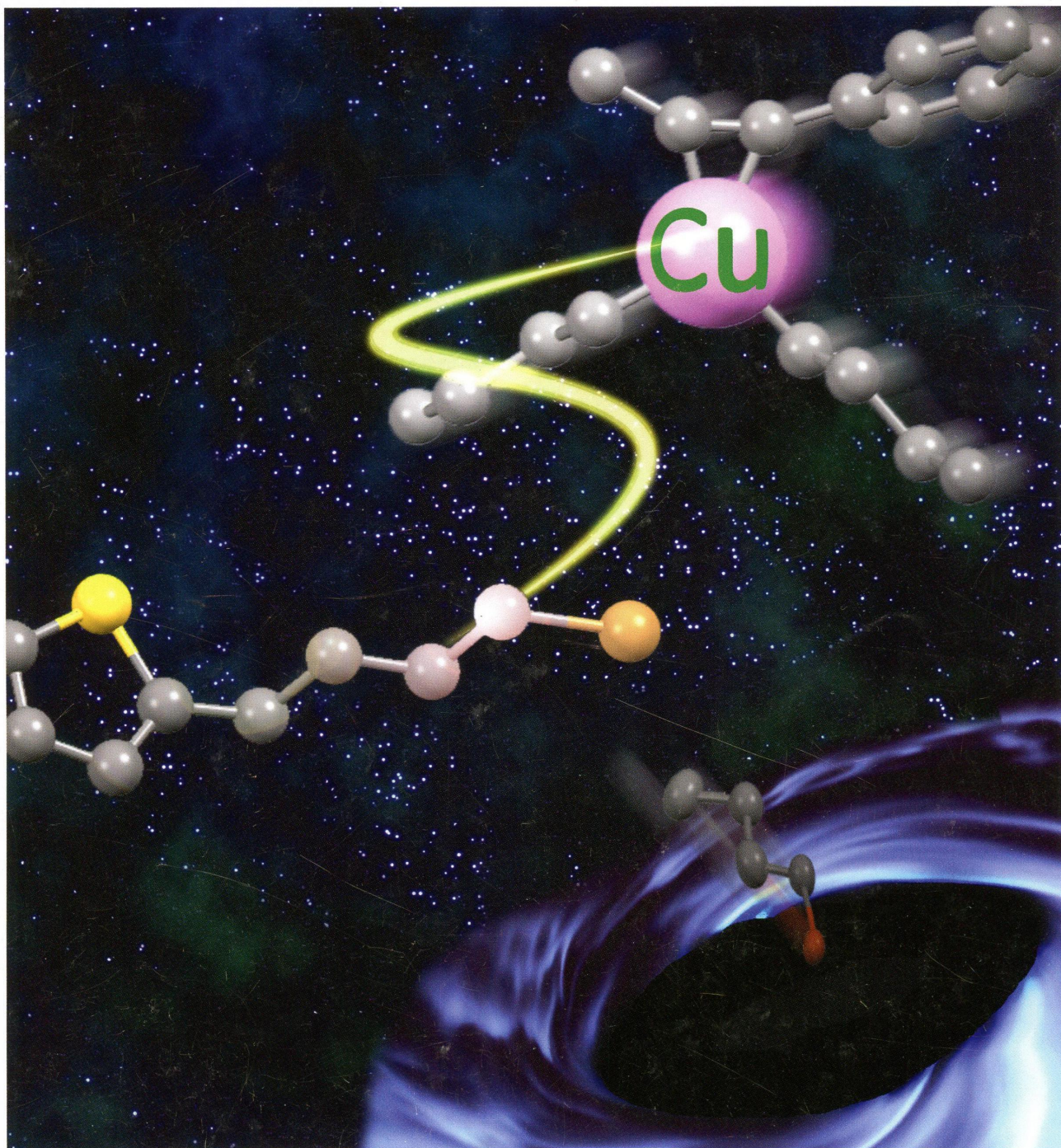


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ON THE COVER: Cu represents very high catalytic performance for alkyl–alkyl cross-coupling reactions by the combined use of an unsaturated hydrocarbon additive such as 1-phenylpropyne or 1,3-butadiene, which suppresses both side reactions and degradation of the catalyst. See Kambe and co-workers, p 8522.

