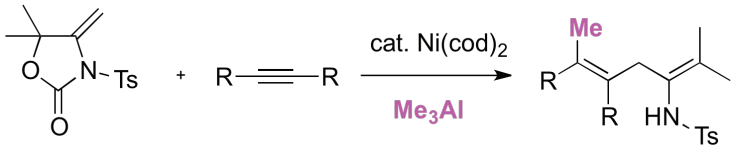
■ REVIEWS

■ COMMUNICATIONS

722 **Ni-Catalyzed Three-Component Coupling of 4-Methylene-2-oxazolidinones, Alkynes, and Trimethylaluminum**

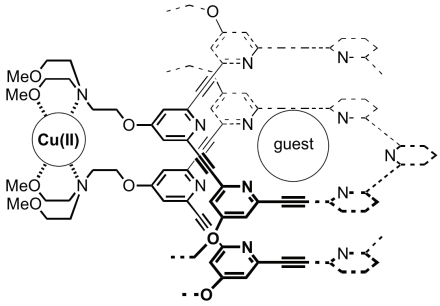
Tatsuya Yamahira, Ryo Ninokata, Gen Onodera, and Masanari Kimura*



Trimethylaluminum 4-Methylene-2-oxazolidinone Alkyne Multicomponent Coupling Reaction Decarboxylation Reaction

730 **Kinetic Switching of Achirality/Chirality Memorization of *meta*-Ethynylpyridine Polymer by Coordination of Cu(II) Outside the Polymer**

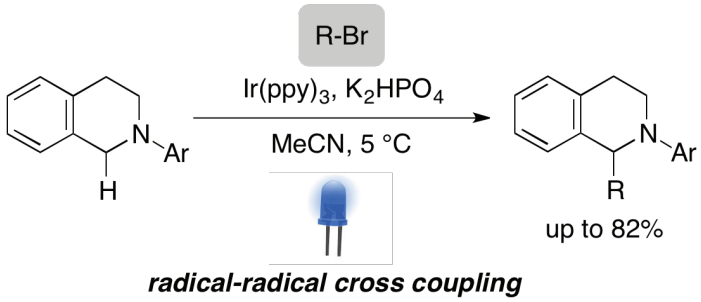
Hajime Abe,* Shunsuke Takashima, and Masahiko Inouye*



Pyridine Phenol Hydrogen Bonding Optical Property Responsiveness to Acid and Base

738 **α-Functionalization of Tetrahydroisoquinolines with Activated Alkyl Bromide under Photoredox Catalysis**

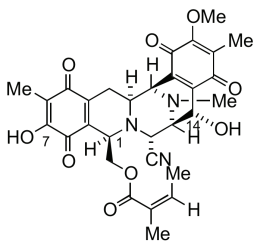
Takafumi Ide, Kazunori Shimizu, Yuji Kawato, Hiromichi Egami, and Yoshitaka Hamashima*



Photoredox Catalysis Radical-Radical Coupling Reaction Tetrahydroisoquinoline C-H Functionalization

748 **Chemistry of Renieramycins. 16. Structure of 7-Desmethylrenieramycin O (= 14α-Hydroxyrenieramycin S) from Blue Sponge, *Xestospongia* sp.**

Naoki Saito,* Ai Hiramatsu, Hiromi Hirade, Mitsue Kubota, Ryoko Toyoshima, Akiya Fujino, Natchanun Sirimangkalakitti, Khanit Suwanborirux,* and Gisela P. Concepcion

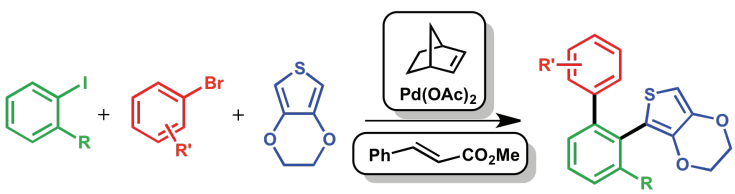


7-demethylrenieramycin O
(14α-hydroxyrenieramycin S)

Isoquinoline Anticancer Activity Structure Determination Renieramycin Structure Transformation

753 **Palladium- and Norbornene-Catalyzed Synthesis of Highly Functionalized Thiophenes: The Remarkable Effect of Electron-Poor Olefins as Ligand**

