

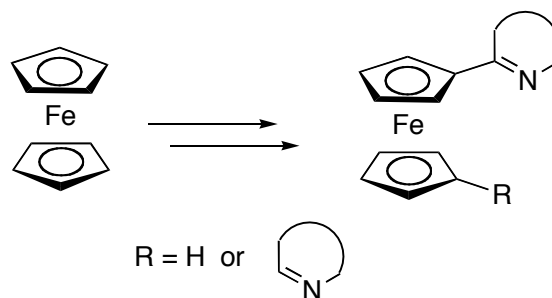
■ Celebration of Professor Ryoji Noyori

- 1 Preface by Takeshi Nakai
 - 5 Biographical Summary
 - 9 Publications of Ryoji Noyori
-

■ REVIEWS

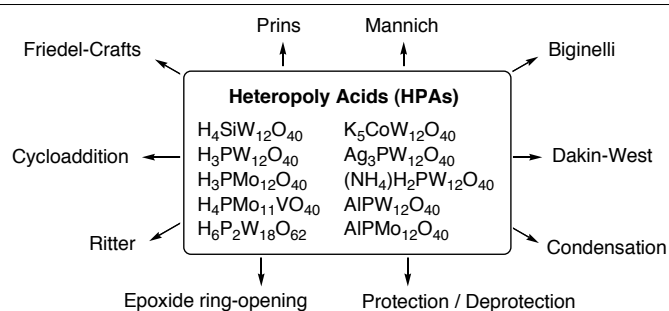
 39 **Azinylferrocenes: Synthesis and Properties**

Irina A. Utepova, Oleg N. Chupakhin,* and Valery N. Charushin


 Ferrocene Azinylferrocene Hetarylferrocene σ^H -Adduct S_N^H -Reaction

 73 **Heteropoly Acids: Green Chemical Catalysts in Organic Synthesis**

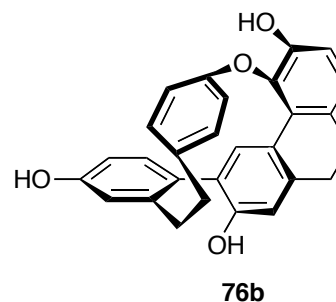
Tadaharu Ueda* and Hiyoshizo Kotsuki*



Heteropoly Acid Environmentally Friendly Catalyst Acid-Catalyzed Transformation Condensation

 99 **Marchantiophyta (Liverworts): Rich Sources of Macrocyclic Bis(bibenzyls)**

Yoshinori Asakawa,* Masao Toyota, Toshihiro Hashimoto, Motoo Tori, Fumihito Nagashima, and Liva Harinantenaina

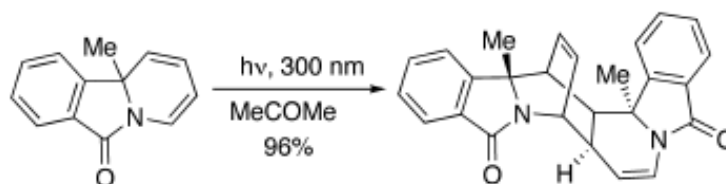


Liverwort Cyclic Bis(bibenzyl) Biological Activity

■ COMMUNICATIONS

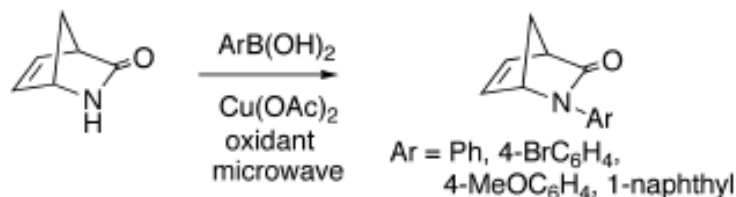
 129 **Photodimerization of a Pyrido[2,1-*a*]isoindol-6(4*H*)-one**

Leo A. Paquette,* Robert D. Dura, and Judith C. Gallucci


 Triplet Sensitization Dioxirane [4+2] Cycloaddition Enamide Oxidation π -Bond Cleavage

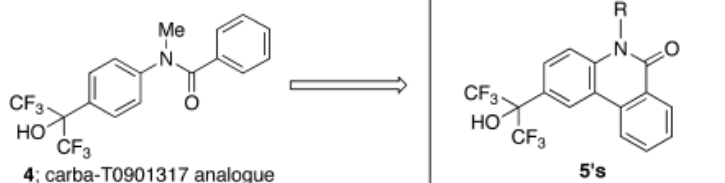
133 Copper-Catalyzed *N*-Arylation Reaction of 2-Azabicyclo[2.2.1]hept-5-en-3-one with Arylboronic Acids under Microwave Irradiation

Takumi Abe, Hiroyuki Takeda, Koji Yamada, and Minoru Ishikura*


 ABH Copper-Catalyzed *N*-Arylation Arylboronic Acid Microwave

137 LXR Antagonists with a 5-Substituted Phenanthridin-6-one Skeleton: Synthesis and LXR Transrepression Activities of Conformationally Restricted Carba-T0901317 Analogs

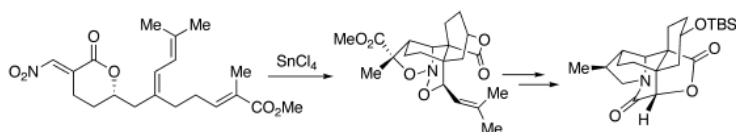
Atsushi Aoyama, Hiroshi Aoyama, Kosuke Dodo, Makoto Makishima, Yuichi Hashimoto, and Hiroyuki Miyachi*



LXR LXR Antagonist Carba-T0901317 Phenanthridin-6-one Conformationally Restricted Heterocyclic Analog

143 Asymmetric Synthesis of the ABCD Ring System of Daphnilactone B *via* a Tandem, Double Intramolecular, [4+2] / [3+2] Cycloaddition Strategy

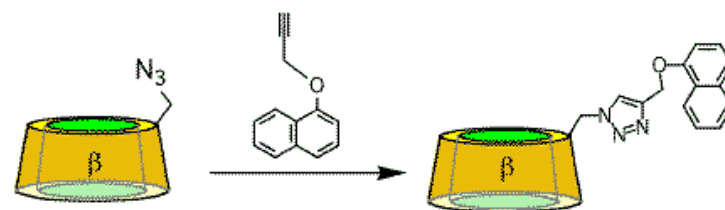
Scott E. Denmark,* Son T. Nguyen, and Ramil Y. Baiazitov



Nitroalkene Alkaloid Nitrosoacetal Stereoinduction Daphniphyllum

155 Synthesis of Functionalized β -Cyclodextrins by "Click Chemistry"

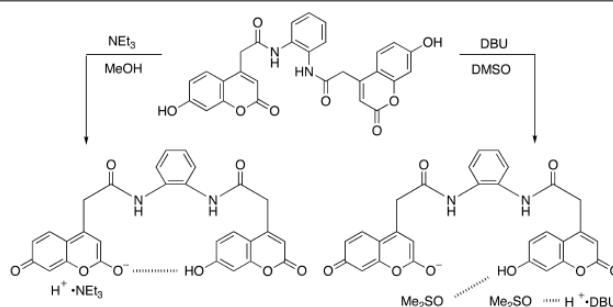
Chenfeng Ke, Cheng Yang, Zixin Yang, Weijia Wu, Tadashi Mori,* Yoshihisa Inoue,* and Yu Liu*



Cyclodextrin Supramolecular Chemistry Click Chemistry 1,3-Dipolar Cycloaddition Naphthalene Chromophore

161 Proton Dissociation-Induced Tautomerization of 4-Substituted 7-Hydroxycoumarin and Its Bridged Dimer in the Ground Stage

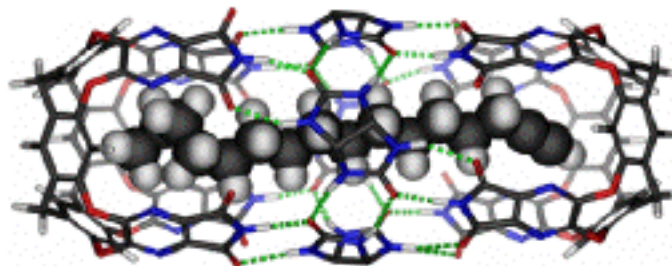
Hirohide Umeto, Kanna Kobayashi, Tetsutaro Igarashi, and Tadamitsu Sakurai*



