

Tetrahedron Letters Vol. 50, No. 47, 2009

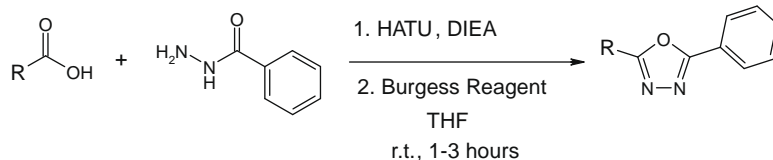
Contents

COMMUNICATIONS

A mild, one-pot preparation of 1,3,4-oxadiazoles

pp 6435–6439

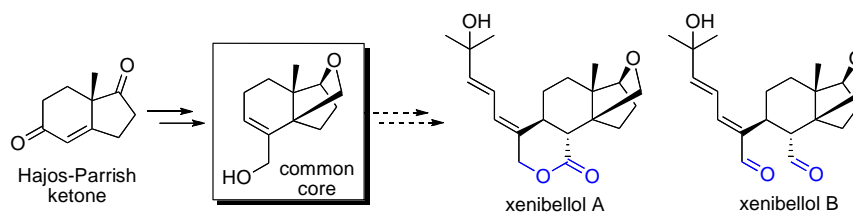
Changkun Li, Hamilton D. Dickson *



Concise synthesis of the xenibellols core

pp 6440–6441

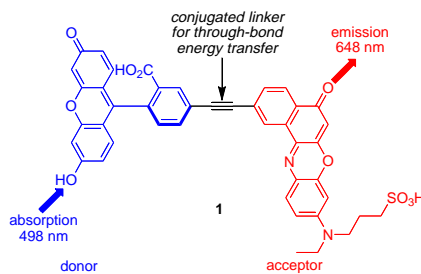
Woo Han Kim, Angie R. Angeles, Jun Hee Lee, Samuel J. Danishefsky *



Energy transfer dyads based on Nile Red

pp 6442–6445

Jiney Jose, Yuichiro Ueno, Juan C. Castro, Lingling Li, Kevin Burgess *



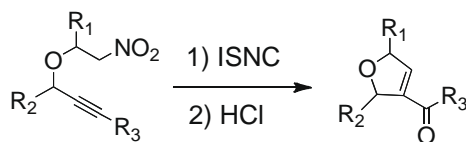
Nile Red derivatives were used as acceptor fragments to construct energy transfer dyads such as **1**; the 'energy transfer efficiencies' of these were 77–97% in organic solvents.



Synthesis of novel 2H,5H-dihydrofuran-3-yl ketones via ISNC reactions

pp 6446–6449

Matthew L. Grandbois, Kelsie J. Betsch, William D. Buchanan, Jetty L. Duffy-Matzner *

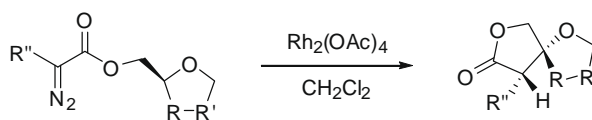


Novel 1-[2H,5H-dihydrofuran-3-yl] ketones have been prepared from propargylic nitroethers via an intramolecular cycloaddition utilizing silyl nitronates in modest to excellent yields. CAChe MNDO PM5 and CONFLEX programs were employed to aid in assigning the stereochemistry.

**Spirolactone syntheses through a rhodium-catalyzed intramolecular C–H insertion reaction: model studies towards the synthesis of syringolides**

pp 6450–6453

Mauricio Navarro Villalobos *, John L. Wood

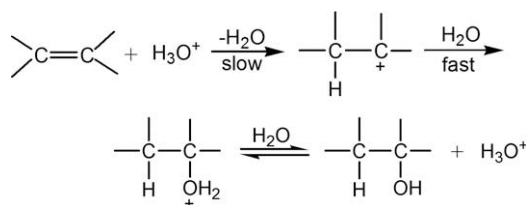


R, R' = CH₂, CH, CHOTBS, CHOBn, CHOMe
 R'' = H, PMP, MMP, vinyl, cyclohexenyl, C(OTBS)=CH₂
 Up to 85% yield

**Substituent effects in acid-catalyzed hydration of alkenes, measured under consistent reaction conditions**

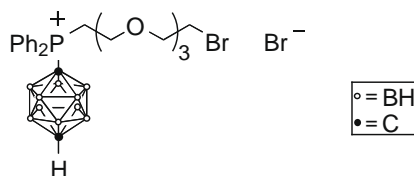
pp 6454–6456

Donna J. Nelson *, Christopher Brammer, Ruibo Li

**Water-soluble phosphonium salts containing 1,12-dicarba-closo-dodecaborane(12)**

pp 6457–6461

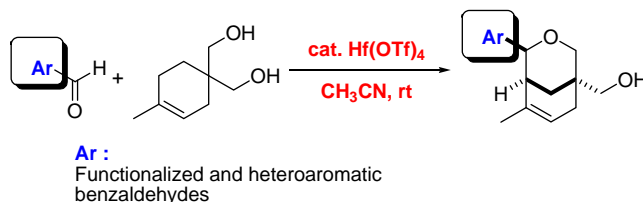
Joseph A. Ioppolo, Michael Kassiou, Louis M. Rendina *