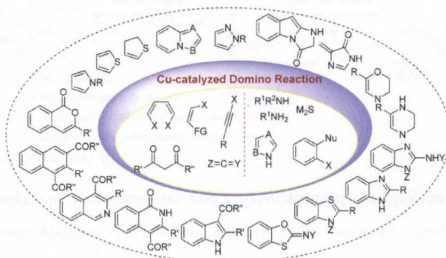
JOCSynopsis

8507

dx.doi.org/10.1021/jo501331r

Copper-Catalyzed Domino Reactions for the Synthesis of Cyclic Compounds

Qian Liao, Xianghua Yang, and Chanjuan Xi*



Brief Communications

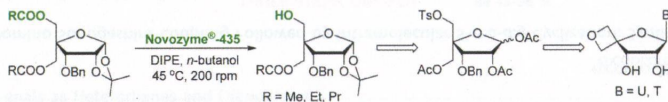
8516

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dx.doi.org/10.1021/jo501655j

Chemoenzymatic Synthesis of C-4'-Spiro-oxetanoribonucleosides

Vivek K. Sharma, Manish Kumar, Deepti Sharma, Carl E. Olsen, and Ashok K. Prasad*



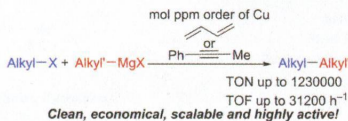
Featured Articles

8522 **S**

dx.doi.org/10.1021/jo501006u

Copper-Catalyzed Alkyl–Alkyl Cross-Coupling Reactions Using Hydrocarbon Additives: Efficiency of Catalyst and Roles of Additives

Takanori Iwasaki, Reiko Imanishi, Ryohei Shimizu, Hitoshi Kuniyasu, Jun Terao, and Nobuaki Kambe*

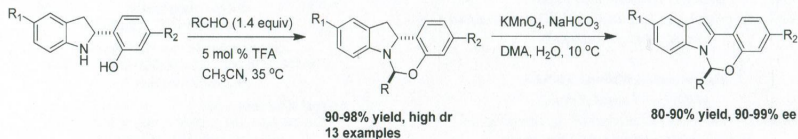


8533 **S**

dx.doi.org/10.1021/jo501581e

Asymmetric Synthesis of Cyclic Indole Aminals via 1,3-Stereinduction

Hongmei Li,* Cheng-yi Chen, Hoa Nguyen, Ryan Cohen, Peter E. Maligrès, Nobuyoshi Yasuda, Ian Mangion, Ilia Zavalov, Mikhail Reibarkh, and John Y. L. Chung

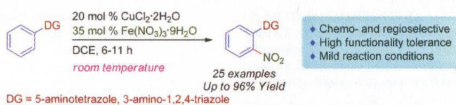


8541 **S**

dx.doi.org/10.1021/jo501617g

Room-Temperature Cu(II)-Catalyzed Chemo- and Regioselective *Ortho*-Nitration of Arenes via C–H Functionalization

Pradeep Sadhu, Santhosh Kumar Alla, and Tharmalingam Punniyamurthy*

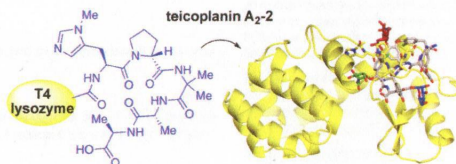


8550 **S**

dx.doi.org/10.1021/jo501625f

X-ray Crystal Structure of Teicoplanin A₂-2 Bound to a Catalytic Peptide Sequence via the Carrier Protein Strategy

Sunkyuu Han, Binh V. Le, Holly S. Hajare, Richard H. G. Baxter, and Scott J. Miller*



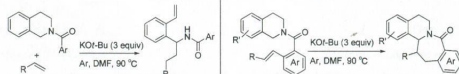
8557

S

dx.doi.org/10.1021/jo501179t

Direct Inter- and Intramolecular Addition of Amides to Arylalkenes Promoted by KOt-Bu/DMF

Wei-juan Wang, Xu Zhao, Lang Tong, Jia-hua Chen, Xue-jing Zhang,* and Ming Yan*



Inter- and intramolecular reactions in good yields
Without transition-metal catalyst
Excellent 7-endo regioselectivity
Convenient procedure and cheap reagents