Nicola Della Ca',* Elena Motti, Giovanni Maestri, and Max Malacria*

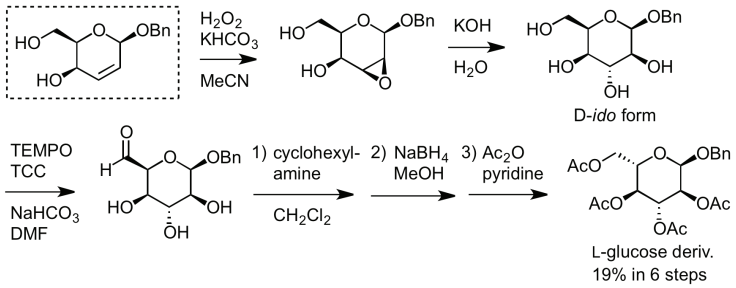


Palladium Catalyst Catalysis Heterocycle C-H Bond Activation Multicomponent Reaction

■ PAPERS

862 **Synthesis of Benzyl Tetra-*O*-acetyl-α-L-glucopyranoside from Benzyl 2,3-Dideoxy-β-D-*erythro*-hex-2-enopyranoside**

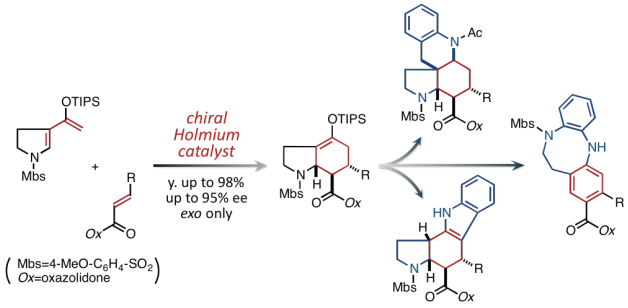
Hayato Okazaki, Yuji Ueda, Kengo Hanaya, Mitsuru Shoji, and Takeshi Sugai*



L-Sugar Stereochemical Inversion Glucal Ferrier Rearrangement Reaction Dihydropyran

872 **Catalytic and Enantioselective Diels-Alder Reaction of Silyloxydiene That Incorporates a Pyrrolidine Ring, and Its Application to the Construction of Chiral Tri- and Tetracyclic Skeletons**

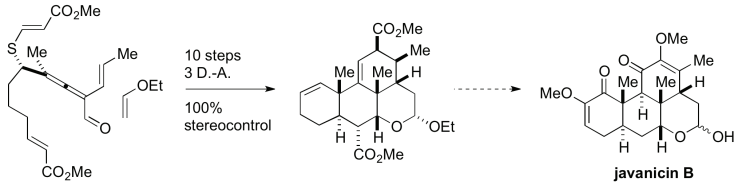
Shinji Harada, Saki Nakashima, Wataru Yamada, Takahiro Morikawa, and Atsushi Nishida*



Diels-Alder Reaction Pyrroloacridine Diazocine Pyrrolocarbazole Holmium Catalyst

894 **A Remarkably Useful Sulfur Bridge as Synthetic Lever in an Approach to Javanicin B**

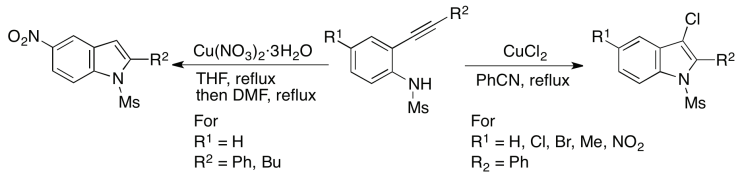
Amélie Dion and Claude Spino*



Javanicin B Diene-Transmissive Diels-Alder Reaction Quassinoid Dihydrothiophene S_N2' Displacement Reaction

920 **Simultaneous Functionalization and Cyclization of 2-Ethynylaniline Derivatives to Indoles**

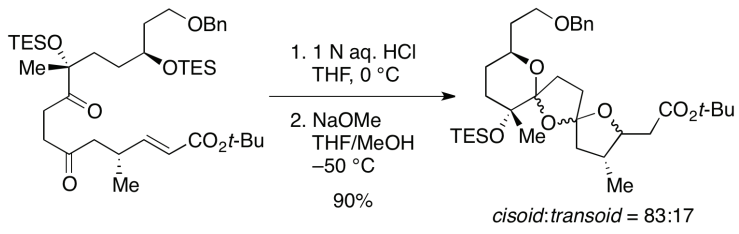
Kou Hiroya,* Shin Itoh, Kiyofumi Inamoto, Hiroki Shigehisa, and Takao Sakamoto