○ = BH
 ● = C

Versatile method for the synthesis of 4-substituted 6-methyl-3-oxabicyclo[3.3.1]non-6-ene-1-methanol derivatives: Prins-type cyclization reaction catalyzed by hafnium triflate

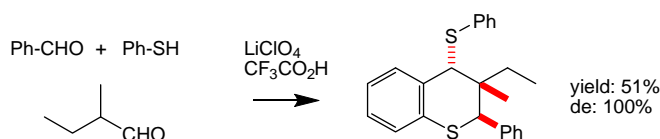
pp 6462–6465

Masayuki Nakamura^{*}, Kenji Niiyama, Takeru Yamakawa

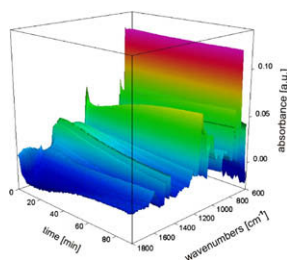
A versatile method for the synthesis of 4-substituted 6-methyl-3-oxabicyclo[3.3.1]non-6-ene-1-methanol derivatives has been developed using Prins-type cyclization reaction by hafnium triflate between various aldehydes and O-protected/unprotected cyclohex-3-ene-1,1-dimethanol in high yields.

Stereoselective one-pot synthesis of highly differently substituted thiochromans

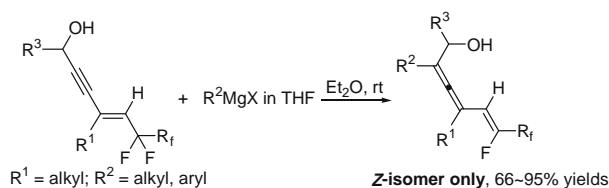
pp 6466–6468

Andrea Seifert, Rainer Mahrwald^{*}**Convenient multigram synthesis of monodisperse oligo(ethylene glycols): effective reaction monitoring by infrared spectroscopy using an attenuated total reflection fibre optic probe**

pp 6469–6471

Daniel Lumpi, Christian Braunschier^{*}, Christian Hametner, Ernst Horkel, Bernhard Zachhuber, Bernhard Lendl, Johannes Fröhlich**Highly stereoselective synthesis of 6-perfluoroalkyl-6-fluoroalka-2,3,5-(Z)-trienols through carbometallation-elimination of 5-perfluoroalkyl-substituted 4(E)-alken-2-ynols with Grignard reagents**

pp 6472–6475

Zhichao Ma, Rong Zeng, Yihua Yu, Shengming Ma^{*}

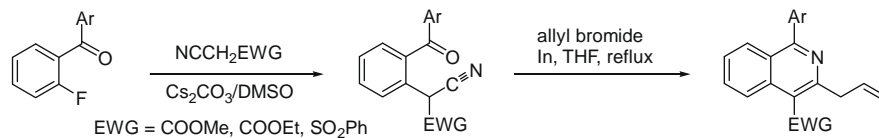
A highly regio- and stereoselective sequential carbometallation and Z-selective β -elimination reaction of 5-perfluoroalkyl-4(E)-en-2-ynols with Grignard reagents in Et_2O has been developed to afford various 6-perfluoroalkyl-6-fluoroalka-2,3,5-(Z)-trienols in good to excellent yields. Primary or secondary alkyl or aryl Grignard reagents may be used to introduce the R^2 group to the 2-position of the starting materials referring to the hydroxyl group. A mechanism for this transformation has been proposed.



An expedient synthesis of poly-substituted 1-aryloquinolines from δ -ketonitriles via indium-mediated Barbier reaction protocol

pp 6476–6479

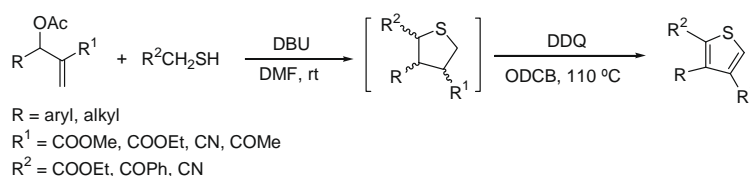
Sung Hwan Kim, Hyun Seung Lee, Ko Hoon Kim, Jae Nyoung Kim *



