

ON THE COVER: An efficient one-pot transformation of optically pure α -amino esters to *anti*- β -amino alcohols. See Padrón and co-workers, p 6775.

Editorial

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All Natural: The Renaissance of Natural Products Chemistry
Tadeusz F. Molinski

[dx.doi.org/10.1021/jo501288m](https://doi.org/10.1021/jo501288m)

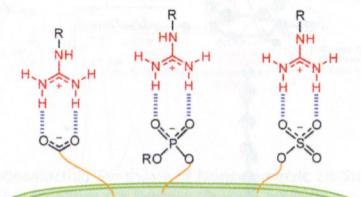
JOC Synopsis

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On Guanidinium and Cellular Uptake

Ezequiel Wexselblatt, Jeffrey D. Esko, and Yitzhak Tor*

[dx.doi.org/10.1021/jo501101s](https://doi.org/10.1021/jo501101s)



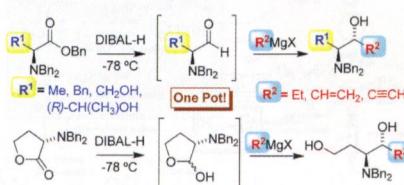
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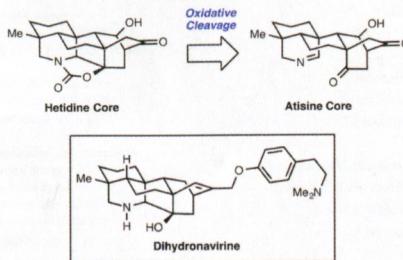
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Direct Stereoselective Synthesis of Enantiomerically Pure *anti*- β -Amino Alcohols
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Studies on C₂₀-Diterpenoid Alkaloids: Synthesis of the Hetidine Framework and Its Application to the Synthesis of Dihydronavirine and the Atisine Skeleton

Amy M. Hamlin, David Lapointe, Kyle Owens, and Richmond Sarpong*



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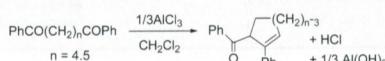
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dx.doi.org/10.1021/jo5006137

AlCl₃-Mediated Aldol Cyclocondensation of 1,6- and 1,7-Diones to Cyclopentene and Cyclohexene Derivatives

Yuji Miyahara* and Yoshio N. Ito



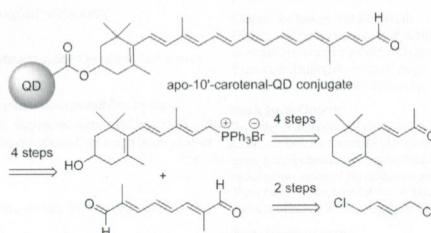
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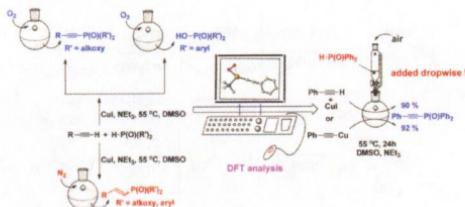
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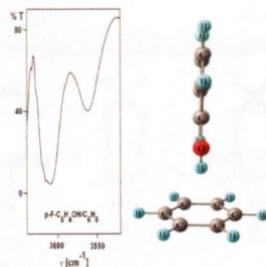
Mechanistic Insight into the Copper-Catalyzed Phosphorylation of Terminal Alkynes: A Combined Theoretical and Experimental Study

Liu Liu, Yile Wu, Zeshu Wang, Jun Zhu,* and Yufen Zhao*



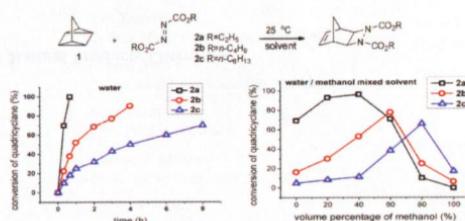
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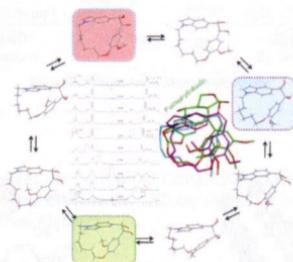
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Yi-Jie Zuo and Jin Qu*