Indole 2-Ethynylaniline Chlorination Reaction Nitration Reaction Cyclization Reaction

934 **A Double Hemiketal Formation/Hetero-Michael Addition Approach to the [6,5,5]-Dispiroketal System of Spirolides**

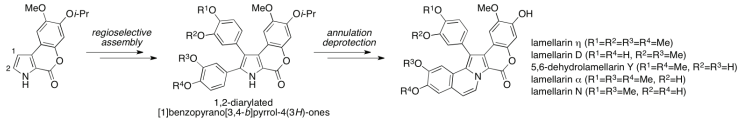
Hiroyuki Yamakoshi, Akinori Toita, Toshihiro Igari, Keisuke Takeda, Shunichi Hashimoto, and Seiichi Nakamura*



[6,5,5]-Dispiroketal Tandem Double Hemiketal Formation/Hetero-Michael Addition Sequence Polyether Macrocyclic Phycotoxin

950 **Synthesis of Lamellarins via Regioselective Assembly of 1,2-Diarylated [1]Benzopyrano[3,4-*b*]pyrrol-4(3*H*)-one Core**

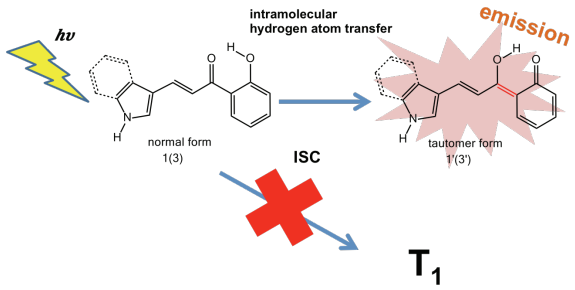
Tsutomu Fukuda,* Takatoshi Katae, Issei Harada, and Masatomo Iwao



1,2-Diarylated [1]Benzopyrano[3,4-*b*]pyrrol-4(3*H*)-one Lamellarin Modular Synthesis

972 **Absorption and Fluorescence Properties of Chalcones Having Pyrrole or Indole Moiety**

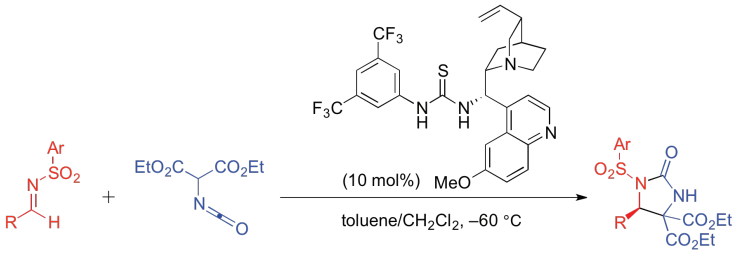
Yukino Shinozaki and Tatsuo Arai*



Hydrogen Bonding Hydrogen Atom Transfer Reaction Excited State Fluorescence Tautomer

980 **An Enantioselective Synthesis of 2-Imidazolidinones through Bifunctional Thiourea-Catalyzed Tandem Mannich/Cyclization of Isocyanatomalonate Diester**

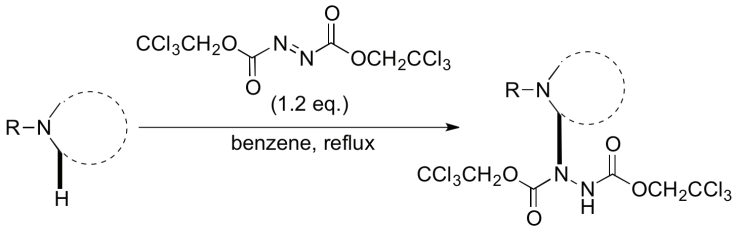
Yusuke Kobayashi, Takuma Yoshida, Takuya Uno, Chihiro Tsukano, and Yoshiji Takemoto*



Organocatalyst Asymmetric Synthesis

994 **Alpha-Oxidation of Amine Derivatives by bis(2,2,2-Trichloroethyl) Azodicarboxylate and Application of Its Products as Iminium Ion Equivalents**

