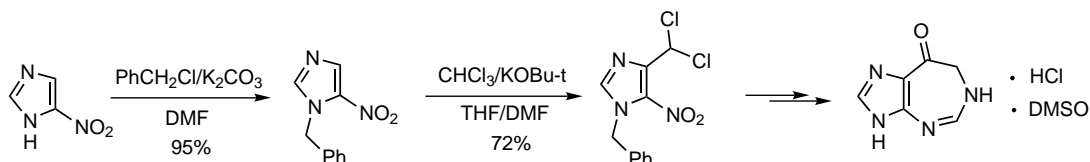


Vicarious nucleophilic substitution of 1-benzyl-5-nitroimidazole, application to the synthesis of 6,7-dihydroimidazo[4,5-d][1,3]-diazepin-8(3H)-one

Bang-Chi Chen,* Sam T. Chao, Joseph E. Sundeen, John Tellew and Saleem Ahmad

Discovery Chemistry, Bristol-Myers Squibb Pharmaceutical Research Institute, Princeton, NJ 08543, USA

Tetrahedron Letters 43 (2002) 1595



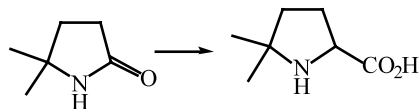
An efficient synthesis of substituted prolines by the selective reduction and reductive cyanation of 2-pyrrolidones

Qian Xia and Bruce Ganem*

Department of Chemistry and Chemical Biology, Baker Laboratory, Cornell University, Ithaca, NY 14853-1301, USA

Substituted prolines that are naturally occurring and/or biologically interesting can be prepared using $\text{Cp}_2\text{ZrHCl/TMSCN}$.

Tetrahedron Letters 43 (2002) 1597

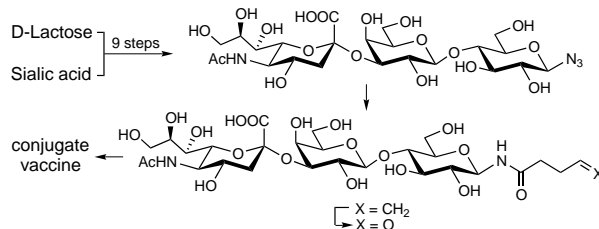


Neoglycoprotein cancer vaccines: synthesis of an azido derivative of GM3 and its efficient coupling to proteins through a new linker

Jie Xue, Yanbin Pan and Zhongwu Guo*

Department of Chemistry, Case Western Reserve University, 10900 Euclid Avenue, Cleveland, OH 44106, USA

Tetrahedron Letters 43 (2002) 1599



Preparation of 5-(cyclohexylmethyl)barbituric acid derivatives by acid-catalyzed reductive cyclohexylmethylation of barbituric acids with *p*-hydroxy or *p*-methoxybenzaldehydes

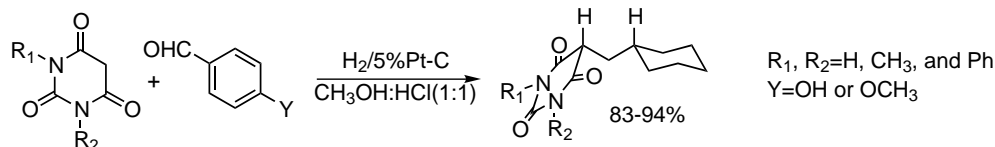
Donna M. Neumann,^a Branko S. Jursic^{a,*} and Kenneth L. Martin^b

^aDepartment of Chemistry, University of New Orleans, New Orleans, LA 70148, USA

^bDepartment of Chemistry, Berry College, Mt. Berry, GA 30165, USA

Synthetic procedures for one-pot multigram preparation of 5-(cyclohexylmethyl)barbituric acid derivatives from corresponding barbituric acid and *p*-hydroxy or *p*-methoxybenzaldehyde were presented.