7-Hydroxycoumarin Bridged Dimer Proton Dissociation Tautomerization Solvent Effect

169 Reversible Encapsulation of Terminal Alkenes and Alkynes

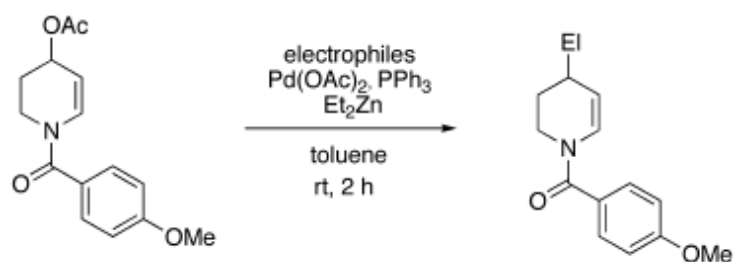
Dariush Ajami and Julius Rebek Jr.*



Self-Assembly Molecular Recognition Molecular Encapsulation Coiled Alkyl Hydrogen Bonding

177 Regioselective Introduction of Electrophiles into Piperidine Derivatives at the 4-Position

Osamu Onomura,* Noriyuki Fujimura, Takahisa Oda, Yoshihiro Matsumura, and Yosuke Demizu

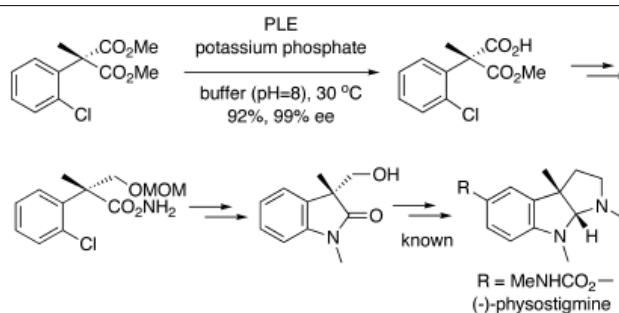


electrophiles = aldehydes, ketones, and imine

4-Substituted Piperidine Electrophilic Substitution Regioselective Diastereoselective Enantioselective

183 Formal Total Synthesis of (–)-Physostigmine

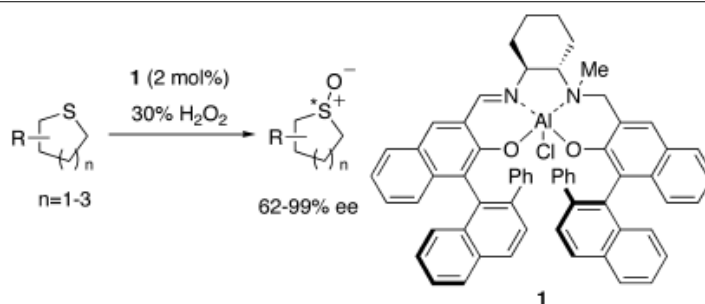
Kaori Asakawa, Naoyoshi Noguchi, and Masahisa Nakada*



Formal Total Synthesis (-)-Physostigmine Asymmetric Hydrolysis Pig Liver Esterase Aryl Amidation

191 Asymmetric Oxidation of Cyclic Sulfides Catalyzed by an Aluminum(salalen) Complex as the Catalyst

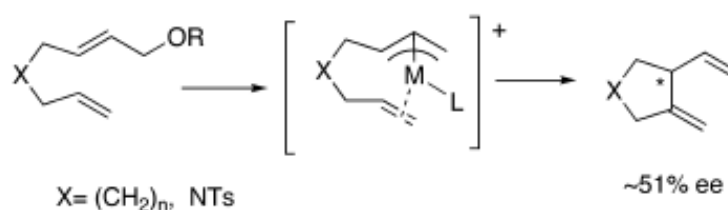
Kazuhiro Matsumoto, Tetsufumi Yamaguchi, and Tsutomu Katsuki*



Asymmetric Synthesis Oxidation Sulfoxide Aluminum Hydrogen Peroxide

197 Palladium-Catalyzed Asymmetric Intramolecular Metallo-Ene Reaction Using Monodentate Phosphines, 9-PBN and 9-NapBN

Osamu Hara, Hiroshi Fujino, Kazuishi Makino, and Yasumasa Hamada*

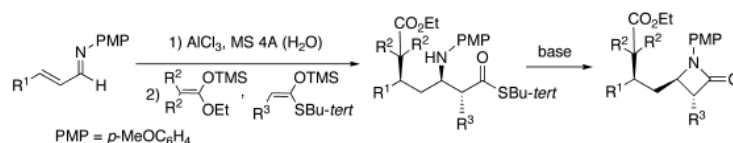

 $X = (\text{CH}_2)_n$, NTs

 conditions: $\text{Pd}_2(\text{dba})_3 \cdot \text{CHCl}_3$, (S)-(-)-9-NapBN, $\text{B}(\text{OAc})_3$

Palladium-Catalyzed Metallo-Ene Reaction Monodentate Phosphine Ligand Asymmetric Synthesis Palladium Cyclization

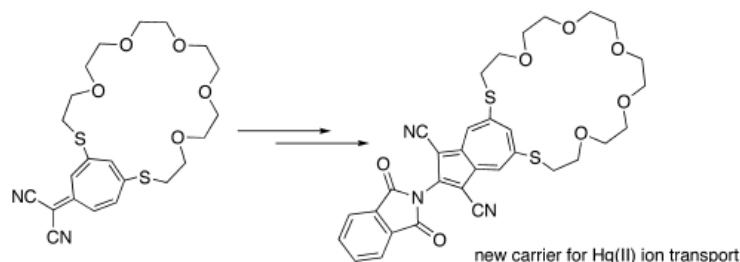
203 Regioselective Double Nucleophilic Addition Reaction Leading to the Synthesis of β -Lactams

Atsushi Takahashi, Shiho Kawai, Iwao Hachiya, and Makoto Shimizu*


 Double Nucleophilic Addition α,β -Unsaturated Imine β -Lactam 2-Arylcarbapenem Ketene Silyl Acetal

209 Synthesis and Mercuriphilic Properties of Dithiocrown Ethers Having an Azulene Pendant

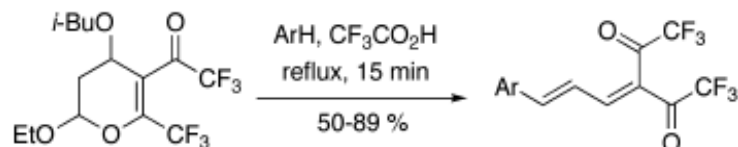
Kanji Kubo,* Akira Mori,* Tatsuya Nishimura, and Nobuo Kato



Heptafulvene Azulene Liquid Membrane Dithiocrown Ether Mercury(II) Ion Selectivity

215 One Step Introduction of 4,4-Bis(trifluoroacetyl)-1,3-butadiene System to Aromatic Rings Using Fluorine-Containing 3,4-Dihydro-2*H*-pyrans. A Facile Synthetic Method for 1,1,1,5,5,5-Hexafluoro-3-[(*E*)-3-arylallylidene]pentane-2,4-diones

Norio Ota, Etsuji Okada,* Atsushi Sonoda, Nobuyuki Muro, Dai Shibata, and Maurice Médebielle

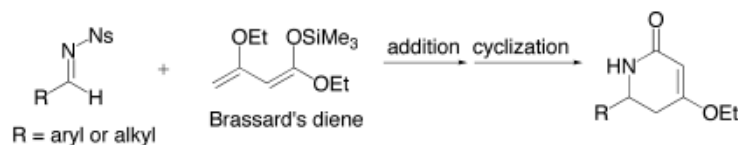


ArH = substituted benzenes, 1-methoxynaphthalene, thiophene

Dihydropyran Pyrylium 1-Aryl-4,4-bis(trifluoroacetyl)-1,3-butadiene Electrocyclic Ring Opening Carbon-Carbon Bond Formation

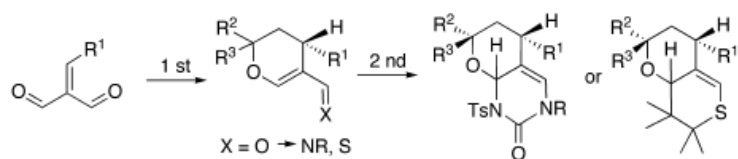
221 A New Synthesis of Dihydropyridin-2-ones from Brassard's Diene and Imines