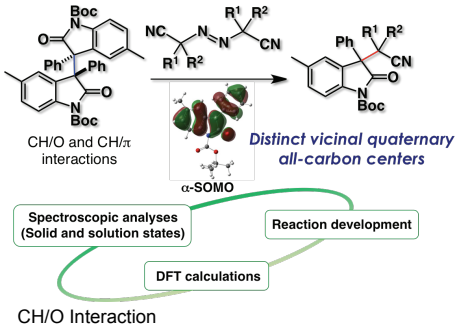
Shinobu Honzawa,* Mitsuaki Uchida, Takuya Tashiro, and Takumichi Sugihara*



bis(2,2,2-Trichloroethyl) Azodicarboxylate Alpha-Oxidation *gem*-Diamino Compound Iminium Ion Equivalent

1030 **Reversibility of 3-Phenyl-2-oxindole Dimer Formation: Application to Construct Compounds with Two Distinct Vicinal All-Carbon Quaternary Centers**

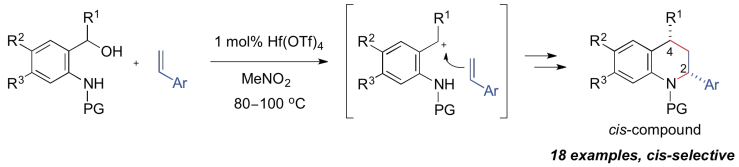
Yoshihiro Sohtome,* Masumi Sugawara, Daisuke Hashizume, Daiki Hojo, Miki Sawamura, Atsuya Muranaka, Masanobu Uchiyama, and Mikiko Sodeoka*



Vicinal All-Carbon Quaternary Center Radical Oxindole CH/π Interaction CH/O Interaction

1041 **Diastereoselective Synthesis of 2,4-Substituted Tetrahydroquinolines via $Hf(OTf)_4$-Catalyzed Substitution/Cyclization of 2-Aminobenzyl Alcohols with Styrenes**

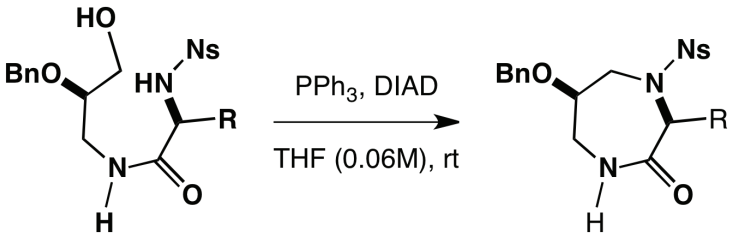
Masahiro Noji,* Hiroto Kadowaki, Yuuki Kubota, Tomomi Yoshida, Noriko Saito, Subaru Yamaguchi, Ren Ohata, Keitaro Ishii, and Toshikatsu Takanami



Tetrahydroquinoline Aminobenzyl Alcohol Styrene Hafnium Triflate Diastereoselective Reaction

1074 **Synthetic Studies of Liposidomycin Degradation Product: Model Studies of Diazepanone Ring Construction**

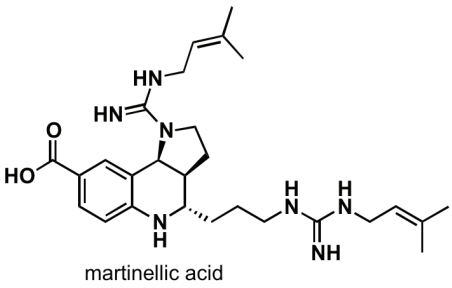
Noriyuki Nakajima,* Taichi Seida, Ai Furuno, Takayuki Asahi, Takao Kishimoto, and Masahiro Hamada



Liposidomycin Diazepanone Mitsunobu Reaction Nitrobenzenesulfonamide Nosyl Group

1082 **An Asymmetric Total Synthesis of Martinellic Acid**

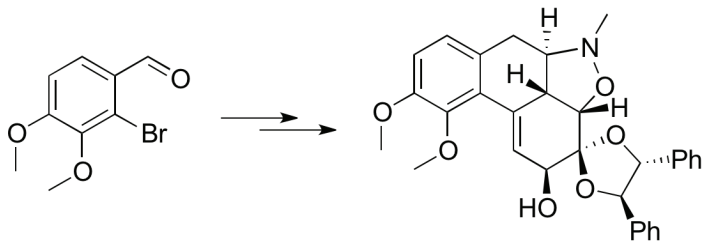
Vivek Badarinarayana, Hossen Mahmud, and Carl J. Lovely*