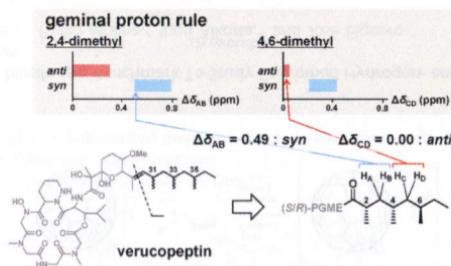
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Raquel Álvarez, Vilmarí López, Carmen Mateo, Manuel Medarde, and Rafael Peláez*



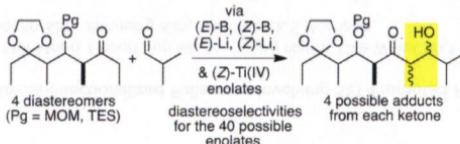
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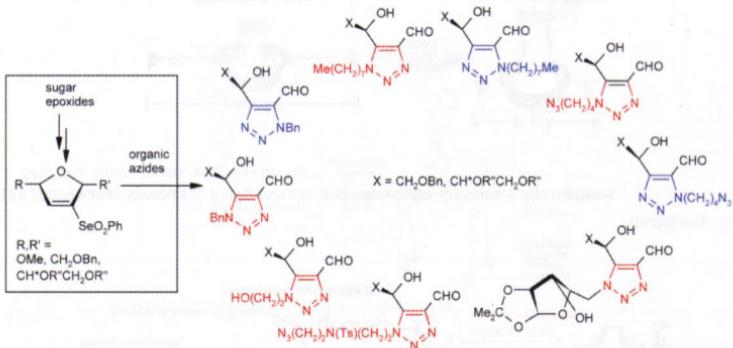


A Systematic Study of the Effects of Relative Configuration, Protecting Group, and Enolate Type on the Diastereoselectivities of Aldol Reactions of a Chiral Ethyl Ketone with 2-Methylpropanal

Dale E. Ward,* Diptarghy Kundu, Mojtaba Biniaz, and Sushital Jana

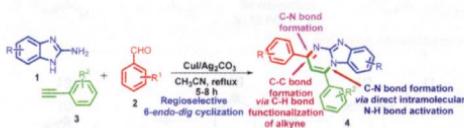


Enantiopure 1,4,5-Trisubstituted 1,2,3-Triazoles from Carbohydrates: Applications of Organoselenium Chemistry
Atanu Bhaumik, Supravat Samanta, and Tanmaya Pathak*



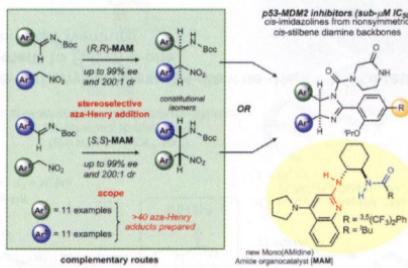
Regioselective Synthesis of Fused Imidazo[1,2-*a*]pyrimidines via Intramolecular C–N Bond Formation/6-*Endo*-Dig Cycloisomerization

Atul Kumar,* Mukesh Kumar, Shivam Maurya, and Ranjana S. Khanna



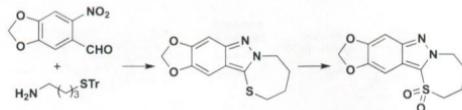
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Brandon A. Vara, Anand Mayasundari, John C. Tellis, Michael W. Danneman, Vanessa Arredondo, Tyler A. Davis, Jaeki Min, Kristin Finch, R. Kiplin Guy,* and Jeffrey N. Johnston*

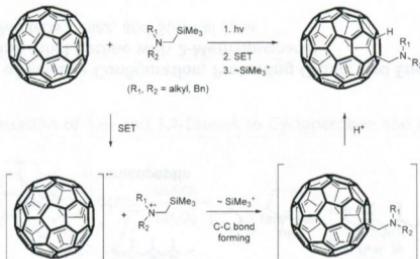


Davis–Beirut Reaction: Route to Thiazolo-, Thiazino-, and Thiazepino-2*H*-indazoles

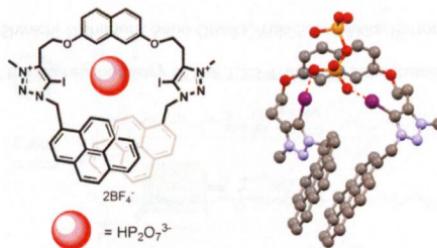
Kelli M. Farber, Makhluf J. Haddadin, and Mark J. Kurth*