Regioselective synthesis of poly-substituted thiophenes from Baylis–Hillman adducts

pp 6480–6483

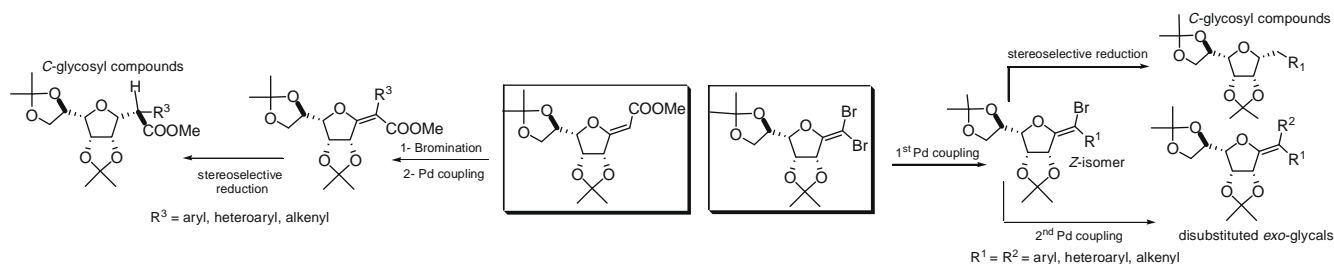
Hyun Seung Lee, Se Hee Kim, Jae Nyoung Kim *



Efficient access to disubstituted *exo*-glycols. Application to the preparation of C-glycosyl compounds

pp 6484–6487

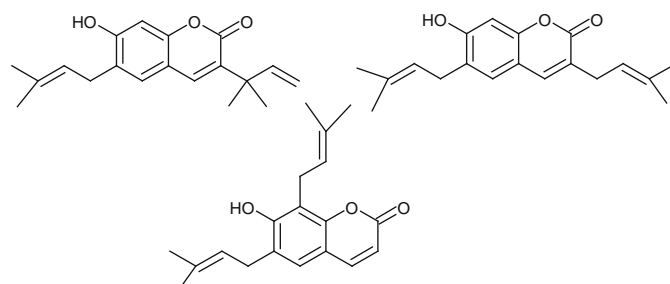
Alexandre Novoa, Nadia Pellegrini-Moïse *, Sandrine Lamandé-Langle, Yves Chapleur *



Cascade Wittig reaction-double Claisen and Cope rearrangements: one-pot synthesis of diprenylated coumarins gravelliferone, balsamiferone, and 6,8-diprenylumbelliferone

pp 6488–6490

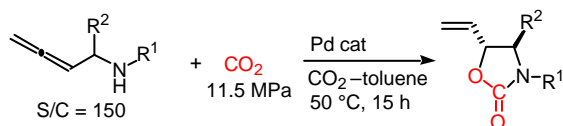
Rupesh E. Patre, Jyoti B. Shet, Perunnikulath S. Parameswaran, Santosh G. Tilve *



Palladium-catalyzed carboxylative cyclization of α -allenyl amines in dense carbon dioxide

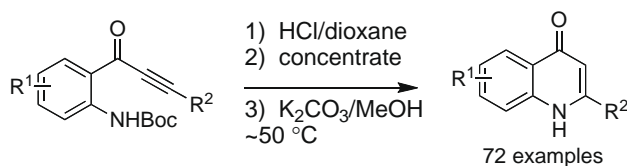
pp 6491–6493

Yoshihito Kayaki, Naoko Mori, Takao Ikariya *

Carboxylative transformation of 2,3-allenic amines into 5-vinyl-1,3-oxazolidin-2-ones was promoted by palladium catalysts under a pressurized CO₂ condition.**Synthesis of a quinolone library from ynones**

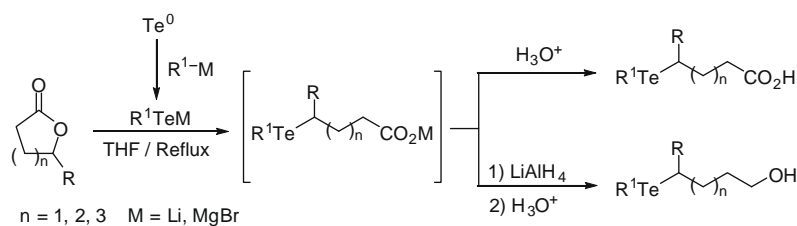
pp 6494–6497

Timothy R. Ward, Brandon J. Turunen, Torsten Haack, Benjamin Neuenswander, William Shadrick, Gunda I. Georg *

**The soft nucleophilicity of organotellurolates driving the S_N2-type lactone ring-opening reaction**

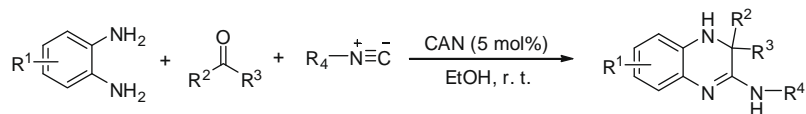
pp 6498–6501

Márcio S. Silva, Alcindo A. Dos Santos, João V. Comasseto *

**CAN-catalyzed syntheses of 3,4-dihydroquinoxalin-2-amine derivatives based on isocyanides**

pp 6502–6505

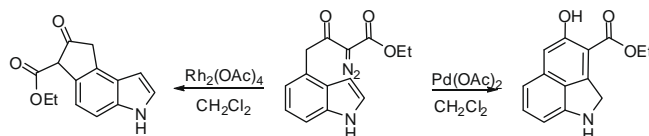
Jian Li *, Yuejin Liu, Chunju Li, Xueshun Jia *