Tetrahedron Letters 43 (2002) 1603



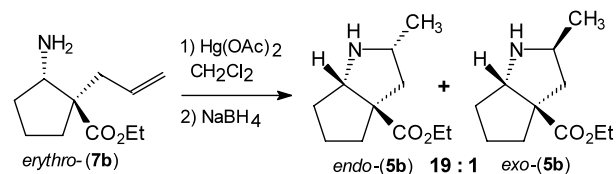
Highly diastereoselective mercury-mediated synthesis of functionalized 2-azabicyclo[3.3.0]octane derivatives

Tetrahedron Letters 43 (2002) 1607

Emerson P. Peçanha,^{a,b} Hugo Verli,^{a,b} Carlos R. Rodrigues,^a Eliezer J. Barreiro^{a,b} and Carlos A. M. Fraga^{a,b,*}

^aLaboratório de Avaliação e Síntese de Substâncias Bioativas (<http://>), Faculdade de Farmácia, Universidade Federal do Rio de Janeiro, PO Box 68006, 21944970, Rio de Janeiro, RJ, Brazil

^bInstituto de Química, Universidade Federal do Rio de Janeiro, Rio de Janeiro, RJ, Brazil



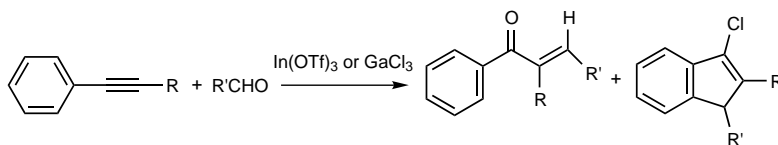
The purified diastereomer ethyl erythro-1-allyl-2-amino-1-cyclopentanecarboxylate (7b), underwent highly diastereoselective mercury(II)-mediated intramolecular amino-cyclization–demercuration to afford primarily endo-(5b).

A highly stereoselective, novel coupling reaction between alkynes and aldehydes

Tetrahedron Letters 43 (2002) 1613

Ganapathy S. Viswanathan and Chao-Jun Li*

Department of Chemistry, Tulane University, New Orleans, LA 70118, USA



Discovery, structure and HIV-1 integrase inhibitory activities of integracins, novel dimeric alkyl aromatics from *Cytonaema* sp.

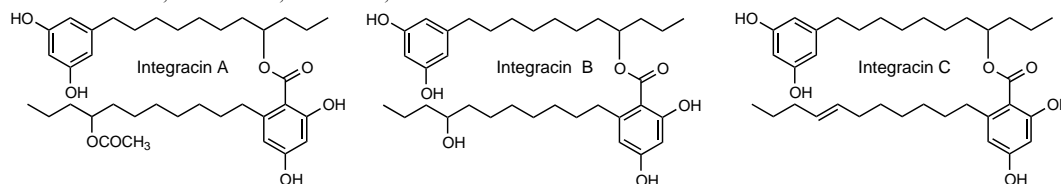
Tetrahedron Letters 43 (2002) 1617

Sheo B. Singh,^{a,*} Deborah L. Zink,^a Gerald F. Bills,^b Fernando Pelaez,^b Ana Teran,^b Javier Collado,^b Keith C. Silverman,^a Russell B. Lingham,^a Peter Felock^c and Daria J. Hazuda^c

^aMerck Research Laboratories, PO Box 2000, Rahway, NJ 07065, USA

^bCIBE, Merck Sharp & Dohme de Espana, S. A. Josefa Valcárcel 38, 28027 Madrid, Spain

^cMerck Research Laboratories, West Point, PA 19486, USA



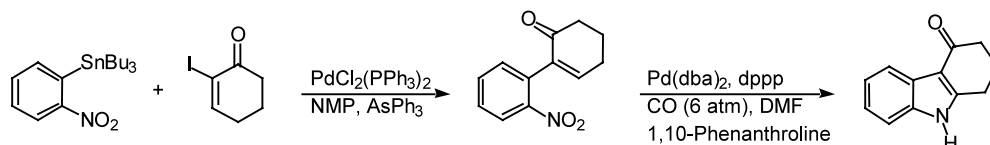
Novel palladium-catalyzed synthesis of 1,2-dihydro-4(3H)-carbazolones

Tetrahedron Letters 43 (2002) 1621

Tricia L. Scott and Björn C. G. Söderberg*

Department of Chemistry, West Virginia University, Morgantown, WV 26506-6045, USA

Sequential palladium catalyzed intermolecular Stille reaction-*N*-heteroannulation afford carbazolones.