Teruaki Mukaiyama,* Yuji Maruyama, and Takayuki Kitazawa


 Brassard's Diene Dihydropyridin-2-one *N*-Nosylimine Addition Reaction

227 Diene-Transmissive Hetero-Diels-Alder Cycloaddition Using Cross-Conjugated Dioxatrienes: A Novel Synthesis of Tetrahydropyran-Fused Aza- and Thia-heterocycles

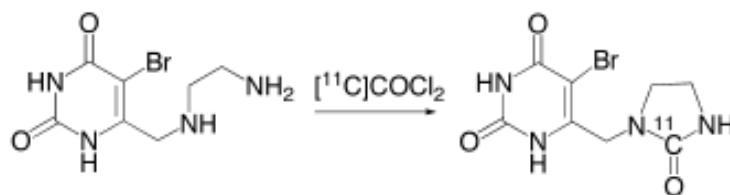
Takao Saito,* Satoru Kobayashi, Takashi Otani, Hideoki Iwanami, and Takayuki Soda



Diene-Transmissive and Hetero-Diels-Alder Reactions Tandem Reaction Cross-Conjugated Diene Pyran-Fused Heterocycle

237 **Synthesis of ^{11}C -Labeled Uracil Derivative for a PET Tracer Targeting Thymidine Phosphorylase**

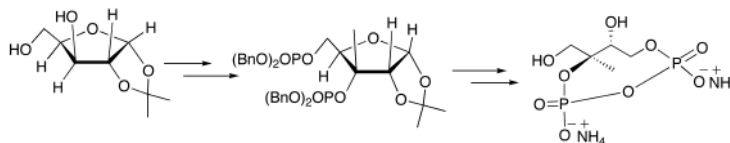
Masayuki Takahashi, Koh-ichi Seki,
Ken-ichi Nishijima, Yuji Kuge,
Nagara Tamaki, and Kazue Ohkura*



Thymidine Phosphorylase PET Angiogenesis [^{11}C]Phosgene Inhibitory Potency

243 **Enantiomeric Synthesis of 2-C-Methyl-D-erythritol 2,4-Cyclodiphosphate**

Prabakaran Narayanasamy* and Dean C. Crick*

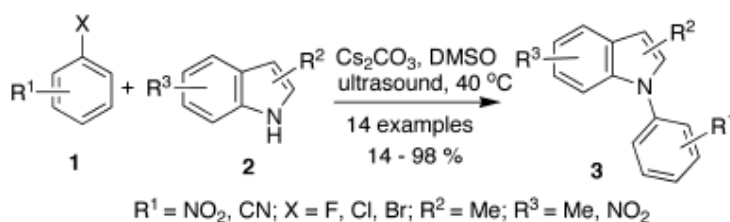


Phosphorylation Oxidation Reduction Cyclization

■ PAPERS

249 **Ultrasound-Assisted *N*-Arylation of Indoles without any Catalyst**

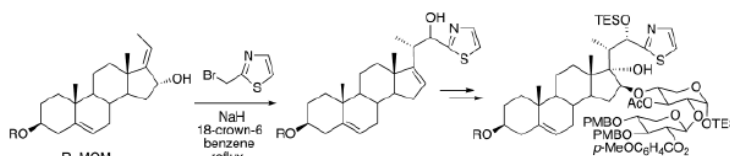
Hui Xu,* Lei Lv, Ling-ling Fan, and Xiao-qiang He



Ultrasound-Assisted Reaction *N*-Arylindole Catalyst-Free Synthesis

257 **Studies on Synthesis of OSW-1 Analogue with Thiazole Ring at Side Chain Employing Wittig Rearrangement**

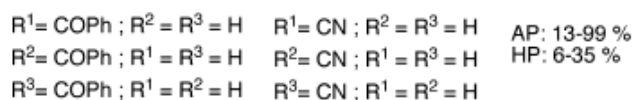
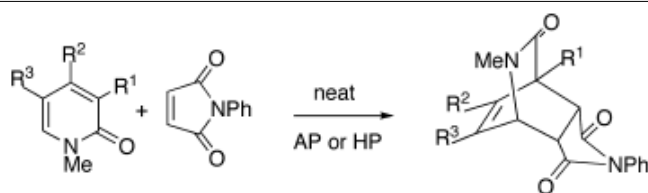
Masayoshi Tsubuki,* Sohichiro Matsuo, and Toshio Honda*



OSW-1 Thiazole Wittig Rearrangement Glycosylation

267 Cycloaddition of 2-Pyridones Having an Electron-Withdrawing Group

Masato Hoshino, Hisao Matsuzaki, and Reiko Fujita*



4-Cyano-1-methyl-2-pyridone

4-Benzoyl-1-methyl-2-pyridone

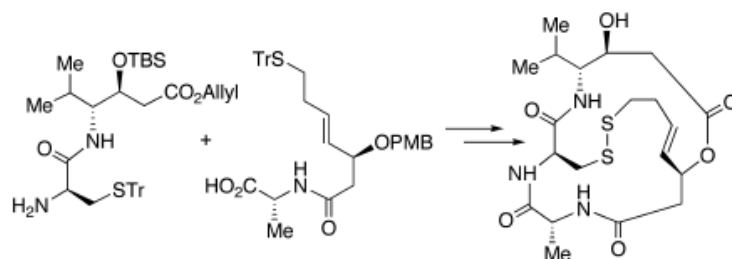
Cycloaddition

MO Calculation

 Δ -Phenylmaleimide

275 Total Synthesis of Spiruchostatin A — A Potent Histone Deacetylase Inhibitor

Toshiya Takizawa, Kazuhiro Watanabe, Koichi Narita, Kyosuke Kudo, Takamasa Oguchi, Hideki Abe, and Tadashi Katoh*



spiruchostatin A

Spiruchostatin A

Histone Deacetylase Inhibitor

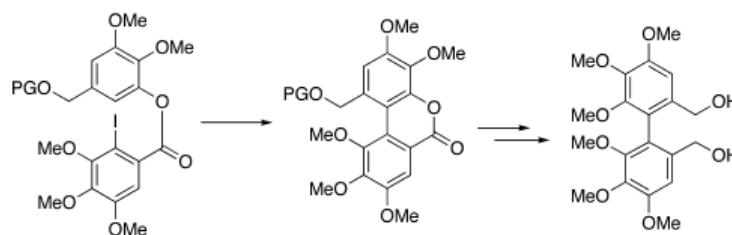
Total Synthesis

Macrolactonization

Shiina Reagent

291 Synthesis of Highly Oxygenated Biphenyl Derivative in an Optically Active Form through Palladium-Mediated Intramolecular Biaryl Coupling Reaction

Hitoshi Abe,* Masatsugu Arai, Keisuke Nishioka, Tatsuya Kida, Kazuma Shioe, Yasuo Takeuchi, and Takashi Harayama*



optically active

Palladium

Axial Chirality

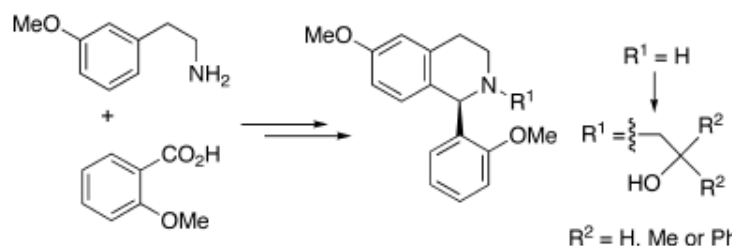
Lactone

Enantioselective Reduction

Biaryl

305 Synthesis of Chiral Tetrahydroisoquinoline-Derived β -Amino Alcohols and Their Application to Asymmetric Reaction

Yoshiyuki Hari, Masaki Sakuma, Ayako Miyakawa, Keiichiro Hatano, and Toyohiko Aoyama*