Starting from readily available *o*-phenylenediamines **1**, ketones **2** and isocyanides **3**, a variety of highly substituted 3,4-dihydroquinoxalin-2-amine derivatives **4** were efficiently synthesized in the presence of catalytic amount of cerium(IV) ammonium nitrate at room temperature. The flexibility of this protocol also opens a new route to the structurally unique spirocyclic analogs when cyclic ketones are employed.

Synthesis of a 1,3,4,5-tetrahydrobenzindole β -ketoester

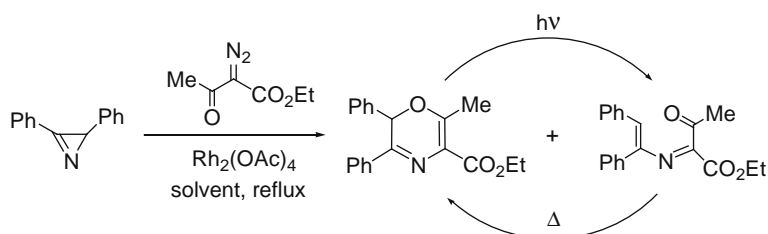
pp 6506–6508

Marianne Lenes Rosenberg, Jens H. F. Aasheim, Martin Trebbin, Einar Uggerud, Tore Hansen *

**Rh(II)-Catalysed reactions of 2H-azirines with ethyl 2-acyl-2-diazoacetates. Synthesis of novel photochromic oxazines**

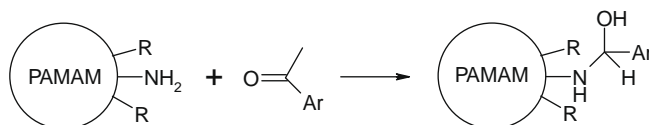
pp 6509–6511

Vsevolod A. Khlebnikov, Mikhail S. Novikov *, Alexander F. Khlebnikov, Nikolai V. Rostovskii

**Stable hemiaminals attached to PAMAM dendrimers**

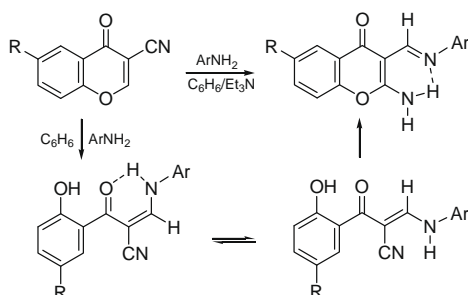
pp 6512–6514

Paweł Subik, Barbara Welc, Beata Wisz, Stanisław Wołowicz *

**Structural revision in the reactions of 3-cyanochromones with primary aromatic amines. Improved synthesis of 2-amino-3-(aryliminomethyl)chromones**

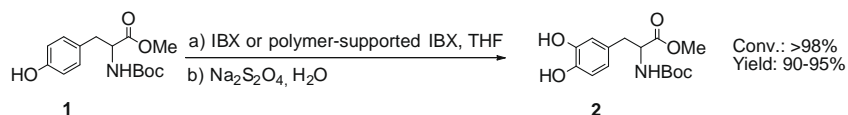
pp 6515–6518

Vyacheslav Ya. Sosnovskikh *, Vladimir S. Moshkin, Mikhail I. Kodess



A novel and efficient synthesis of DOPA and DOPA peptides by oxidation of tyrosine residues with IBX

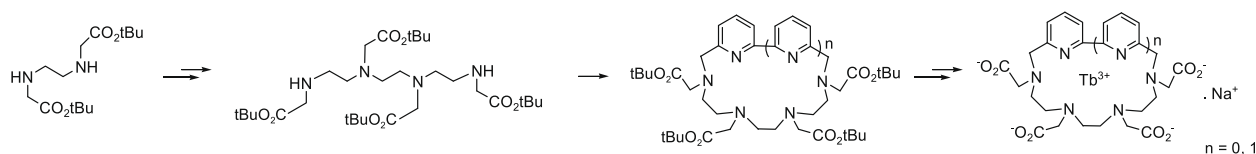
pp 6519–6521

Roberta Bernini^{*}, Maurizio Barontini, Fernanda Crisante, Maria Cristina Ginnasi, Raffaele Saladino^{*}