Alkaloid Pyrroloquinoline Cross-Coupling Reaction Cycloaddition Reaction Guanidine

1106 **Toward the Synthesis of (–)-Codeine by Chiral Auxiliary-Mediated Nitrone Cycloaddition**

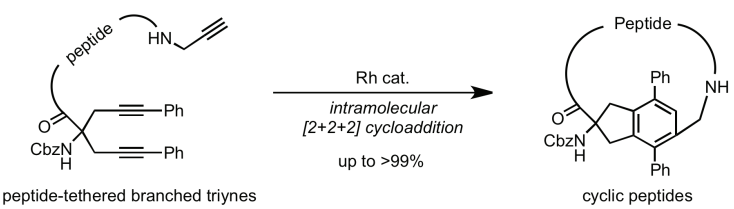
Julia Rautschek and Peter Metz*



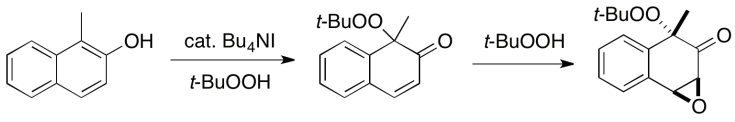
Asymmetric Synthesis Chiral Auxiliary Morphine Alkaloid Natural Product Synthesis Nitrone Cycloaddition Reaction

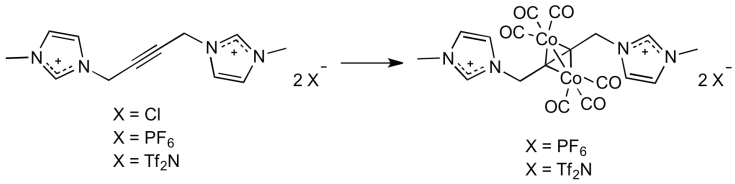
1121 **Catalytic Intramolecular [2+2+2] Cycloaddition of Peptide-Tethered Branched Triynes for the Synthesis of Cyclic Peptides**

Shuhei Obinata, Yu-ki Tahara, Kyalo Stephen Kanyiva, and Takanori Shibata*

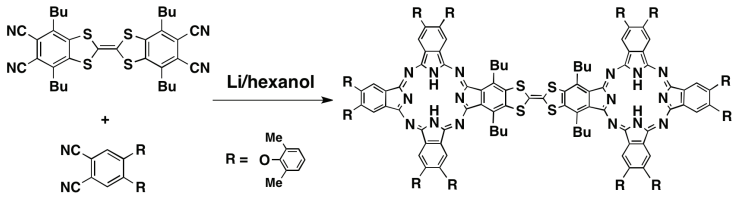


Cycloaddition Reaction Cyclic Peptide Triyne Amino Acid

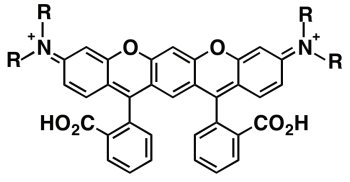




■ SHORT PAPERS



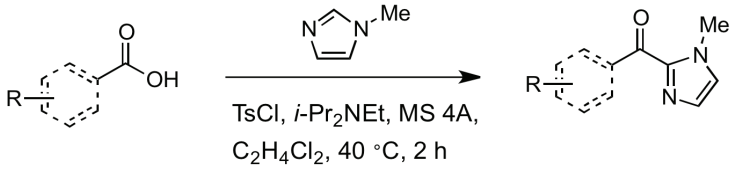
Far-red to NIR emissive organic dyes



R = *n*-C_3H_7, *n*-C_4H_9, *n*-C_6H_{13}, *n*-C_8H_{17}

1177 **Synthesis of 2-Aroyl-1-methyl-1*H*-imidazoles Using Aryl Carboxylic Acids**

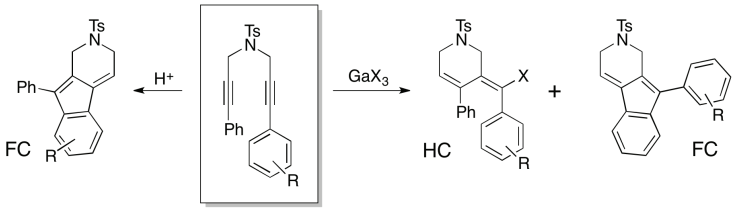
Kin-ichi Oyama,* Noriyuki Watanabe, and Kumi Yoshida*