Amino Alcohol

Chiral Ligand

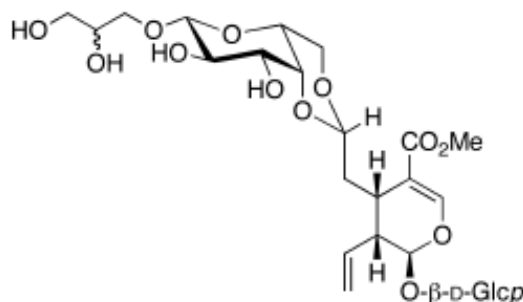
Diethylzinc

Enantioselective Addition

Tetrahydroisoquinoline

313 Macropyllanosides A - D, Secoiridoid Glycosides from *Hydrangea macrophylla* subsp. *serrata*

Masao Kikuchi,* Rie Kakuda, and Yasunori Yaoita



Macropyllanoside

Secoiridoid Glycoside

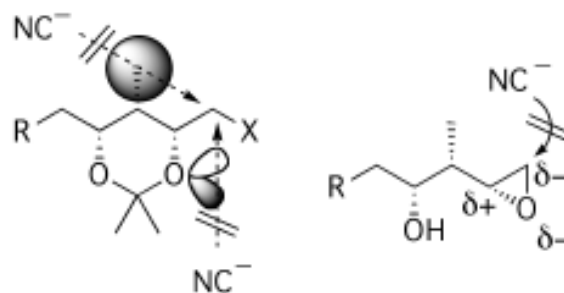
Terpenoid

Hydrangea macrophylla subsp. *serrata*

Saxifragaceae

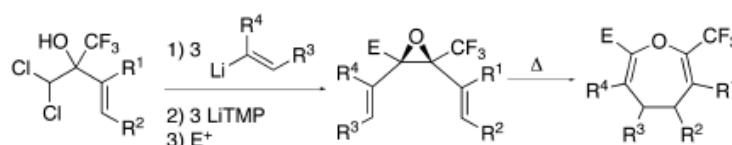
321 Study of Synthetic Routes for the Spiroketal Fragment in Calyculin A Based on Conformational Analysis

Takatoshi Matsumoto,* Mototsugu Kabeya, Eiichi Morishita, and Takayuki Shioiri


 Spiroketal Fragment Calyculin A Symmetrical Tetraol Equivalent Addition of the C₁-Unit Conformational Analysis

329 Stereoselective Preparation and Cope Rearrangement of 2-CF₃-*cis*-2,3-bis(alkenyl)-oxiranes: A Facile Route to 2-CF₃-Substituted Oxacycles

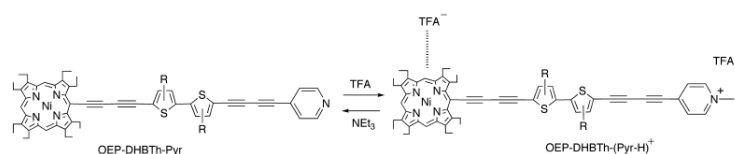
Masaki Shimizu,* Takuya Fujimoto, Xinyu Liu, Youhei Takeda, and Tamejiro Hiyama*



Fluorine Oxepine Oxepane Cope Rearrangement Oxirane

353 The Octaethylporphyrin-Dihexylbithiophene Derivatives Combined with Pyridine and Pyrimidine Rings. Their Syntheses and Proton-Mediated and Heat-Driven Spectral Changes

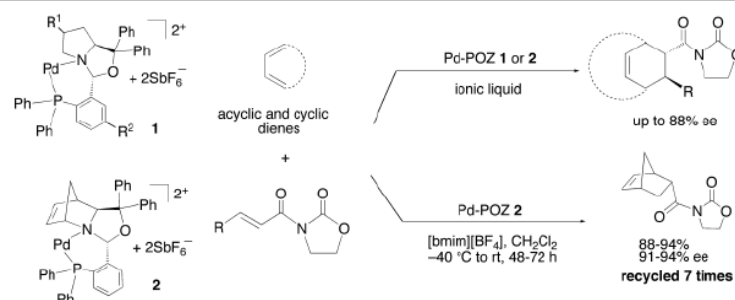
Hiroyuki Higuchi,* Naoto Hayashi, Takuya Matsukihira, Takanori Kawakami, Toru Takizawa, Junji Saito, Keiko Miyabayashi, and Mikio Miyake



Octaethylporphyrin Pyridine Protonation Spectral Change

381 Chiral Cationic Pd-Phosphinooxazolidine Catalysts for a Highly Efficient Asymmetric Diels-Alder Reaction in Ionic Liquids

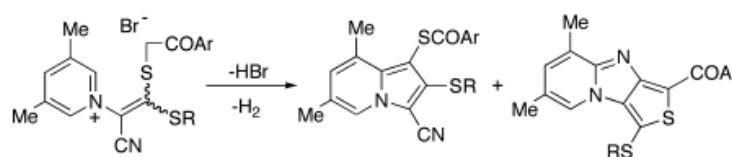
Hiroto Nakano,* Yasuhiro Nishiuchi, Kouichi Takahashi, Reiko Fujita, Koji Uwai, and Mitsuhiro Takeshita*



Phosphinooxazolidine Reuse Catalytic Asymmetric Reaction Chiral Catalyst

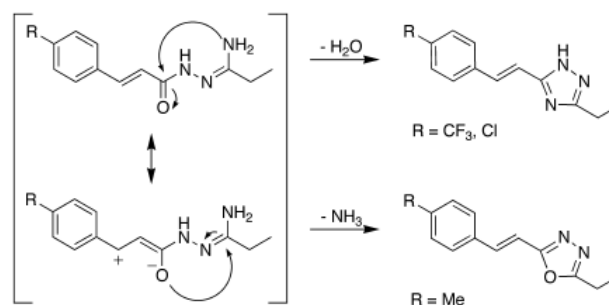
391 Preparation of New Nitrogen-Bridged Heterocycles. 63. Unexpected Formation of Thieno[3',4':4,5]imidazo[1,2-*a*]pyridines

Akikazu Takehi,* Hiroyuki Suga, Atsushi Izumita, and Takashi Abe


 Thieno[3',4':4,5]imidazo[1,2-*a*]pyridine Indolizine Pyridinium Salt Synthesis X-Ray Analysis

401 Synthesis of 1,2,4-Trisubstituted Imidazoles and 1,3,5-Trisubstituted 1,2,4-Triazoles

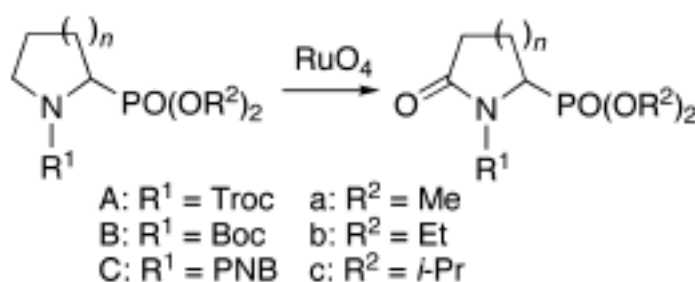
Corinne Baumgartner, Lukas Brändli, and François Diederich*



Trisubstituted Imidazole Trisubstituted Triazole Oxadiazole Enzyme Inhibitor Ligand Scaffold

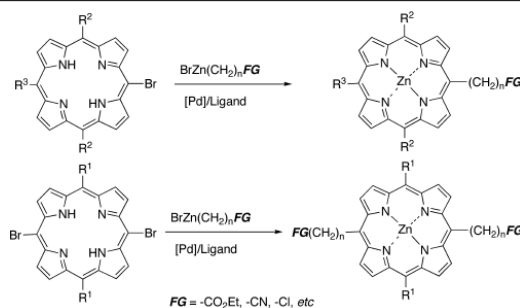
429 Ruthenium Tetroxide Oxidation of *N*-Acyl Cyclic Amine-2-phosphonic Acid Diesters

Mamoru Kaname, Hironori Mashige, Shigeyuki Yoshifuji, and Haruki Sashida*


 Ruthenium Tetroxide Oxidation Aminophosphonic Acid α -Amonophosphonic Acid Diester ω -Amino- ω -phosphonocarboxylic Acid

439 A Facile and Efficient Synthesis of Mono- and Bis-functionalized *meso*-Substituted Porphyrins via Palladium-Catalyzed Negishi Cross-Coupling

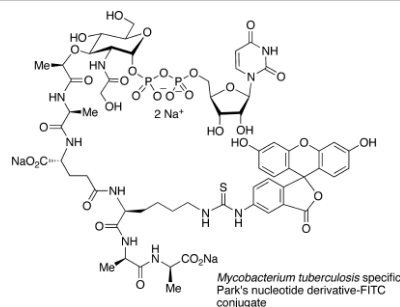
Toshikatsu Takanami, Miku Yotsukura, Wakaba Inoue, Naoyuki Inoue, Fumio Hino, and Kohji Suda*