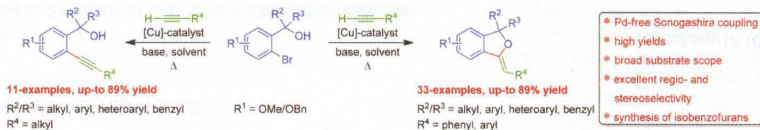
8566

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dx.doi.org/10.1021/jo501137q

[Cu]-Catalyzed Domino Sonogashira Coupling Followed by Intramolecular 5-*exo-dig* Cyclization: Synthesis of 1,3-Dihydro-2-benzofurans

Lodi Mahendar, Alavala Gopi Krishna Reddy, Jonnada Krishna, and Gedu Satyanarayana*



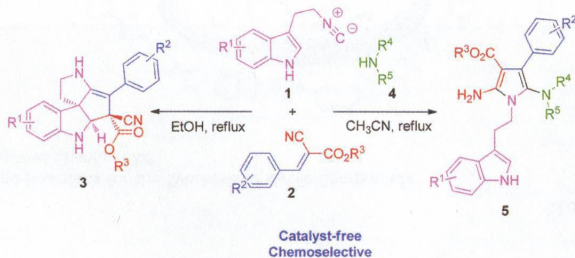
8577

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Chemoselective Synthesis of Polycyclic Spiroindolines and Polysubstituted Pyrroles via the Domino Reaction of 2-Isocyanoethylindoles

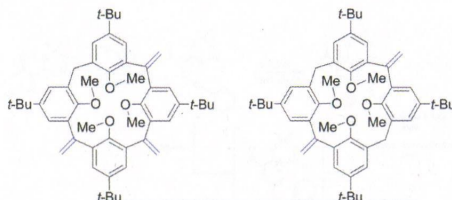
Xiang Wang, Shun-Yi Wang,* and Shun-Jun Ji*



8584 **S**

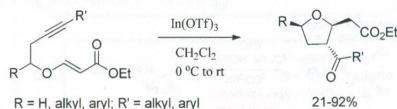
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Incorporation of Three or Two Distal Double Bonds at the Methylene Bridges of the Calix[4]arene Scaffold
Ori Shalev and Silvio E. Biali*

8592 **S**

dx.doi.org/10.1021/jo501197y

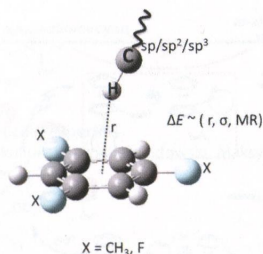
Diastereoselective Synthesis of Substituted Tetrahydrofurans via Prins Cyclization of Enol Ethers
Paramartha Gogoi, Vijay K. Das, and Anil K. Saikia*

8599 **S**

dx.doi.org/10.1021/jo501251s

C–H $\cdots\pi$ Interactions and the Nature of the Donor Carbon Atom

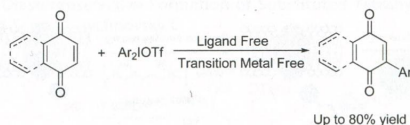
Brijesh Kumar Mishra, Milind Madhusudan Deshmukh, and Ramanathan Venkatnarayan*

8607 **S**

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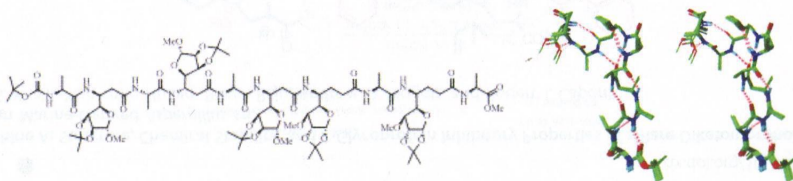
Transition Metal-Free Direct C–H Functionalization of Quinones and Naphthoquinones with Diaryliodonium Salts:
Synthesis of Aryl Naphthoquinones as β -Secretase Inhibitors