**Method for the Synthesis of Amine-Functionalized Fullerenes Involving SET-Promoted Photoaddition Reactions of α -Silylamines**

Suk Hyun Lim, Jinju Yi, Gyeong Min Moon, Choon Sup Ra, Keepyung Nahm, Dae Won Cho,* Kyungmok Kim, Tae Gyung Hyung, Ung Chan Yoon,* Ga Ye Lee, Soojin Kim, Jinheung Kim, and Patrick S. Mariano

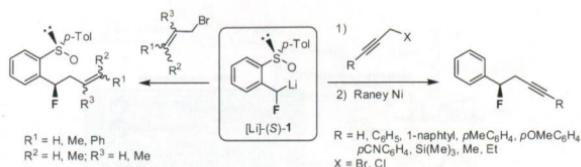
**Open Bis(triazolium) Structural Motifs as a Benchmark To Study Combined Hydrogen- and Halogen-Bonding Interactions in Oxoanion Recognition Processes**

Fabiola Zapata, Antonio Caballero,* Pedro Molina,* Ibon Alkorta,* and José Elguero



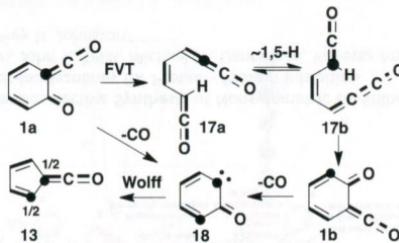
Asymmetric Nucleophilic Monofluorobenzylation of Allyl and Propargyl Halides Mediated by a Remote Sulfinyl Group: Synthesis of Homoallylic and Homopropargylic Fluorides

Yolanda Arroyo, M. Ascensión Sanz-Tejedor,* Alejandro Parra, Inés Alonso, and José Luis García Ruano*



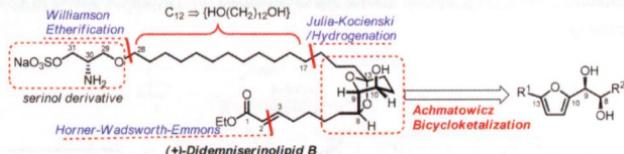
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Rainer Koch,* Rodney J. Blanch, and Curt Wentrup*



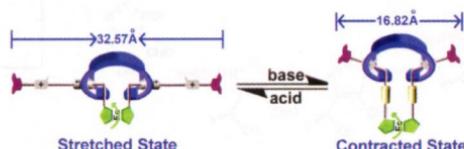
Asymmetric Total Synthesis of (+)-Didemniserinolipid B via Achmatowicz Rearrangement/Bicycloketalization

Jingyun Ren and Rongbiao Tong*



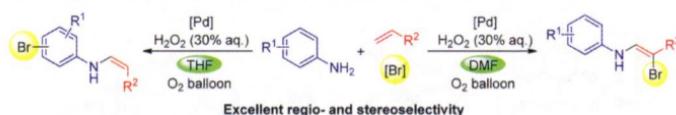
A Musclemlike 2Rotaxane: Synthesis, Performance, and Molecular Dynamics Simulations

Hong Li, Xin Li, Ying Wu, Hans Ågren, and Da-Hui Qu*



Palladium-Catalyzed Oxidative C–N Bond Coupling Involving a Solvent-Controlled Regioselective Bromination Process

Xiaochen Ji, Huawen Huang, Wenfang Xiong, Kunbo Huang, Wanqing Wu, and Huanfeng Jiang*



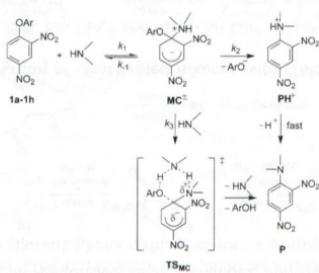
One-Pot Synthesis of 1,3,5-Triazine Derivatives via Controlled Cross-Cyclotrimerization of Nitriles: A Mechanism Approach

Antonio Herrera, Alberto Riaño, Ramón Moreno, Bárbara Caso, Zulay D. Pardo, Israel Fernández, Elena Sáez, Dolores Molero, Angel Sánchez-Vázquez, and Roberto Martínez-Alvarez*