Porphyrin Negishi Cross-Coupling Alkylzinc Reagent Bromoporphyrin Palladium

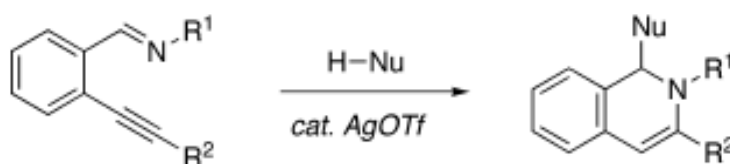
455 Synthetic Studies on *Mycobacterium tuberculosis* Specific Fluorescent Park's Nucleotide Probe

Kai Li and Michio Kurosu*


 Park's Nucleotide *Mycobacterium tuberculosis* MraY Solid-Phase Organic Synthesis Total Synthesis

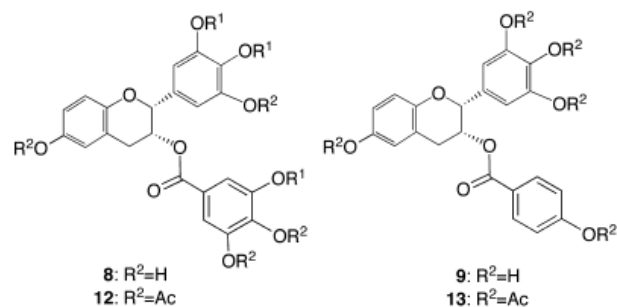
471 Silver-Catalyzed Synthesis of 1,2-Dihydroisoquinolines through Direct Addition of Carbon Pronucleophiles to *ortho*-Alkynylaryl Aldimines

Naoki Asao,* Salprima Yudha S., Tsutomu Nogami, and Yoshinori Yamamoto


 1,2-Dihydroisoquinoline Direct Addition Silver Catalyst *Ortho*-Alkynyl-Arylaldimine Pronucleophile

485 Enantioselective Synthesis and Proteasome Inhibition of A-Ring Analogs of (-)-Epigallocatechin Gallate (EGCG), the Active Ingredient of Green Tea Extract

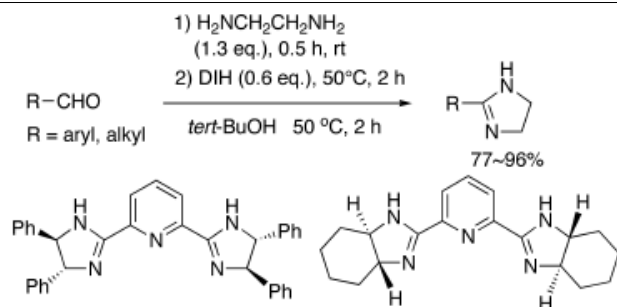
Kumi Osanai, Vesna Milacic, Q. Ping Dou, and Tak Hang Chan*



Green Tea Catechin Epigallocatechin Gallate (EGCG) Proteasome EGCG Analog

507 Efficient Preparation of 2-Imidazolines from Aldehydes and Ethylenediamines with 1,3-Diiodo-5,5-dimethylhydantoin

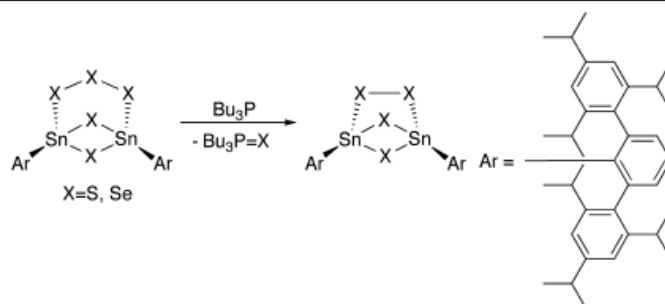
Shogo Takahashi and Hideo Togo*



2-Imidazoline Aldehyde 1,3-Diiodo-5,5-dimethylhydantoin Ethylenediamine Chiral Liand

515 Dechalcogenation of Pentachalcogenadistannabicyclo[3.1.1]heptanes

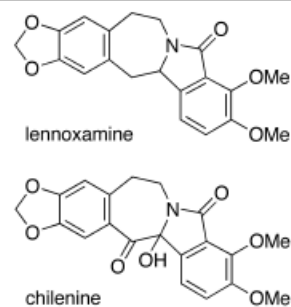
Masaichi Saito,* Hizuru Hashimoto, and Tomoyuki Tajima



Dechalcogenation Tributylphosphine Tetrachalcogenadistannabicyclo[2.1.1]hexane X-Ray Analysis

521 Total Synthesis of Isoindolobenzazepine Alkaloids, Lennoxamine and Chilenine, Based on Palladium-Catalyzed Reduction of Alkenyl Phosphates

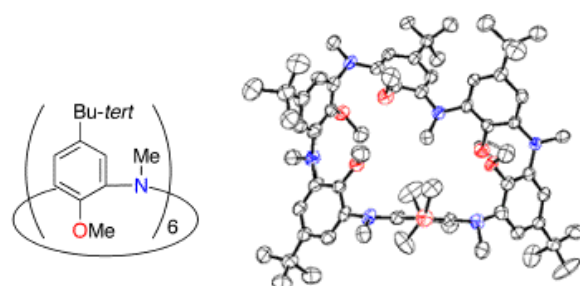
Haruhiko Fuwa* and Makoto Sasaki*



Lennoxamine Chilenine Isoindolobenzazepine Alkaloid Alkenyl Phosphate Palladium-Catalyzed Reaction

541 Synthesis, Molecular Structure, and Oxidation Behavior of Exhaustively Methylated Azacalix-[6]arene

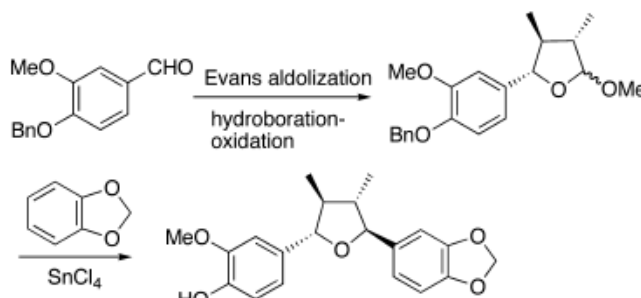
Koichi Ishibashi, Hirohito Tsue,* Hiroki Takahashi, Satoshi Tokita, Kazuhiro Matsui, and Rui Tamura



Azacalixarene High-Spin State Cation Radical

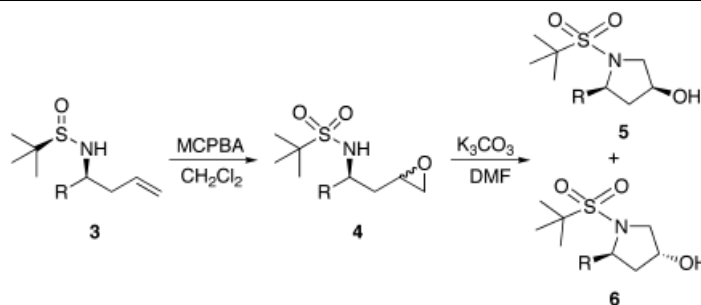
551 Synthesis of (–)-Talaumidin, a Neurotrophic 2,5-Biaryl-3,4-dimethyltetrahydrofuran Lignan, and Its Stereoisomers

Yoshiyasu Fukuyama,* Kenichi Harada, Tomoyuki Esumi, Daisuke Hojo, Yumemi Kujime, Naoko Kubo, Miwa Kubo, and Hideaki Hioki


 Tetrahydrofuran Lignan Evans *Anti*-Aldolization Hydroboration Friedel-Crafts Arylation Neurotrophic Activity

569 Stereoselective Synthesis of Pyrrolidin-3-ols from Homoallylamines

Mohamed Medjahdi, José C. González-Gómez, Francisco Foubelo,* and Miguel Yus*



Chiral Imine Asymmetric Allylation Chiral Pyrrolidin-3-ol Epoxide Intramolecular Opening Indium