2-Aroyl-1-methyl-1*H*-imidazole *N*-Methylimidazole Aryl Carboxylic Acid

1184 **Halocyclizations and Cycloisomerizations of Bisaryl 1,6-Diynes**

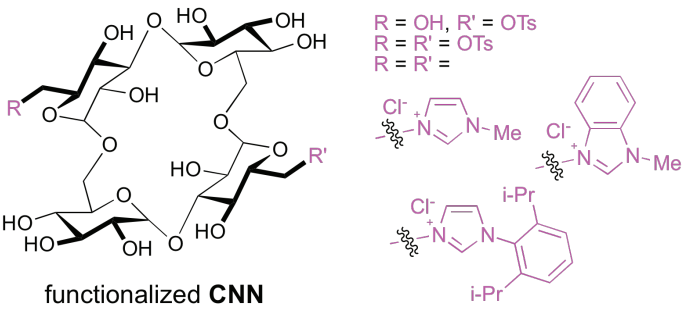
Kyle R. Strom, Anna C. Impastato, Jaime A. Duque, and John K. Snyder*



2,3,4,4*a*-Tetrahydro-1*H*-indeno[2,1-*c*]pyridine Halocyclization Reaction Galluim(III) Catalysis Bisalkyne Cyclization Reaction

1197 **Synthesis of Cyclic Nigerosylnigerose (CNN) bis-Imidazolium Salts**

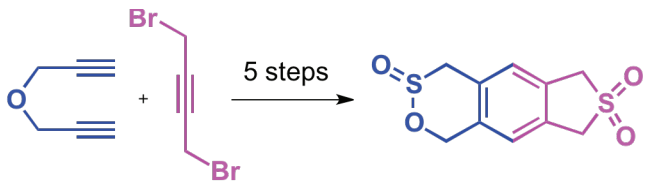
Susumu Tsuda,* Yuya Komatsu, Yohei Minami, Ryoji Ueda, Shin-ichi Fujiwara, Takanori Iwasaki, Hitoshi Kuniyasu, and Nobuaki Kambe*



Cyclic Oligosaccharide Cyclic Nigerosylnigerose CNN (Cyclic Nigerosylnigerose) CNN Tosylate Imidazole

1204 **A Short Synthetic Route to a Hybrid Molecule Benzosultine-Sulfone via [2+2+2] Cyclotrimerization Using $Mo(CO)_6$**

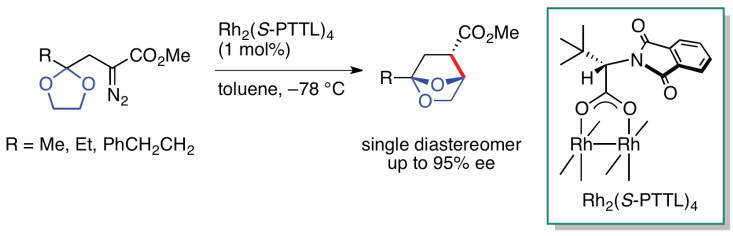
Sambasivarao Kotha* and Gaddamedi Sreevani



Molybdenum Hexacarbonyl [$Mo(CO)_6$] Sultine Sulfone [2+2+2] Cyclotrimerization Reaction Rongalite

1211 **Diastereo- and Enantioselective Construction of 6,7-Dioxabicyclo[2.2.1]heptane Derivatives by a Dirhodium(II)-Catalyzed Intramolecular C–H Insertion Reaction**

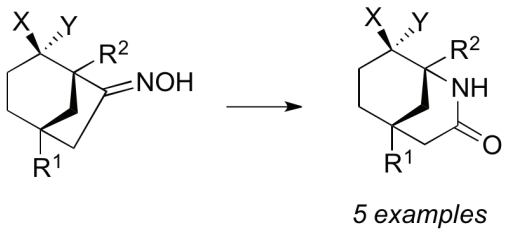
Taku Miyazawa, Kozue Imai, Motoki Ito, Koji Takeda, Masahiro Anada,* Shigeki Matsunaga, and Shunichi Hashimoto*



Asymmetric Catalysis C–H Insertion Reaction Dirhodium(II) Complex α-Alkyl-α-diazoester Enantioselection

1230 **Synthesis of a Functionalized Morphan Scaffold via a Palladium-Catalyzed Cycloalkenylation and Beckmann Rearrangement**