Dawei Wang,* Bingyang Ge, Liang Li, Jie Shan, and Yuqiang Ding*

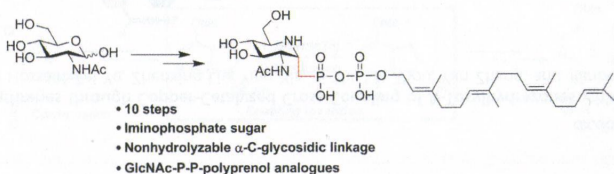


Design and Synthesis of Peptides with Hybrid Helix-Turn-Helix (HTH) Motif and Their Conformational Study

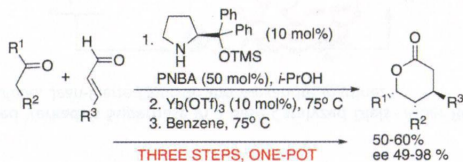
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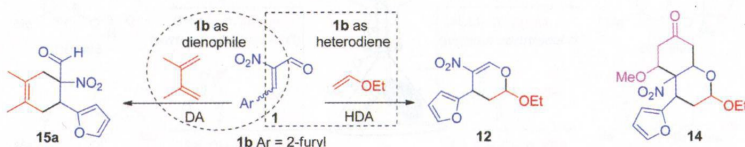
Che-Hsiung Hsu, Mathias Schelwies, Sebastian Enck, Lin-Ya Huang, Shih-Hsien Huang, Yi-Fan Chang, Ting-Jen Rachel Cheng, Wei-Chieh Cheng, and Chi-Huey Wong*

**One-Pot Sequential Organocatalytic Michael–Tishchenko–Lactonization Reactions. Synthesis of Enantioenriched 4,5,6-Trisubstituted δ -Lactones**

James O. Guevara-Pulido, José M. Andrés, and Rafael Pedrosa*

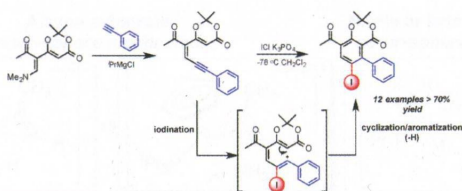
 **β -Aryl- α -nitro- α,β -enals as Heterodienes and Dienophiles**

Hugo Lago-Santomé, Patricia Martínez-Bescos, Marta Fernández-González, Lidia Ozores-Viturro, Fernando Cagide-Fagin, and Ricardo Alonso*



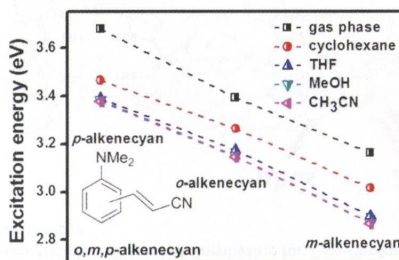
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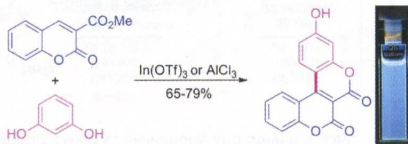
Meta Effect of Absorption Energy in Donor–Acceptor Substituted Benzenoids: A Computational Study of Its Dependence on Acceptor Strength, Solvent Polarity, and Conjugation Length

Kiran Sankar Chatterjee, Avik Kumar Pati, and Ashok K. Mishra*



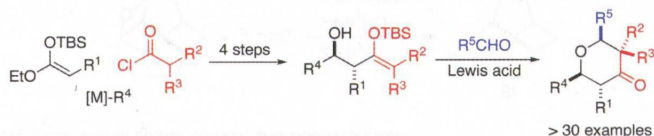
V-Shaped Bis-Coumarins: Synthesis and Optical Properties

Mariusz Tasior, Yevgen M. Poronik, Olena Vakuliuk, Bartłomiej Sadowski, Maksymilian Karczewski, and Daniel T. Gryko*

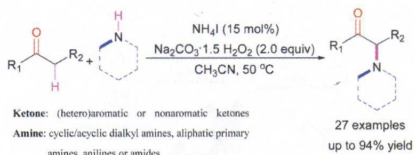


Silyl Enol Ether Prins Cyclization: Diastereoselective Formation of Substituted Tetrahydropyran-4-ones