583 Structural Aspects of Iodine-Promoted One-Pot Cyclization of *O*-Bis(methylthio)stilbenes to Thieno[3,2-*b*]thiophene Derivatives: Synthetic Trials of Tetrathienoacenes from 1,2-Bis(3-methylthiothiophen-2-yl)ethenes

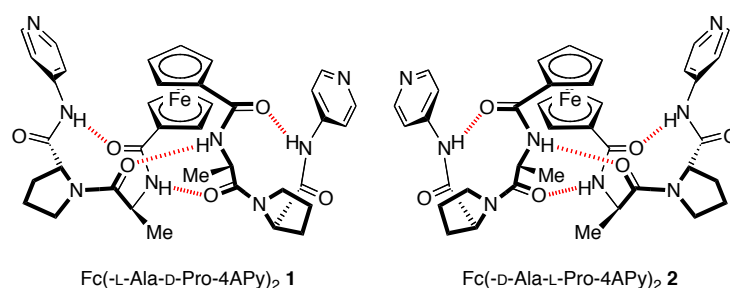
Tatsuya Yamamoto, Eigo Miyazaki, and Kazuo Takimiya*



One-Pot Cyclization Iodine-Promoted Cyclization Heteroarene Thienoacene X-Ray Analysis

595 Simultaneous Formation of Antiparallel β -Sheet-like and Type II β -Turn-like Structures Based on Introduction of Dipeptide Chains with Heterochiral Sequence into Ferrocene Scaffold

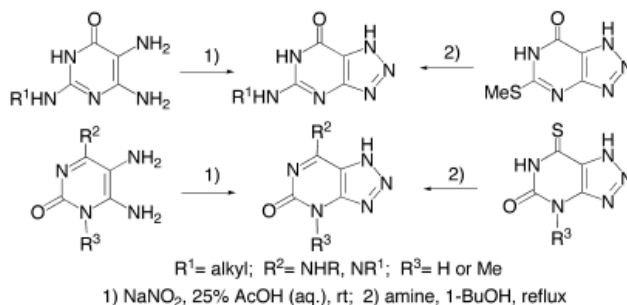
Toshiyuki Moriuchi,* Takayoshi Nagai, Takashi Fujiwara, Nami Honda, and Toshikazu Hirao*



Chirality Organization Bioorganometallic Chemistry Secondary Structure Helical Chirality Hydrogen Bond

605 Design, Synthesis and Evaluation of Antitumor and Antiviral Activities of 5-Amino-1-*H*[1,2,3]-triazolo[4,5-*d*]pyrimidin-7(6*H*)-ones (8-Azaguanines) and 7-Amino-1-*H*[1,2,3]triazolo[4,5-*d*]pyrimidin-5(4*H*)-ones (8-Azaisoguanines)

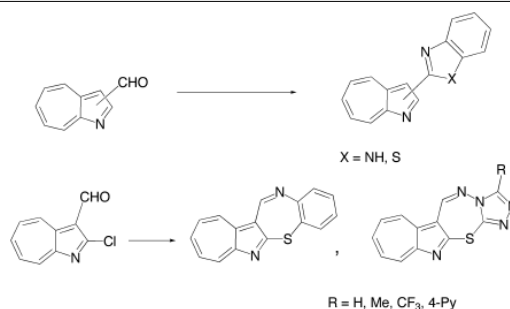
Rafiqul Islam, Noriyuki Ashida, and Tomohisa Nagamatsu*



8-Azaguanine 8-Azaisoguanine Antitumor Antiviral Synthesis

617 Facile Synthesis of (2-Benzimidazolyl)-1-azaazulenes, (2-Benzothiazolyl)-1-azaazulenes, and Related Compounds and Evaluation of Their Anticancer *in vitro* Activity

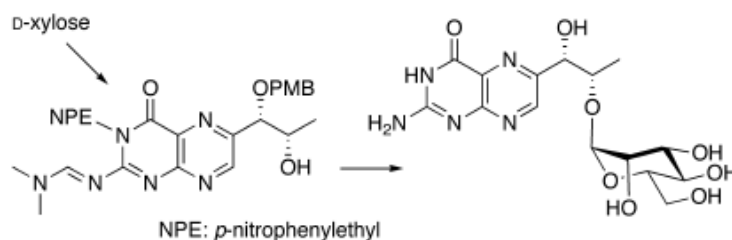
Noriko Yamauchi, Hiroyuki Fujii, Akikazu Kakehi, Motoo Shiro, Masaki Kurosawa, Takeo Konakahara, and Noritaka Abe*



Formyl-1-azaazulene Benzazol Derivative Diazathiazepine Fused 1-Azaazulene Anticancer Activity X-Ray Analysis

635 An Efficient Synthetic Route for a Versatile Ciliapterin Derivative and the First Ciliapterin D-Mannoside Synthesis

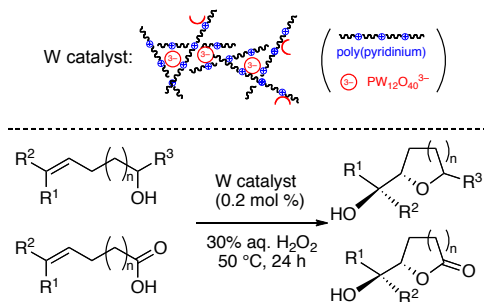
Tadashi Hanaya,* Hiroki Baba, Mitsunori Kanemoto, and Hiroshi Yamamoto



Pterine Glycoside Ciliapterin D-Mannoside Pteridine Enol Acetate Inversion of Configuration

645 Development of Tightly Convoluted Polymeric Phosphotungstate Catalysts and Their Application to an Oxidative Cyclization of Alkenols and Alkenoic Acids

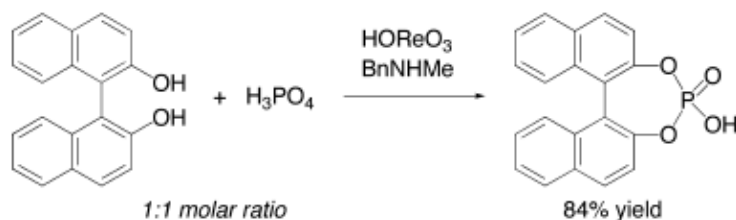
Yoichi M. A. Yamada, Haiquin Guo, and Yasuhiro Uozumi*



Ionic Convolution Polymer-Supported Catalyst Phosphotungstate Oxidative Cyclization Hydrogen Peroxide

657 Selective Synthesis of Cyclic Phosphoric Acid Diesters through Oxorhenium(VII)-Catalyzed Dehydrative Condensation of Phosphoric Acid with Alcohols

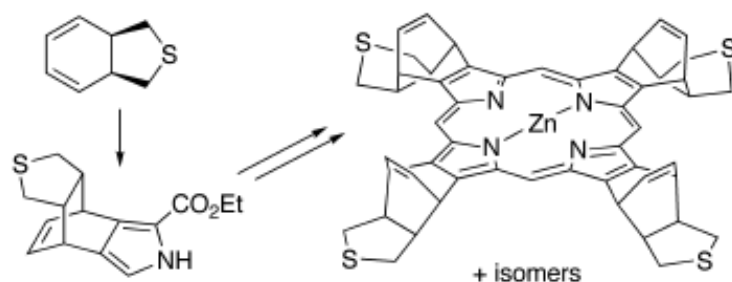
Akira Sakakura, Masayuki Sakuma, Mikimoto Katsukawa, and Kazuaki Ishihara*



Cyclic Phosphoric Acid Diester Catalytic Dehydrative Condensation Rhenium(VII) Oxide Phosphoric Acid Diol

667 Preparation of 1,3,3a,7a-Tetrahydroisothianaphthene and Its Application to Tetrahydrothiophene-Fused Porphyrin

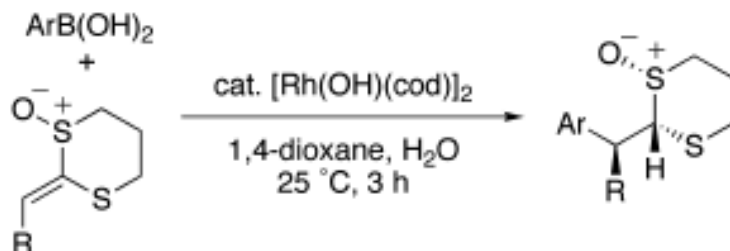
Yukiko Katsuyama, Eita Yoshida, Hiroki Uoyama, Noboru Ono, and Hidemitsu Uno*