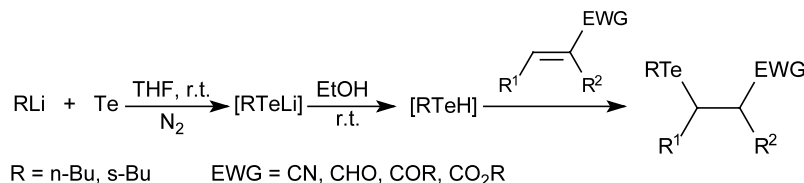


β -Functionalized selenides and tellurides by hydrochalcogenation of olefins containing electron-withdrawing groups

Tetrahedron Letters 43 (2002) 1625

Fabiano K. Zinn, Vinicius E. Righi, Silas C. Luque, Henrique B. Formiga and João V. Comasseto*

Instituto de Química, Universidade de São Paulo, Av. Prof. Lineu Prestes, 748, Cx.P. 26077, 05599-970 São Paulo, Brazil



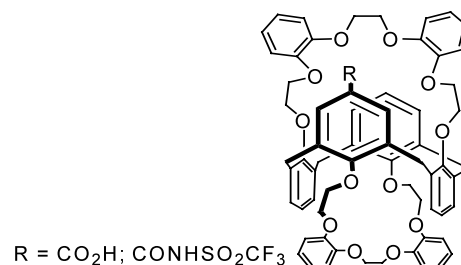
Calix[4]arene-bis(dibenzocrown-6-ethers) with one proton-ionizable group

Tetrahedron Letters 43 (2002) 1629

Vladimir S. Talanov,* Galina G. Talanova, Maryna G. Gorbunova and Richard A. Bartsch*

Department of Chemistry and Biochemistry, Texas Tech University, Lubbock, TX 79409-1061, USA

New 1,3-alternate calix[4]arene-bis(dibenzocrown-6-ethers) exhibit high extraction efficiency and high selectivity for Cs⁺.



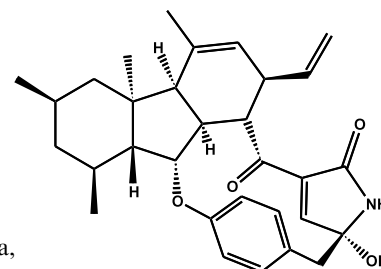
Pyrrocidines A and B, new antibiotics produced by a filamentous fungus

Tetrahedron Letters 43 (2002) 1633

Haiyin He,* Hui Y. Yang, Ramunas Bigelis, Eric H. Solum, Michael Greenstein and Guy T. Carter

Natural Products Chemistry, Wyeth-Ayerst Research, 401 N. Middletown Road, Pearl River, NY 10965, USA

Pyrrocidines A and B, two new antibiotics, containing rare 13-membered macrocycles, were isolated from the fermentation broth of a fungus, *LL-Cyan426*. Pyrrocidine A exhibited potent activity against Gram-positive bacteria, including drug-resistant strains. The structures of these compounds were established using spectroscopic methods.



Pyrrocidine A

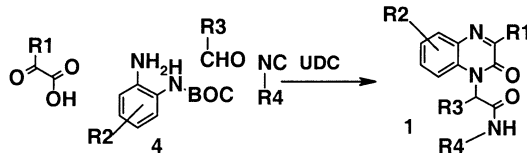
Two-step solution-phase synthesis of novel quinoxalinones utilizing a UDC (Ugi/de-Boc/cyclize) strategy

Tetrahedron Letters 43 (2002) 1637

Thomas Nixey, Paul Tempest and Christopher Hulme*

Department of Small Molecule Drug Discovery, AMGEN Inc., One AMGEN Center Drive, Thousand Oaks, CA 91320, USA

This letter reveals a novel two-step synthesis of arrays of biologically relevant quinoxalinones, containing four points of potential diversity. The approach utilizes the so-called UDC (Ugi/de-Boc/cyclize) strategy.



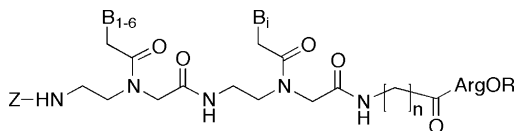
Liquid-phase combinatorial synthesis of diPNA-arginine conjugates

Tetrahedron Letters 43 (2002) 1641

Mary-Lorène Leroux, Christophe Di Giorgio, Nadia Patino and Roger Condom*

Laboratoire de Chimie Bio-Organique, UMR 6001, Université de Nice Sophia-Antipolis, F-06108 Nice Cedex 2, France

A library of potential anti HIV agents has been generated through a combinatorial liquid-phase synthesis, which results from a Fully Protected Backbone strategy (FPB).