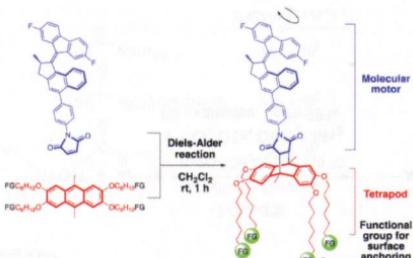
Kinetic Study on S_NAr Reaction of 1-(Y-Substituted-phenoxy)-2,4-dinitrobenzenes with Cyclic Secondary Amines in Acetonitrile: Evidence for Cyclic Transition-State Structure

Ik-Hwan Um,* Min-Young Kim, Tae-Ah Kang, and Julian M. Dust*

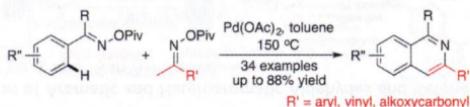


Tetrapodal Molecular Switches and Motors: Synthesis and Photochemistry

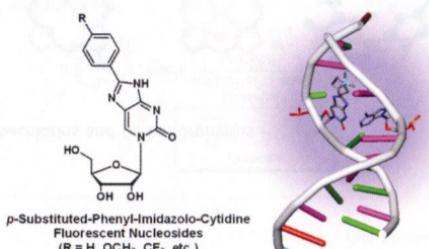
Kuang-Yen Chen, Sander J. Wezenberg, Gregory T. Carroll, Gábor London, Jos C. M. Kistemaker, Thomas C. Pijper, and Ben L. Feringa*

**Methyl Ketone Oxime Esters as Nucleophilic Coupling Partners in Pd-Catalyzed C–H Alkylation and Application in the Synthesis of Isoquinolines**

Zhi-Wei Zhang, Aijun Lin, and Jiong Yang*

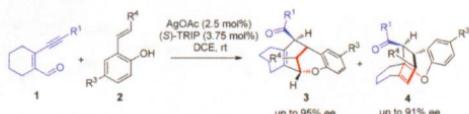
**Phenyl-imidazolo-cytidine Analogues: Structure–Photophysical Activity Relationship and Ability To Detect Single DNA Mismatch**

Marina Kovaliov, Michal Weitman, Dan Thomas Major, and Bilha Fischer*



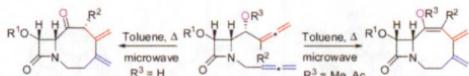
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Hao Zhang, Le Zhu, Shaozhong Wang, and Zhu-Jun Yao*



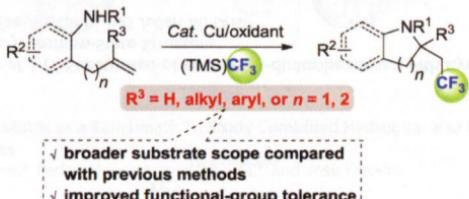
Microwave-Promoted Synthesis of Bicyclic Azocene- β -Lactams from Bis(allenes)

Benito Alcaide,* Pedro Almendros,* Cristina Aragónccillo, Israel Fernández, and Gonzalo Gómez-Campillos



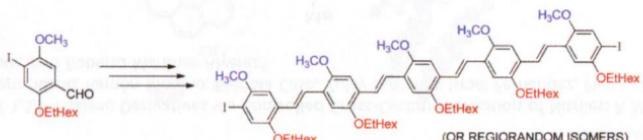
Copper-Catalyzed Aminotrifluoromethylation of Unactivated Alkenes with (TMS)CF₃: Construction of Trifluoromethylated Azaheterocycles

Jin-Shun Lin, Xiang-Geng Liu, Xiao-Long Zhu, Bin Tan,* and Xin-Yuan Liu*



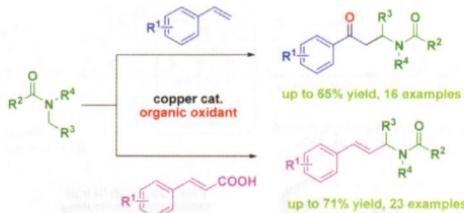
Controlled Regioregularity in Oligo(2-methoxy-5-(2'-ethylhexyloxy)-1,4-phenylenevinylenes)

