



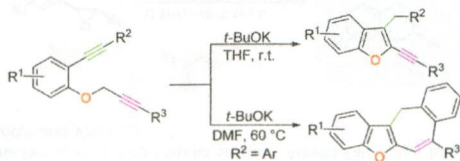
Synthesis of Vinylogous Amides by Gold(I)-Catalyzed Cyclization of *N*-Boc-Protected 6-Alkynyl-3,4-dihydro-2*H*-pyridines

Alberto Oppedisano, Cristina Prandi, Paolo Venturello, Annamaria Deagostino, Giulio Goti, Dina Scarpi, and Ernesto G. Occhiatto*



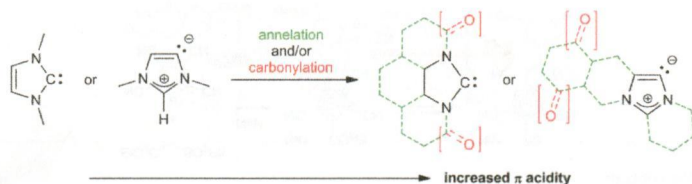
Potassium *tert*-Butoxide Promoted Annulation of 2-Alkynylphenyl Propargyl Ethers: Selective Synthesis of Benzofuran and 12*H*-Benzoannulene Derivatives

Tamiris B. Grimaldi, Davi F. Back, and Gilson Zeni*



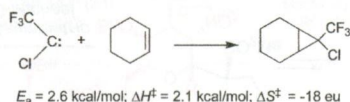
Electronic and Ligand Properties of Annelated Normal and Abnormal (Mesoionic) *N*-Heterocyclic Carbenes: A Theoretical Study

Ashwini K. Phukan,* Ankur Kanti Guha, Satyajit Sarmah, and Rian D. Dewhurst



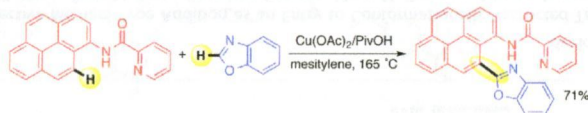
Reactivity of Chlorotrifluoromethylcarbene: Activation Parameters for Halocarbene–Alkene Addition Reactions

Robert A. Moss,* Lei Wang, and Karsten Krogh-Jespersen*



Copper-Mediated Dehydrogenative Biaryl Coupling of Naphthylamines and 1,3-Azoles

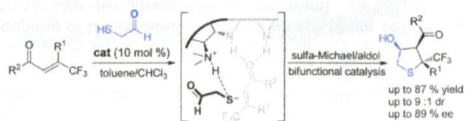
Riko Odani, Koji Hirano,* Tetsuya Satoh, and Masahiro Miura*



Notes

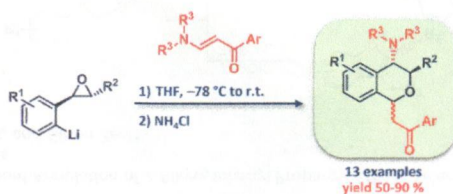
Organocatalytic Cascade Sulfa-Michael/Aldol Reaction of β,β -Disubstituted Enones: Enantioselective Synthesis of Tetrahydrothiophenes with a Trifluoromethylated Quaternary Center

Yu Su, Jun-Bing Ling, Shuang Zhang, and Peng-Fei Xu*



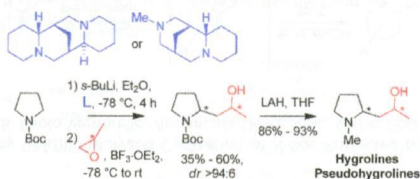
Preparation of Polysubstituted Isochromanes by Addition of *ortho*-Lithiated Aryloxiranes to Enamiones

Antonio Salomone, Filippo Maria Perna, Francesca Claudia Sassone, Aurelia Falcicchio, Jure Bezenšek, Jurij Svetec, Branko Stanovnik,* Saverio Florio,* and Vito Capriati*



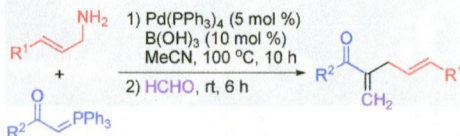
Total Synthesis of Hygrolines and Pseudohygrolines