Gidget C. Tay, Chloe Y. Huang, and Scott D. Rychnovsky*

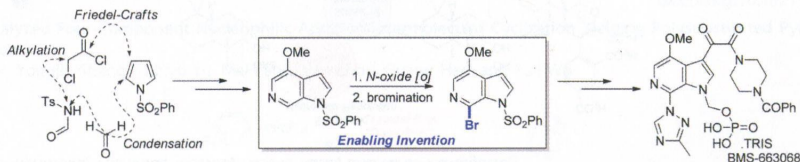


Transition-Metal-Free Oxidative α -C-H Amination of Ketones via a Radical Mechanism: Mild Synthesis of α -Amino Ketones
Qing Jiang, Bin Xu, An Zhao, Jing Jia, Tian Liu, and Cancheng Guo*



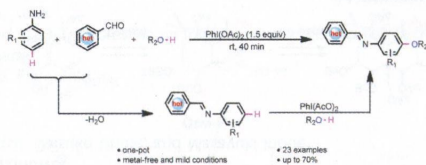
Synthesis of the 6-Azaindole Containing HIV-1 Attachment Inhibitor Pro-Drug, BMS-663068

Ke Chen, Christina Risatti, Michael Bultman, Maxime Soumeillant, James Simpson, Bin Zheng, Dayne Fanfair, Michelle Mahoney, Boguslaw Mudryk, Richard J. Fox, Yi Hsiao, Saravanababu Murugesan, David A. Conlon, Frederic G. Buono, and Martin D. Eastgate*



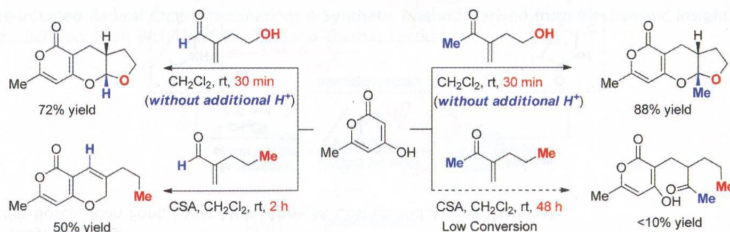
Iodine(III)-Mediated C-H Alkoxylation of Aniline Derivatives with Alcohols under Metal-Free Conditions

Qing Jiang, Jing-Yu Wang, and Cancheng Guo*



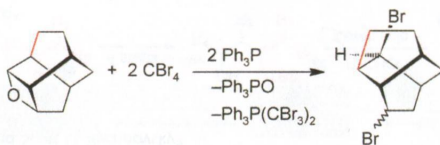
Cascade Michael Addition/Cyclization of Cyclic 1,3-Dicarbonyl Compounds: Important Role of the Tethered Alcohol of α,β -Unsaturated Carbonyl Compounds on Reaction Rate and Regioselectivity

Hongliang Yao, Liyan Song, Yuan Liu, and Rongbiao Tong*



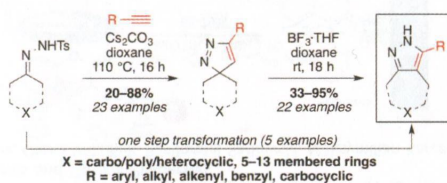
Bromination and Accompanying Rearrangement of the Polycyclic Oxetane 2,4-Oxytwistane

Murray G. Rosenberg, Peter Billing, Lothar Brecker, and Udo H. Brinker*



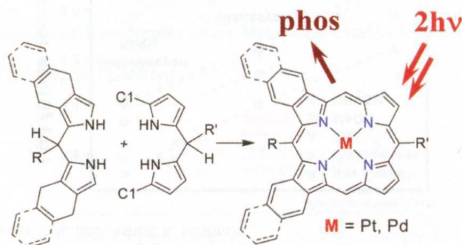
Regioselective Preparation of Saturated Spirocyclic and Ring-Expanded Fused Pyrroles

Rohan R. Merchant, Daniel M. Allwood,* David C. Blakemore, and Steven V. Ley



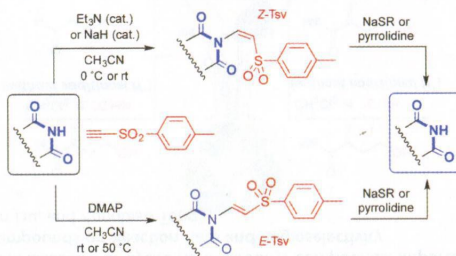
Synthesis of Phosphorescent Asymmetrically π -Extended Porphyrins for Two-Photon Applications