Xinju Zhu and Kyle N. Plunkett*



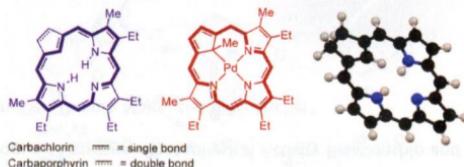
Functionalization of Amides via Copper-Catalyzed Oxyalkylation of Vinylarenes and Decarboxylative Alkenylation of sp^3 C–H

Hong Yan, Linhua Lu, Guangwei Rong, Defu Liu, Yang Zheng, Jie Chen, and Jincheng Mao*



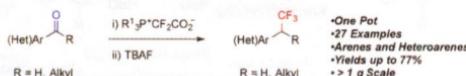
Synthesis and Reactivity of Carbachlorins and Carbaporphyrins

Daming Li and Timothy D. Lash*



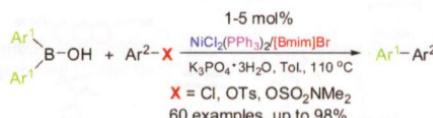
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Yupu Qiao, Tuda Si, Ming-Hsiu Yang, and Ryan A. Altman*



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Haihua Ke, Xiaofeng Chen, and Gang Zou*



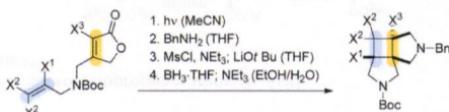
Organocatalytic Chemo-, (*E/Z*)- and Enantioselective Formal Alkenylation of Indole-Derived Hydroxylactams Using *o*-Hydroxystyrenes as a Source of Alkenyl Group

Hong-Hao Zhang, Yue-Ming Wang, Yuan-Wei Xie, Zi-Qi Zhu, Feng Shi,* and Shu-Jiang Tu



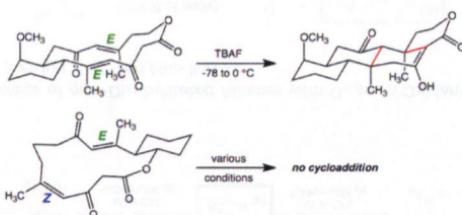
An Intramolecular [2 + 2] Photocycloaddition Approach to Conformationally Restricted Bis-Pyrrolidines

Diego A. Fort, Thomas J. Woltering,* André M. Alker, and Thorsten Bach*



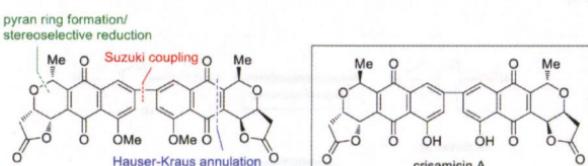
Factors Controlling the Facility of Transannular Diels–Alder Reactions of Macrocyclic Bis-enones

Q. Nhu N. Nguyen, Jiong Yang, and Dean J. Tantillo*



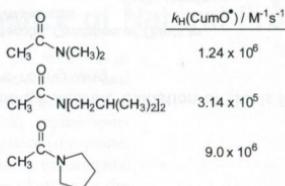
Toward an Asymmetric Synthesis of the Dimeric Pyranonaphthoquinone Antibiotic Crisamicin A

Margaret A. Brimble,* Najmah P. S. Hassan, Briar J. Naysmith, and Jonathan Sperry



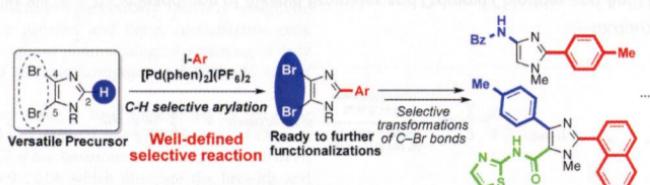
Absolute Rate Constants for Hydrogen Atom Transfer from Tertiary Amides to the Cumyloxyl Radical: Evaluating the Role of Stereoelectronic Effects

Michela Salamone, Michela Milan, Gino A. DiLabio, and Massimo Bietti*



Facile Synthetic Method for Diverse Polyfunctionalized Imidazoles by Means of Pd-Catalyzed C–H Bond Arylation of *N*-Methyl-4,5-dibromoimidazole

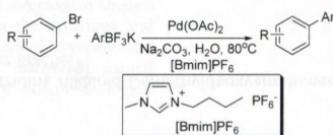
Takayuki Yamauchi, Fumitoshi Shibahara,* and Toshiaki Murai*