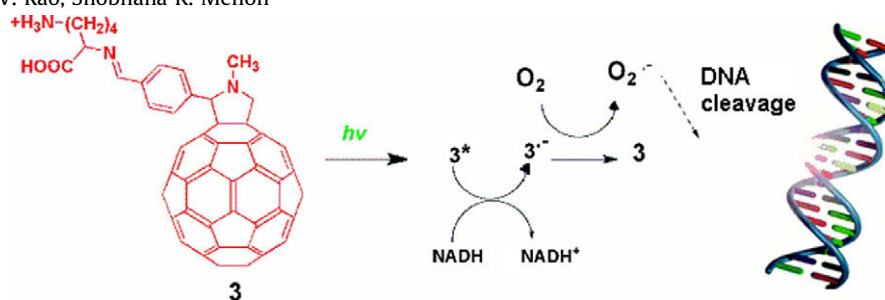
Chemo- and regioselective oxidation reactions of tyrosine and peptides containing tyrosine residues were performed with IBX. The corresponding catecholic compounds (DOPA and DOPA residues) were obtained in very good yields. Polymer-supported IBX maintained the efficiency and selectivity with economic and environmental benefits.

An efficient route to pyridine and 2,2'-bipyridine macrocycles incorporating a triethylenetetraminetetraacetic acid core as ligand for lanthanide ions

pp 6522–6525

Ghassan Bechara, Nadine Leygue, Chantal Galaup, Béatrice Mestre, Claude Picard^{*}**Photoinduced DNA cleavage by fullerene–lysine conjugate**

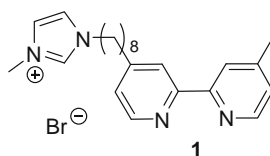
pp 6526–6530

Anish Kumar, Mandava V. Rao, Shobhana K. Menon^{*}

The presence of positive charge as well as of photoactive fullerene moiety made the synthesized fullerene–lysine conjugate highly efficient in photoinduced cleavage of DNA in the presence of NADH.

**Imidazolium-functionalized bipyridine derivatives: a promising family of ligands for catalytic Rh(0) colloids**

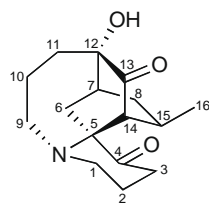
pp 6531–6533

Bastien Léger, Audrey Denicourt-Nowicki, Hélène Olivier-Bourbigou, Alain Roucoux^{*}

Lycopladine H, a novel alkaloid with fused-tetracyclic skeleton from *Lycopodium complanatum*

pp 6534–6536

Kan'ichiro Ishiuchi, Takaaki Kubota, Shigeki Hayashi, Toshiro Shibata, Jun'ichi Kobayashi *

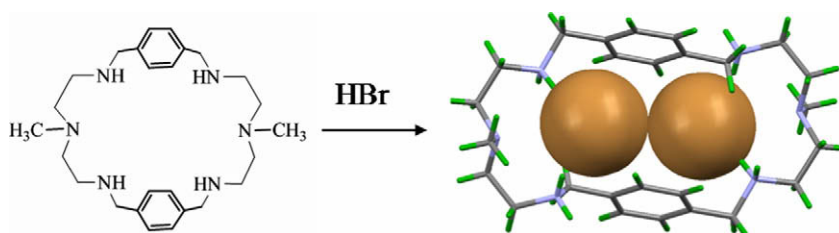


lycopladine H (1)

A new hexaaminomacrocyclic for ditopic binding of bromide

pp 6537–6539

Don Gibson, Kalpana R. Dey, Frank R. Fronczek, Md. Alamgir Hossain *

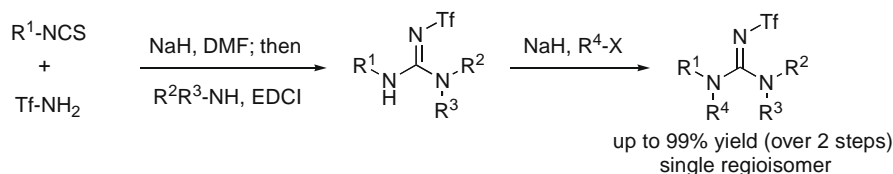


A hexaaminomacrocyclic has been synthesized and crystallized with hydrobromic acid. The structural analysis of the bromide complex suggests that the ligand in its tetraprotonated form, binds two bromides forming a ditopic complex.