Marc Liniger, Katja Estermann, and Karl-Heinz Altmann*



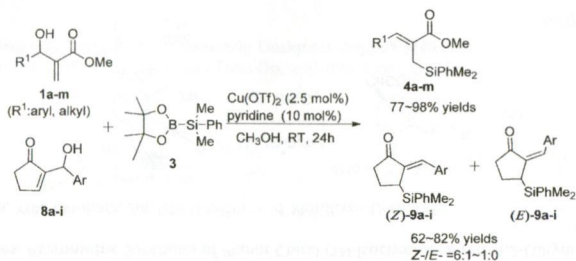
Catalytic Allylation of Stabilized Phosphonium Ylides with Primary Allylic Amines

Xian-Tao Ma, Yong Wang, Rui-Han Dai, Cong-Rong Liu, and Shi-Kai Tian*



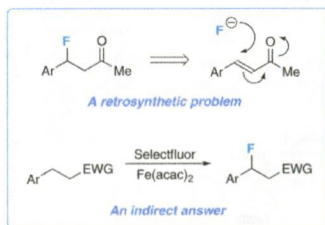
Cu(II)-Catalyzed Allylic Silylation of Morita–Baylis–Hillman Alcohols via Dual Activation of Si–B Bond and Hydroxyl Group

Qing-Qing Xuan, Neng-Jun Zhong, Chuan-Li Ren, Li Liu,* Dong Wang, Yong-Jun Chen, and Chao-Jun Li*



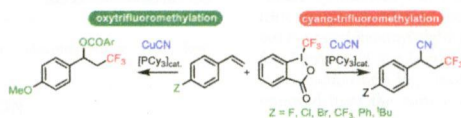
Metal-Catalyzed Benzylic Fluorination as a Synthetic Equivalent to 1,4-Conjugate Addition of Fluoride

Steven Bloom, Seth Andrew Sharber, Maxwell Gargiulo Holl, James Levi Knippel, and Thomas Lectka*



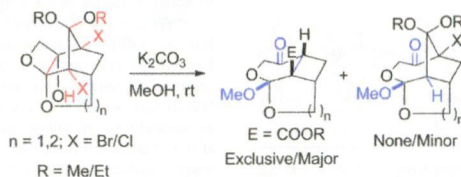
Copper-Mediated Cyanotrifluoromethylation of Styrenes Using the Togni Reagent

Nadia O. Ilchenko, Pär G. Janson, and Kálmán J. Szabó*

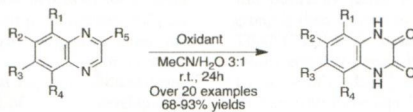


An Unusual Fragmentation of Oxetane-Embedded Tetracyclic Ketal Systems

G. Hari Mangeswara Rao and Faiz Ahmed Khan*

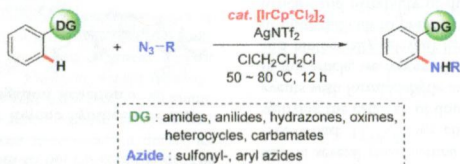
A Direct Method for Oxidizing Quinoxaline, Tetraazaphenanthrene, and Hexaazatriphenylene Moieties Using Hypervalent λ^3 -Iodine Compounds

Ludovic Troian-Gautier, Julien De Winter, Pascal Gerbaux, and Cécile Moucheron*



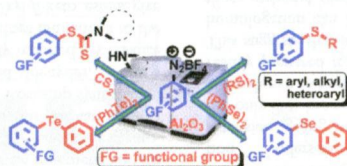
Iridium-Catalyzed Direct Arene C–H Bond Amidation with Sulfonyl- and Aryl Azides

Donggun Lee, Youngchan Kim, and Sukbok Chang*



Reaction under Ball-Milling: Solvent-, Ligand-, and Metal-Free Synthesis of Unsymmetrical Diaryl Chalcogenides

Nirmalya Mukherjee, Tanmay Chatterjee, and Brindaban C. Ranu*



Additions and Corrections

Correction to Stereocontrolled Syntheses of Peptide Thioesters Containing Modified Seryl Residues as Probes of Antibiotic Biosynthesis

Nicole M. Gaudelli and Craig A. Townsend*