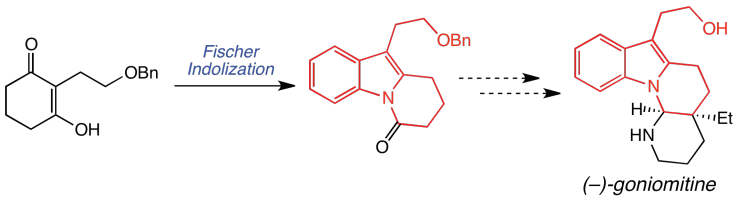
Natsuko Kagawa, Yutaka Yamamoto, Shuichiro Ono, and Masahiro Toyota*



2-Azabicyclo[3.3.1]nonane Morphan Bicyclo[3.2.1]octane Beckmann Rearrangement Reaction Oxime

1245 **A Fischer Indolization Strategy toward the Total Synthesis of (–)-Goniomitine**

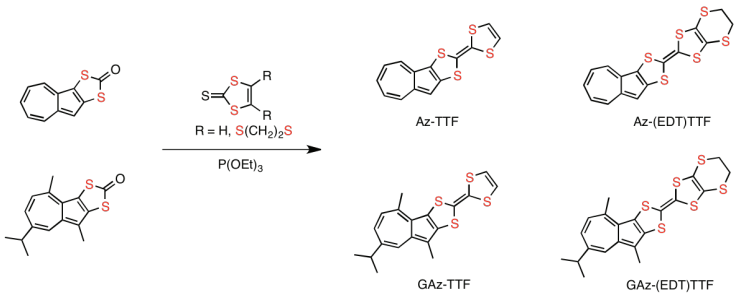
Beau P. Pritchett, Jun Kikuchi, Yoshitaka Numajiri, and Brian M. Stoltz*



Alkaloid Fischer Indolization Reaction Asymmetric Alkylation Goniomitine Dihydropyrido[1,2-*a*]indolone

1254 **Azulene-Based Tetrathiafulvalenes: Preparation and Their Electron-Donating Ability**

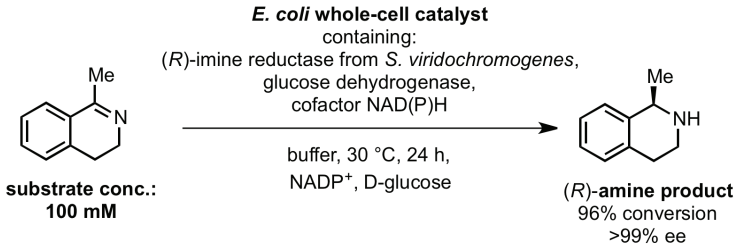
Ohki Sato,* Takahito Saito, Masami Aoki, and Atsushi Sakai



Azulene Guaiazulene Tetrathiafulvalene Electron Donor Cyclic Voltammetry

1261 **Asymmetric Biocatalytic Reduction of Cyclic Imines: Design and Application of a Tailor-Made Whole-Cell Catalyst**

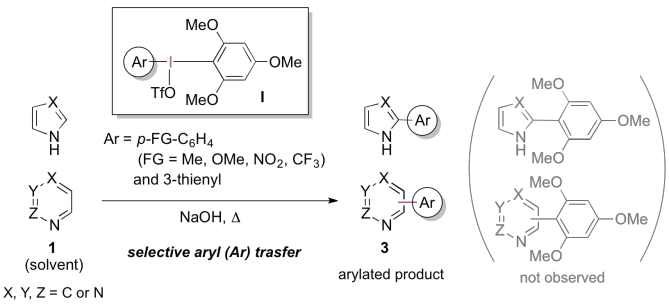
Nadine Zumbrägel, Dennis Wetzl, Hans Iding, and Harald Gröger*



Asymmetric Catalysis Reduction of Cyclic Imine Reduction of 1-Methyl-3,4-dihydroisoquinoline Synthesis of Cyclic Amine Enzyme Catalysis

1272 **Selective Aryl Radical Transfers into *N*-Heteroaromatics from Diaryliodonoium Salts with Trimethoxybenzene Auxiliary**

Toshifumi Dohi, Shohei Ueda, Akiko Hirai, Yusuke Kojima, Koji Morimoto, and Yasuyuki Kita*



Hypervalent Compound Diaryliodonium Salt Arylation Reaction Auxiliary *N*-Heteroaromatics

Contributors To This Issue