A simple one-pot synthesis of triflyl guanidines: access to highly substituted electron-poor guanidines

pp 6540–6542

Karen Thai, Craig W. Clement, Michel Gravel *

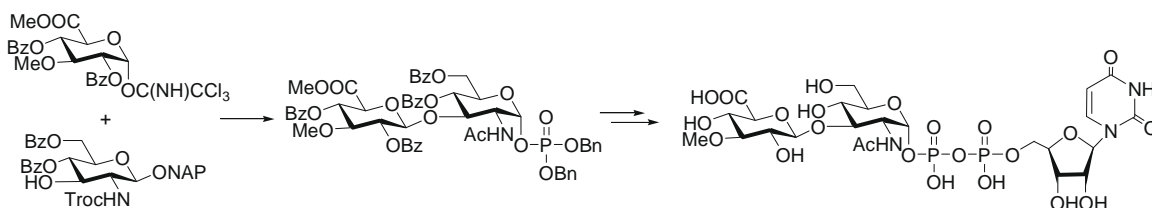


Unsymmetrical di- and trisubstituted triflyl guanidines are accessed through a simple, one-pot protocol from the corresponding isothiocyanate and amine. Trisubstituted triflyl guanidines can be alkylated to obtain tetrasubstituted triflyl guanidines in high yields and complete regioselectivity.

**The first chemical synthesis of novel MeO-3-GlcUA derivative of hyaluronan-based disaccharide to elucidate the catalytic mechanism of hyaluronic acid synthases (HASs)**

pp 6543–6545

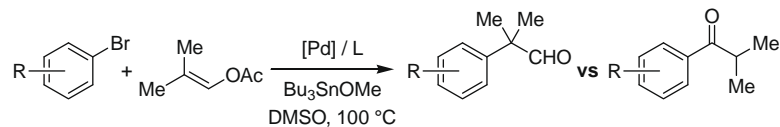
Guohua Wei, Vipin Kumar, Jun Xue, Robert D. Locke, Khushi L. Matta *



Palladium-catalyzed arylation of vinylic acetates. Phosphine ligand influenced regioselectivity

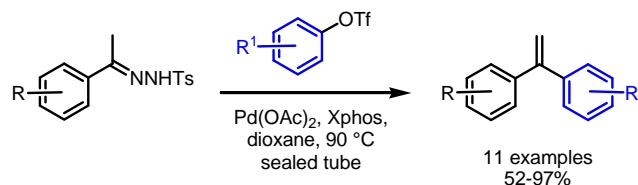
pp 6546–6548

Mickaël Jean, Jacques Renault, Pierre van de Weghe *

**Expeditious synthesis of 1,1-diarylethylenes related to isocombretastatin A-4 (isoCA-4) via palladium-catalyzed arylation of *N*-tosylhydrazones with aryl triflates**

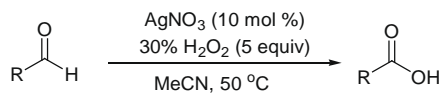
pp 6549–6552

Bret Tréguier, Abdallah Hamze, Olivier Provot, Jean-Daniel Brion, Mouâd Alami *

**Silver nitrate-catalyzed oxidation of aldehydes to carboxylic acids by H₂O₂**

pp 6553–6556

Debashis Chakraborty *, Ravikumar R. Gowda, Payal Malik

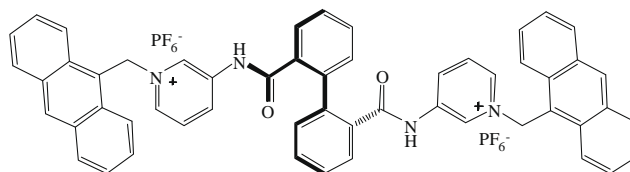


An inexpensive and efficient method for the oxidation of a variety of aromatic, aliphatic and conjugated aldehydes with 30% H₂O₂ as oxidant in the presence of catalytic amounts of AgNO₃ is described.

**Pyridinium amide-based simple synthetic receptor for selective recognition of dihydrogenphosphate**

pp 6557–6561

Kumaresh Ghosh *, Avik Ranjan Sarkar, Amarendra Patra



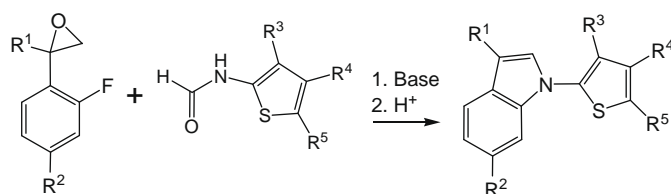
1

A new fluorescent receptor **1** built on biphenyl motif has been designed and synthesized. Pyridinium amide moiety in **1** acts as binding site and shows selective complexation of H₂PO₄[−] under the mastery of biphenyl spacer. Binding-induced increase in emission was used to determine the selectivity and sensitivity of **1** toward a series of anions such as different dicarboxylates, HSO₄[−], and H₂PO₄[−].