B₁₋₆ = A, C, G, T, U and In

B_i ∈ (A, C, G, T, U, In)

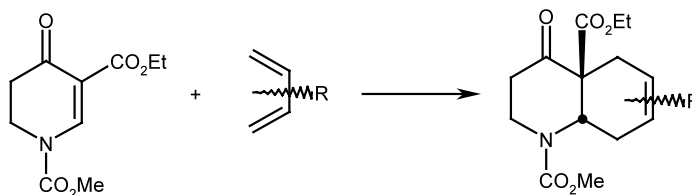
R = CH₃ or H, Z = benzyloxycarbonyl

Construction of *cis*-azadecalone units via novel intermolecular Diels–Alder reaction

Tetrahedron Letters 43 (2002) 1645

Hamid Dhimane,* Stéphane Meunier, Corinne Vanucci-Bacqué and Gérard Lhommet*

Laboratoire de Chimie des Hétérocycles, associé au CNRS, Université Pierre et Marie Curie, UMR 7611, 4, Place Jussieu, F-75252 Paris cedex 05, France

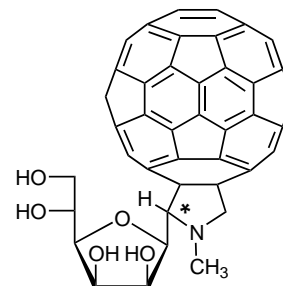
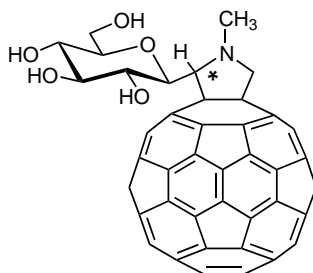


Synthesis of [60]fulleropyrrolidine glycoconjugates using 1,3-dipolar cycloaddition with *C*-glycosyl azomethine ylides

Tetrahedron Letters 43 (2002) 1649

Alessandro Dondoni* and Alberto Marra

Dipartimento di Chimica, Laboratorio di Chimica Organica, Università di Ferrara, Via L. Borsari 46, I-44100 Ferrara, Italy



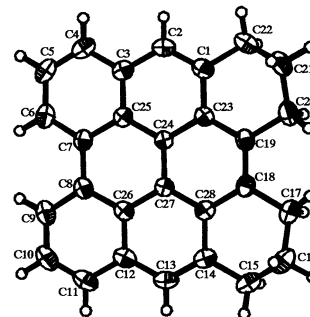
Spectroscopic characterization and crystal structure of the 1,2,3,4,5,6-hexahydrophenanthro[1,10,9,8-*opqra*]perylene

Tetrahedron Letters 43 (2002) 1653

Klaus Wolkenstein,^{a,*} Jürgen H. Gross,^b Thomas Oeser^b and Heinz F. Schöler^a

^a*Institute of Environmental Geochemistry, University of Heidelberg, Im Neuenheimer Feld 236, D-69120, Germany*

^b*Institute of Organic Chemistry, University of Heidelberg, Im Neuenheimer Feld 270, D-69120, Germany*

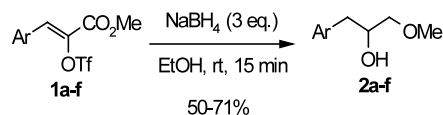


Sodium borohydride and vinyl triflates of α -keto esters: a new combination toward monoalkylated 1,2-diols

Tetrahedron Letters 43 (2002) 1657

Vincent Dalla* and Bernard Decroix

Unité de Recherche en Chimie Organique et Macromoléculaire, Faculté des Sciences et Techniques de l'Université du Havre, 25 rue Philippe Lebon, BP 540, 76058 Le Havre cedex, France

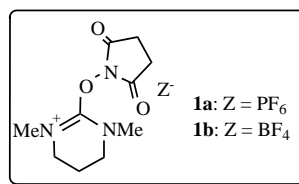
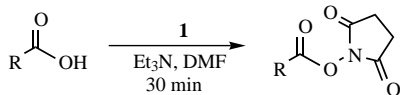


O-Succinimidyl-1,3-dimethyl-1,3-trimethylenuronium salts as efficient reagents in active ester synthesis

Tetrahedron Letters 43 (2002) 1661

Miguel A. Bailén, Rafael Chinchilla, David J. Dodsworth and Carmen Nájera*

Departamento de Química Orgánica, Universidad de Alicante, Apartado 99, 03080 Alicante, Spain



Structure and absolute configuration of acetosellin, a new polyketide from a phytotoxic strain of *Cercospora acetosella*

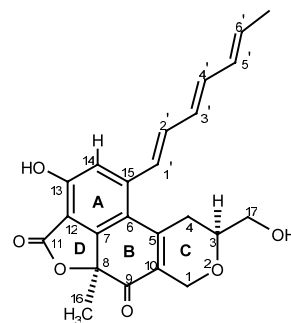
Tetrahedron Letters 43 (2002) 1665

Gianluca Nasini,^{a,*} Alberto Arnone,^a Gemma Assante,^b Gabriele Candiani^a and Orso Vajna de Pava^a

^aCentro di Studio per le Sostanze Organiche Naturali, Dipartimento di Chimica del Politecnico, via Mancinelli 7, 20133 Milano, Italy

^bIstituto di Patologia Vegetale, Università degli Studi, via Celoria 2, 20133 Milano, Italy

A new pigment isolated from the mycelium of *Cercospora acetosella* was characterized by NMR spectroscopy and NOE experiments.