Tatiana V. Esipova and Sergei A. Vinogradov*



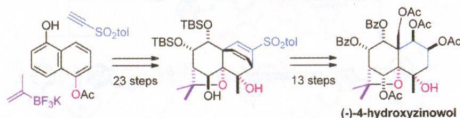
Tosvinyl and Besvinyl as Protecting Groups of Imides, Azinones, Nucleosides, Sultams, and Lactams. Catalytic Conjugate Additions to Tosylacetylene

Elena Petit, Lluís Bosch, Joan Font, Laura Mola, Anna M. Costa,* and Jaume Vilarrasa*



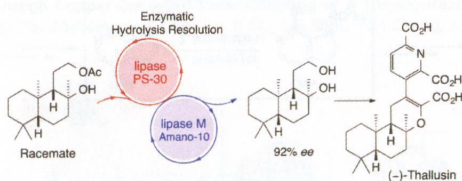
Total Synthesis of (–)-4-Hydroxyzinowol

Hidenori Todoroki, Masafumi Iwatsu, Daisuke Urabe, and Masayuki Inoue*



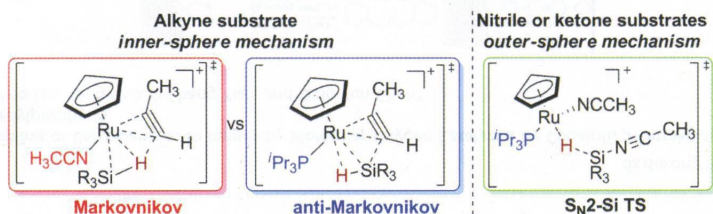
Total Synthesis of (–)-Thallusin: Utilization of Enzymatic Hydrolysis Resolution

Hirofumi Yamamoto,* Yuichi Takagi, Takaki Oshiro, Tadashi Mitsuyama, Ikuo Sasaki, Naoto Yamasaki, Akiyo Yamada, Hiromichi Kenmoku, Yoshihide Matsuo, Yusuke Kasai, and Hiroshi Imagawa



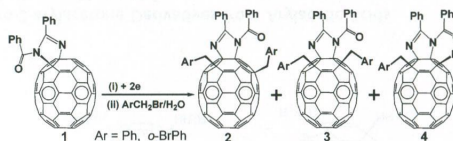
Ligand-Controlled Reactivity, Selectivity, and Mechanism of Cationic Ruthenium-Catalyzed Hydrosilylations of Alkynes, Ketones, and Nitriles: A Theoretical Study

Yun-Fang Yang, Lung Wa Chung,* Xinhao Zhang, K. N. Houk,* and Yun-Dong Wu*



Reductive Benzoylation of C₇₀ Imidazoline with a Bulky Addend

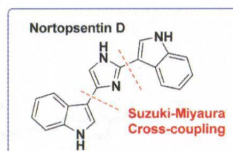
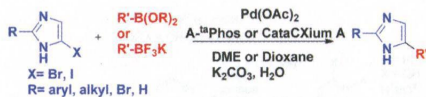
Hui-Lei Hou, Zong-Jun Li, Ying Wang, and Xiang Gao*



Notes

Suzuki-Miyaura Cross-Coupling Reactions of Unprotected Haloimidazoles

Jiajing Tan,* Yonggang Chen,* Hongmei Li, and Nobuyoshi Yasuda

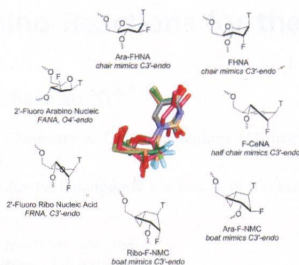


8877

dx.doi.org/10.1021/jo501381q

Comparison of Duplex Stabilizing Properties of 2'-Fluorinated Nucleic Acid Analogues with Furanose and Non-Furanose Sugar Rings

Michael E. Østergaard, Timothy Dwight, Andres Berdeja, Eric E. Swayze, Michael E. Jung, and Punit P. Seth*