A short synthesis of 3,6-disubstituted *N*-2-thienyl/aryl-indoles

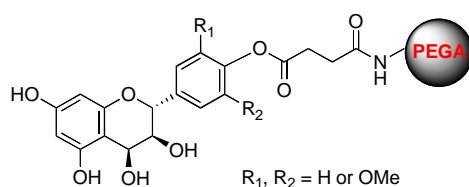
pp 6562–6566

Hanumant B. Borate^{*}, Sangmeshwer P. Sawargave, Suleman R. Maujan

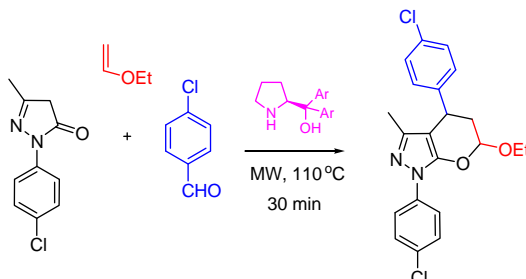
Various 3,6-disubstituted *N*-2-thienyl/aryl-indoles were prepared by a short synthetic strategy involving reaction of substituted 2,4-difluoro/dichloro-styrene epoxide with substituted 2-formylaminothiophene/*N*-formylaniline in the presence of a base followed by treatment with an acid.

**Stable solid-supported leucoanthocyanidin variants for flavanoid biosynthesis elucidation**

pp 6567–6571

Denis Deffieux^{*}, Sophie Gaudrel-Grosay, Axelle Grelard, Céline Chalumeau, Stéphane Quideau^{*}**Microwave-assisted organocatalytic multicomponent Knoevenagel/hetero Diels–Alder reaction for the synthesis of 2,3-dihydropyran[2,3-*c*]pyrazoles**

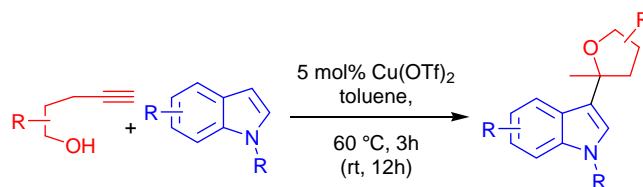
pp 6572–6575

Marco Radi, Vincenzo Bernardo, Beatrice Bechi, Daniele Castagnolo, Mafalda Pagano, Maurizio Botta^{*}

A rapid protocol for the multicomponent microwave-assisted organocatalytic Knoevenagel/hetero Diels–Alder reaction (KHDA) has been developed.

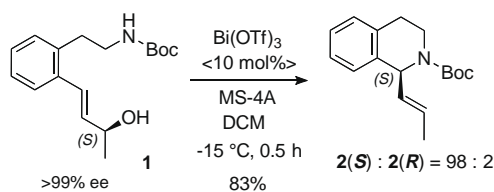
Thorpe–Ingold effect in copper(II)-catalyzed formal hydroalkoxylation–hydroarylation reaction of alkynols with indoles

pp 6576–6579

Nitin T. Patil^{*}, Vivek S. Raut, Rahul D. Kavthe, Vaddu V. N. Reddy, P. V. K. Raju

Lewis acid-catalyzed intramolecular amination via 1,3-chirality transfer

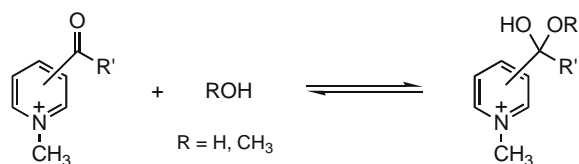
pp 6580–6583

Nobuyuki Kawai^{*}, Ryuzou Abe, Jun'ichi Uenishi

Direct intramolecular amination of the chiral non-racemic allylic alcohol **1** conjugated with a benzene ring afforded the tetrahydro-isoquinoline **2** possessing a newly formed (*E*)-alkene in the presence of a catalytic amount of Lewis acid.

Substantial formation of hydrates and hemiacetals from pyridinium ketones

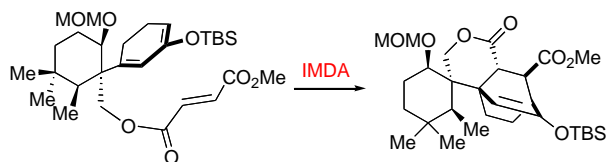
pp 6584–6585

Sha Huang, Amanda K. Miller, Weiming Wu^{*}

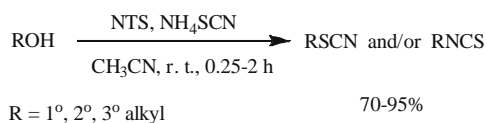
Pyridinium ketones have been found to exist as hydrates and hemiacetals in considerable amount in aqueous and alcoholic solutions, respectively. The relative position of the pyridinium positive charge has a large effect on the equilibrium constants. The polar substituent constants, σ^* , of the pyridinium group substituted at different positions can be estimated from the hydration constants.