Tetrahydro-2-benzothiophene Diels-Alder Reaction Tetrabenzoporphyrin X-Ray Analysis Porphyrin Synthesis

679 2-Alkylidene-1,3-dithiane Monoxides as Activated Alkenes in Rhodium-Catalyzed Addition Reaction of Arylboronic Acids

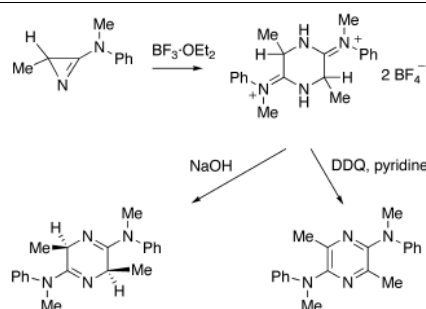
Suguru Yoshida, Hideki Yorimitsu,* and Koichiro Oshima*



Rhodium Addition Arylboronic Acid 2-Alkylidene-1,3-dithiane 1-Oxide Sulfur

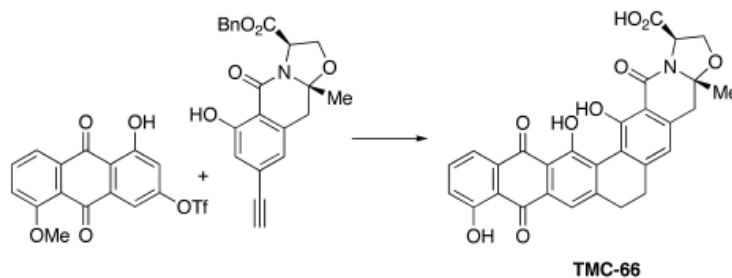
689 Synthesis of 2,5-Diaminopyrazine Derivatives via Dimerization of 2*H*-Azirin-3-amines

Maged K. G. Mekhael, Anthony Linden, and Heinz Heimgartner*


 2*H*-Azirin-3-amine Pyrazine Derivative Lewis Acid Catalysis Dimerization X-Ray Crystallography

699 Total Synthesis of an Endothelin Converting Enzyme Inhibitor, TMC-66

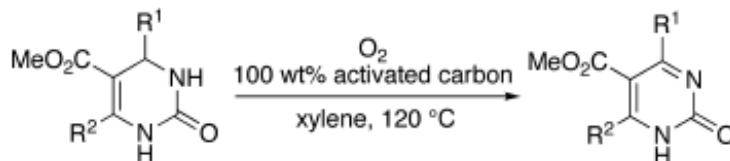
Seijiro Hosokawa,* Hitoshi Fumiyama, Hisato Fukuda, Tomohiro Fukuda, Masashi Seki, and Kuniaki Tatsuta*



TMC-66 Total Synthesis Endothelin Converting Enzyme Oxazolidine Oxidative Coupling

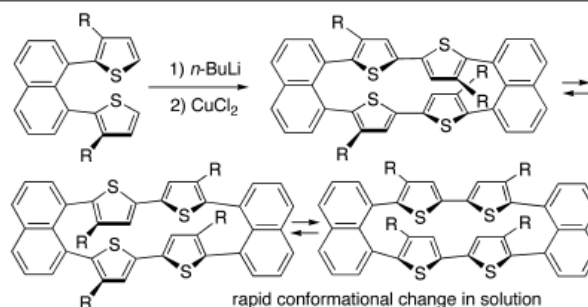
715 Oxidative Conversion of Functionalized 3,4-Dihydropyrimidin-2(1*H*)-ones to the Corresponding Pyrimidin-2(1*H*)-ones Using Activated Carbon-Molecular Oxygen System

Ken-ichi Okunaga, Yukiko Nomura, Kenjiro Kawamura, Natsuki Nakamichi, Kazuo Eda, and Masahiko Hayashi*


 Oxidation Pyrimidin-2(1*H*)-one Biginelli Reaction 3,4-Dihydropyridin-2(1*H*)-one Activated Carbon

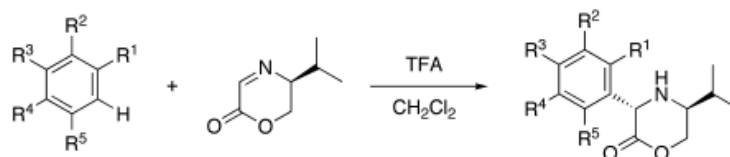
727 Syntheses, Structures, and Properties of Bithiophenophanes Bridged at 1,8-Positions of Naphthalenes

Kazumi Nakao, Tomohiko Nishiuchi, and Masahiko Iyoda*


 Copper-Catalyzed Coupling Cyclophane 2,2'-Bithiophene π - π Interaction Fluorescence

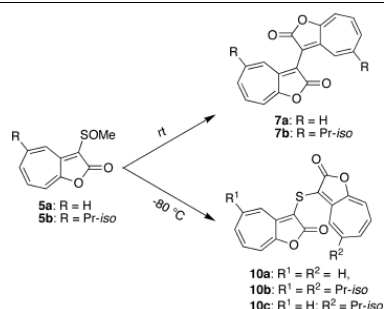
747 A Simple Chiral Template for the Synthesis of Functionalized α -Arylglycine Derivatives

Hiyoku Nakata, Takahiro Imai, Satoshi Yokoshima, and Tohru Fukuyama*


 Arylglycine Chiral Template Nucleophilic Addition 2-Nitrobenzenesulfonyl Group β -Elimination

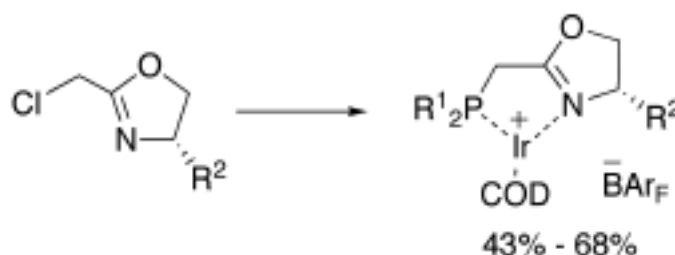
759 Synthesis and Reactivity of 3-Methylsulfinyl-2*H*-cyclohepta[b]furan-2-ones

Junya Higashi, Kazuyuki Okada, Taku Shoji, Koza Toyota, Masataka Watanabe, Masafumi Yasunami, Shigeru Kikuchi, Shunji Ito, and Noboru Morita*


 2*H*-Cyclohepta[b]furan-2-one Dimethyl Sulfide Ditriflate Trifluoromethanesulfonyl Anhydride Electrophilic Substitution Coupling

771 Phosphinomethyloxazolines as Efficient Ligands for the Iridium-Catalyzed Enantioselective Hydrogenation of Unfunctionalized Tetrasubstituted Olefins

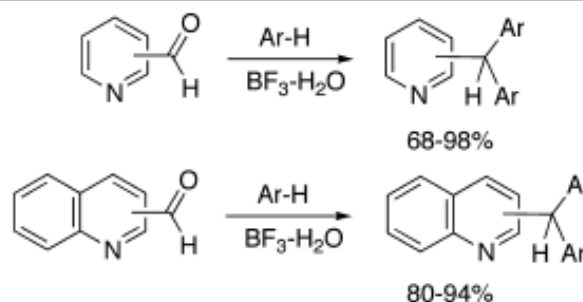
Marcus G. Schrems, Eva Neumann, and Andreas Pfaltz*



N,P Ligand Asymmetric Catalysis Chiral Ligand

783 Facile Synthesis of Diarylmethylpyridines/ Diarylmethylquinolines through Super-electrophilic Activation of Pyridinecarboxaldehydes/Quinolinecarboxaldehydes with Boron Trifluoride Monohydrate

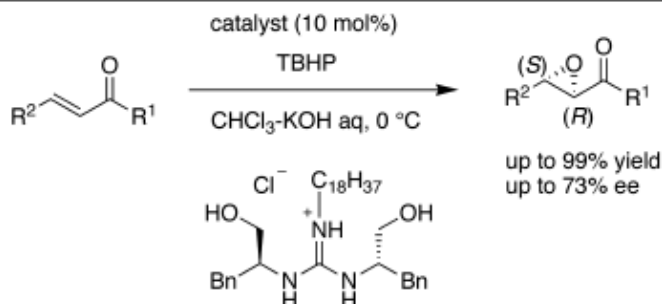
G. K. Surya Prakash,* Farzaneh Paknia, Sujith Chacko, Thomas Mathew, and George A. Olah*