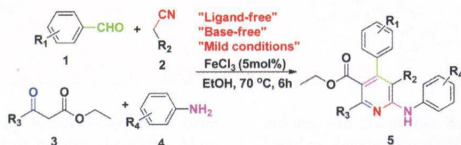
8882

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FeCl₃-Catalyzed Four-Component Nucleophilic Addition/Intermolecular Cyclization Yielding Polysubstituted Pyridine Derivatives

Xinwei He, Yongjia Shang,* Zhiyu Yu, Mei Fang, Yao Zhou, Guang Han, and Fuli Wu



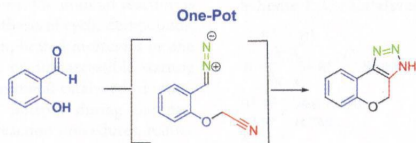
8889

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A Step-Economical Route to Fused 1,2,3-Triazoles via an Intramolecular 1,3-Dipolar Cycloaddition between a Nitrile and an In Situ Generated Aryldiazomethane

Neelakandha S. Mani* and Anne E. Fitzgerald



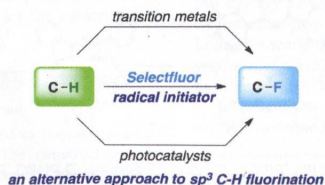
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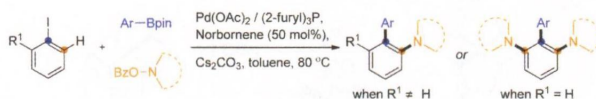
Triethylborane-Initiated Radical Chain Fluorination: A Synthetic Method Derived from Mechanistic Insight

Cody Ross Pitts, Bill Ling, Ryan Woltonist, Ran Liu, and Thomas Lectka*



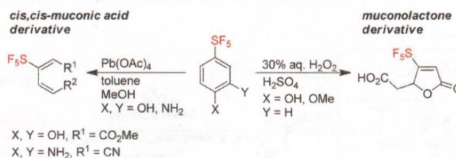
Synthesis of Biaryl Tertiary Amines through Pd/Norbornene Joint Catalysis in a Remote C–H Amination/Suzuki Coupling Reaction

Changqing Ye, Hui Zhu, and Zhiyuan Chen*



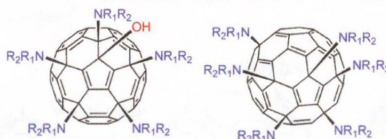
Synthesis of Aliphatic Sulfur Pentafluorides by Oxidation of SF₅-Containing Anisole, Phenols, and Anilines

Norbret Vida, Tereza Pastýříková, Blanka Klepetářová, and Petr Beier*



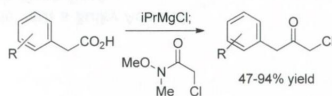
Selective Addition of Secondary Amines to C₆₀: Formation of Penta- and Hexaamino[60]fullerenes

Yanbang Li and Liangbing Gan*



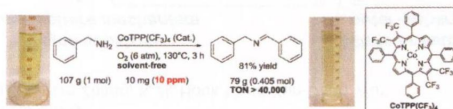
One-Step Synthesis of 1-Chloro-3-arylacetonone Derivatives from Arylacetic Acids

Michael J. Zacuto,* Robert F. Dunn, and Margaret Figus



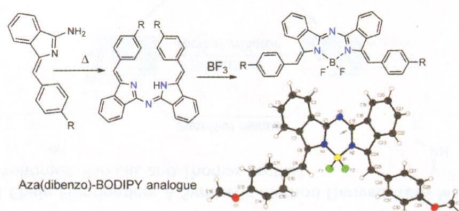
Oxidative Coupling of Benzylamines to Imines by Molecular Oxygen Catalyzed by Cobalt(II) β -Tetrakis(trifluoromethyl)-*meso*-tetraphenylporphyrin

Shuai Zhao, Chao Liu, Yong Guo, Ji-Chang Xiao, and Qing-Yun Chen*



Synthesis of a Class of Core-Modified Aza-BODIPY Derivatives

Alejandro Díaz-Moscoso, Edward Emond, David L. Hughes, Graham J. Tizzard, Simon J. Coles, and Andrew N. Cammidge*



Aza(dibenzo)-BODIPY analogue