Synthetic studies toward Maoecrystal V

pp 6586–6587

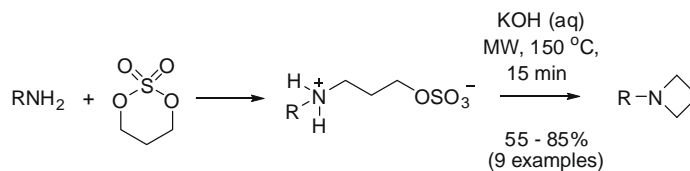
Feng Peng, Maolin Yu, Samuel J. Danishefsky^{*}**In situ-generated *N*-thiocyanatosuccinimide (NTS) as a highly efficient reagent for the one-pot thiocyanation or isothiocyanation of alcohols**

pp 6588–6589

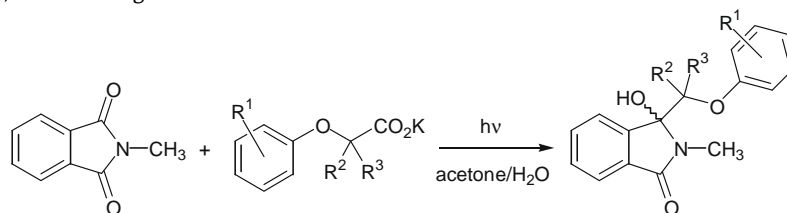
Babak Mokhtari^{*}, Roya Azadi, Samira Rahmani-Nezhad

Microwave-assisted synthesis of azetidines in aqueous media

pp 6590–6592

Brendan A. Burkett^{*}, Samuel Z. Ting, Gwendolyn C. S. Gan, Christina L. L. Chai**Photodecarboxylative additions of phenoxyacetates to *N*-methylphthalimide**

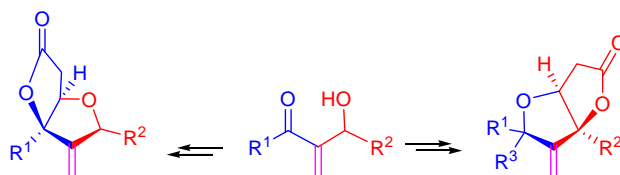
pp 6593–6596

Fadi Hatoum, Sonia Gallagher, Michael Oelgemöller^{*}

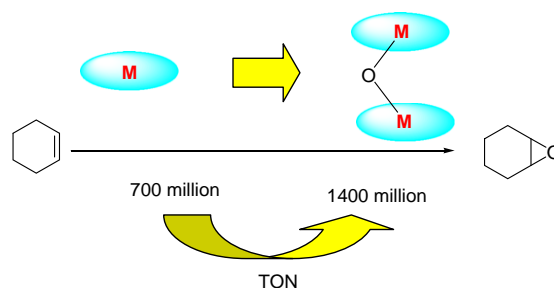
Photoaddition of various phenoxyacetates to *N*-methylphthalimide affords the corresponding hydroxyphthalimidines in yields of 21–93%. The diastereoselectivity of the intermolecular addition is studied for a series of 2-substituted phenoxyacetates with low diastereoselectivities being observed. Comparison experiments with anisole and ether-containing phthalimide confirm that the crucial electron-transfer step occurs from the carboxylate functionality.

An expeditious, bidirectional synthesis of furofuranones: a new application of Morita–Baylis–Hillman adducts

pp 6597–6600

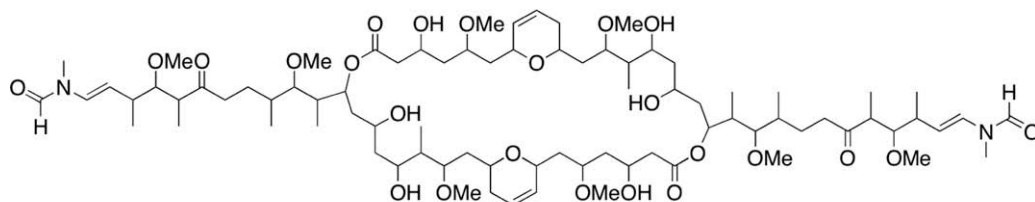
Goverdhan Mehta^{*}, Bilal Ahmad Bhat, T. H. Suresha Kumara**Remarkable enhancement of aerobic epoxidation reactivity for olefins catalyzed by μ -oxo-bisiron(III) porphyrins under ambient conditions**

pp 6601–6605

Xian-Tai Zhou, Qing-Hua Tang, Hong-Bing Ji^{*}

Luminaolide, a novel metamorphosis-enhancing macrodiolide for scleractinian coral larvae from crustose coralline algae

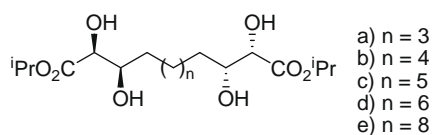
pp 6606–6609

Makoto Kitamura, Peter J. Schupp^{*}, Yoshikatsu Nakano, Daisuke Uemura^{*}

Luminaolide (1)

A new organogelator effective at both extremes of solvent polarity

pp 6610–6612

David W. Knight^{*}, Ian R. Morgan

The hydroxy diesters shown are powerful organogelators, capable of forming stable gels from a diversity of solvents including toluene and water at very low concentrations.

*Corresponding author

Supplementary data available via ScienceDirect

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