Hydroxyalkylation Super-electrophile Protosolvation Super Acid

801 Development of Bifunctional Acyclic Hydroxyguanidine Organocatalyst: Application to Asymmetric Nucleophilic Epoxidation

Bongki Shin, Shinji Tanaka, Tetsuya Kita, Yuichi Hashimoto, and Kazuo Nagasawa*

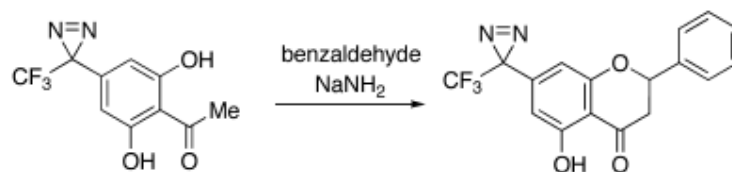


Guanidine Organocatalyst Bifunctional Nucleophilic Epoxidation Chalcone

■ NOTES

811 Synthesis of Diazirine Possessing an Acetophenone Derivative as a Valuable Intermediate for a Flavonoid Photoaffinity Probe

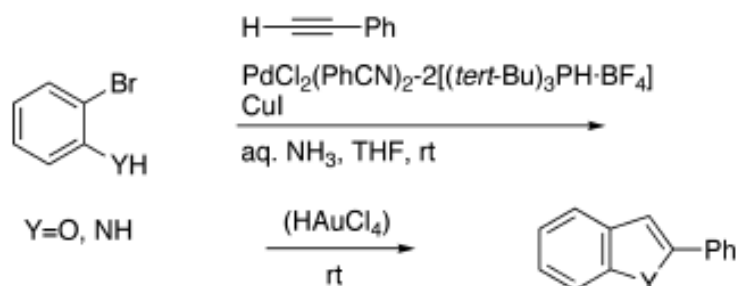
Takumi Furuta,* Mitsuru Ueda, Yasuo Hirooka, Kiyoshi Tanaka, and Toshiyuki Kan*



Flavonoid Probe Molecule Diazirine Photoaffinity Labeling Friedel-Crafts Acylation

819 Effect of the Use of Bulky Alkylphosphines in the Sonogashira Coupling with Aqueous Ammonia

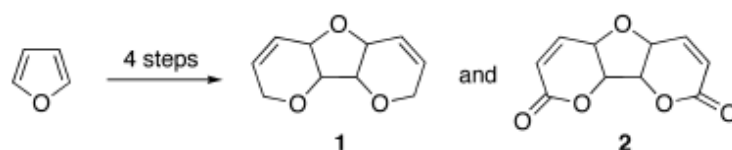
Sachio Fukuoka, Tetsuro Naito, Hiroki Sekiguchi, Takashi Somete, and Atsunori Mori*



Sonogashira Coupling Indole Benzofuran Bulky Phosphine One-Pot Synthesis

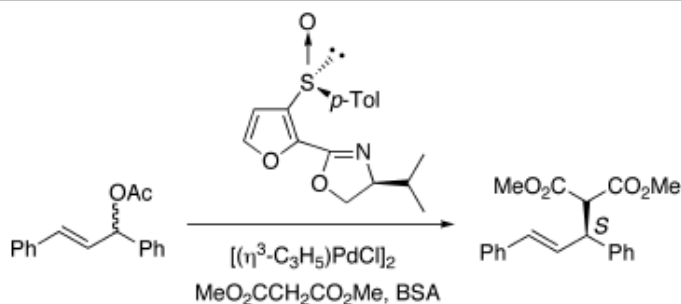
827 A Straightforward Synthesis of Pyran-[2',3':4,5]furo[3,2-*b*]pyran from Furan

Ana Aljarilla and Joaquín Plumet*


 Metathesis Reaction Furan Fused Tricyclic Ether Furo[3,2-*b*]pyran Diels-Alder Reaction

833 Synthesis of Chiral (Sulfinyl)furyloxazoline Ligands and Its Application to Enantioselective Palladium-Catalyzed Allylic Alkylation

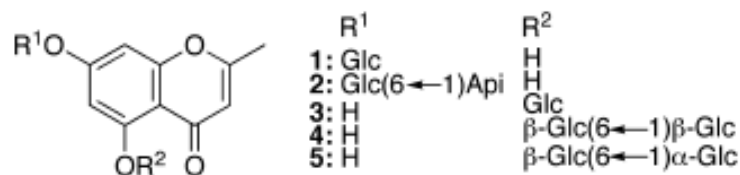
Yusuke Bunya, Takaaki Sengoku, Yoko Imamura, and Yoshitsugu Arai*



Asymmetric Substitution Chiral Ligand Palladium Catalyst Chiral Sulfoxide Furan

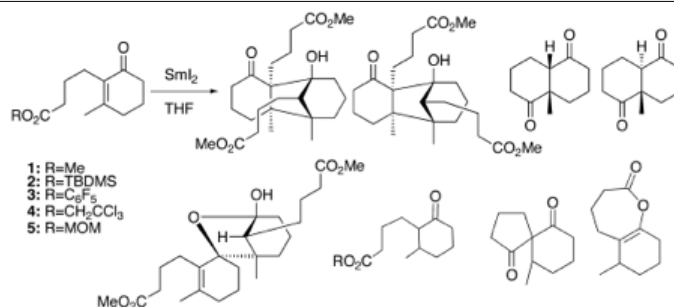
845 Staphylosides A and B: Two New Chromone Diglucosides from Leaves of *Staphylea bumalda* DC.

Etsuko Sueyoshi, Qian Yu, Katsuyoshi Matsunami, and Hideaki Otsuka*


Staphylea bumalda Staphylaceae Chromone Staphyloside Isomatoside

851 Carbon-Carbon Bond Formation between Enone and Ester Carbonyl Group Induced by Samarium Diiodide

Masakazu Sono,* Takayuki Mizutani, Masayo Nozaki, Shigeru Takaoka, and Motoo Tori*



Samarium Diiodide Reduction Cyclization Radical Dimer

861 Straightforward Asymmetric Total Synthesis of (+)-Evodiamine, a Major Indole Alkaloid in Herbal Medicine “Wu Zhu Yu”

Atsushi Nakayama, Noriyuki Kogure, Mariko Kitajima, and Hiromitsu Takayama*



Indole Alkaloid Asymmetric Synthesis Evodiamine Evodia Ruthenium

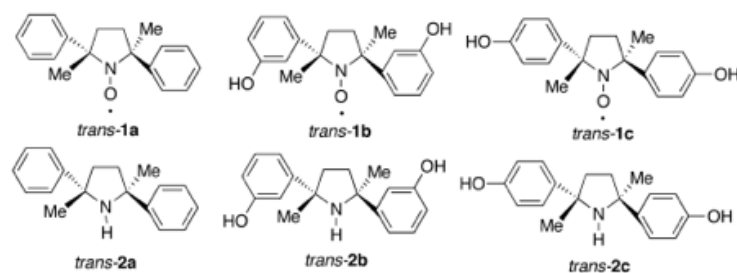
867 Flavisiamines E-F and Fruticosiamine A, New Methyl Chanofrucosinate- and Aspidofractinine-Type Indole Alkaloids, from Two Species of *Kopsia*

Mitsuhiro Sekiguchi, Yusuke Hirasawa, Kazumasa Zaima, Teh Chin Hoe, Kit-Lam Chan, and Hiroshi Morita*


Kopsia fravida Flavisiamines E - G *Kopsia fruticosa* Fruticosiamine A

875 Enantiomeric Resolution of Racemic C₂-Symmetric *trans*-2,5-Dimethyl-2,5-diphenylpyrrolidine and *trans*-2,5-Dimethyl-2,5-bis(3-hydroxyphenyl)pyrrolidine by a Diastereomer Method

Yoshiaki Uchida, Yoichi Nakayama, Katsuaki Suzuki, Shigeaki Oki, Masahiro Horiguchi, Hirohito Tsue, and Rui Tamura*



Nitroxide Radical Optical Resolution Tartaric Acid Chiral Pyrrolidine