Notes

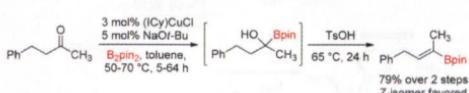
[Bmim]PF₆-Promoted Ligandless Suzuki–Miyaura Coupling Reaction of Potassium Aryltrifluoroborates in Water

Leifang Liu,* Yan Dong, Bo Pang, and Jiahai Ma

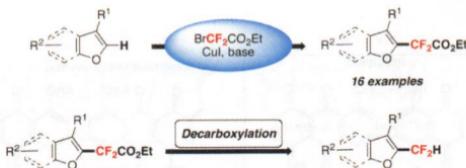


Stereoselective Formation of Trisubstituted Vinyl Boronate Esters by the Acid-Mediated Elimination of α -Hydroxyboronate Esters

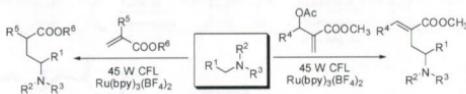
Weiyi Guan, Alicia K. Michael, Melissa L. McIntosh, Liza Koren-Selfridge, John P. Scott, and Timothy B. Clark*



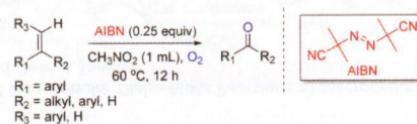
Copper-Catalyzed Direct C-2 Difluoromethylation of Furans and Benzofurans: Access to C-2 CF₂H Derivatives
Marie-Charlotte Belhomme, Thomas Poisson,* and Xavier Pannecoucke*



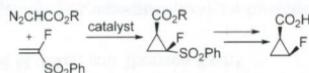
The Coupling of Tertiary Amines with Acrylate Derivatives via Visible-Light Photoredox Catalysis
Xiaojun Dai, Dongping Cheng, Baochuan Guan, Wenjuan Mao, Xiaoliang Xu,* and Xiaonian Li*



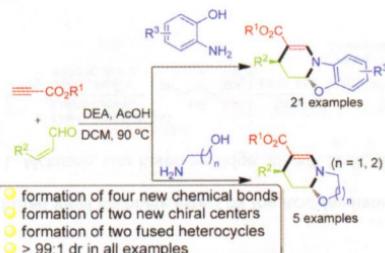
AIBN-Catalyzed Oxidative Cleavage of *gem*-Disubstituted Alkenes with O₂ as an Oxidant
Guang-Zu Wang, Xing-Long Li, Jian-Jun Dai,* and Hua-Jian Xu*



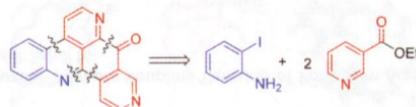
Stereoselective Synthesis of *cis*-2-Fluorocyclopropanecarboxylic Acid
Taku Shibue and Yasumichi Fukuda*



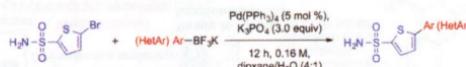
Diastereoselective Construction of Tetrahydropyridine Fused Bicyclic Structures via Three-Component Domino Reaction
 Jie-Ping Wan,* Yunfang Lin, Qing Huang, and Yunyun Liu



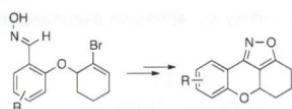
Total Synthesis of the Marine Pyridoacridine Alkaloid Demethyldeoxyamphimedine
 Benedikt Melzer, Alois Plodek, and Franz Bracher*



Arylation and Heteroarylation of Thiensulfonamides with Organotrifluoroborates
 Mnaza Noreen, Nasir Rasool, Mirna El Khatib, and Gary A. Molander*



Annulated Isoxazoles via [3 + 2] Cycloaddition of Alkenyl Bromides and Oximoyl Chlorides and Ag(I) Promoted Elimination
 Emmanuel B. Castillo-Contreras, Alexander M. Stahl, and Gregory R. Dake*



Thiol as a Synthon for Preparing Thiocarbonyl: Aerobic Oxidation of Thiols for the Synthesis of Thioamides
 Xi Wang, Miran Ji, Seungyeon Lim, and Hye-Young Jang*