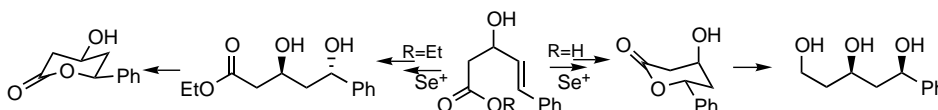


Stereocontrolled approach to δ - and γ -lactones and 1,3-diols. The role of X⁻ ion in the selenolactonization

Tetrahedron Letters 43 (2002) 1669

Michelangelo Gruttadauria,* Carmela Aprile and Renato Noto

Dipartimento di Chimica Organica 'E. Paternò', Università di Palermo, Viale delle Scienze, Parco d'Orleans II, 90128 Palermo, Italy



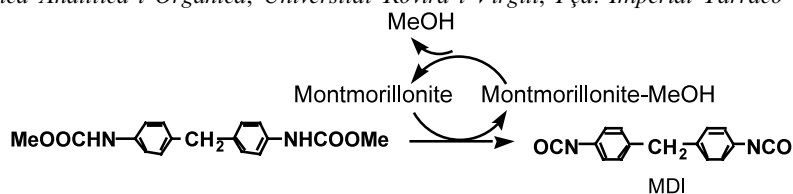
A new and efficient catalytic method for synthesizing isocyanates from carbamates

Tetrahedron Letters 43 (2002) 1673

Pedro Uriz,^a Marc Serra,^a Pilar Salagre,^a Sergio Castillon,^b Carmen Claver^a and Elena Fernandez^{a,*}

^aDepartament de Química Física i Inorgànica, Universitat Rovira i Virgili, Pça. Imperial Tàrraco 1, 43005 Tarragona, Spain

^bDepartament de Química Analítica i Orgànica, Universitat Rovira i Virgili, Pça. Imperial Tàrraco 1, 43005 Tarragona, Spain



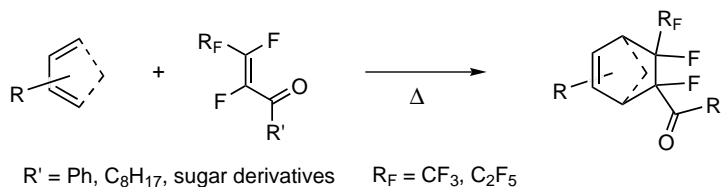
Dienophilic reactivity of perfluoroalkenyl ketones in Diels–Alder reactions

Tetrahedron Letters 43 (2002) 1677

Frédéric Chanteau,^a Michael Essers,^b Richard Plantier-Royon,^a Günter Haufe^{b,*} and Charles Portella^{a,*}

^aLaboratoire Réactions Sélectives et Applications, Associé au CNRS (UMR 6519), Université de Reims, Faculté des Sciences, BP 1039, F-51687 Reims, Cedex 2, France

^bOrganisch-Chemisches Institut, Westfälische Wilhelms-Universität Münster, Corrensstr. 40, D-48149 Münster, Germany



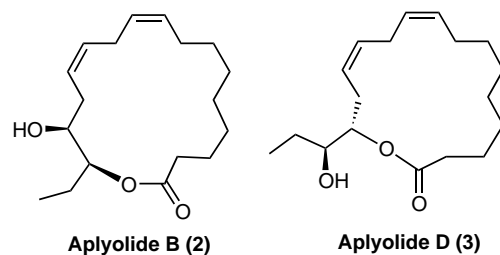
First total synthesis of natural aplyolides B and D, ichthyotoxic macrolides isolated from the skin of the marine mollusk *Aplysia depilans*

Tetrahedron Letters 43 (2002) 1681

Aldo Spinella,* Tonino Caruso and Carmine Coluccini

Dipartimento di Chimica, Università di Salerno, Via S. Allende, 84081 Baronissi, Salerno, Italy

The ichthyotoxic marine natural products aplyolides B (2) and D (3) were efficiently synthesized by a convergent approach.



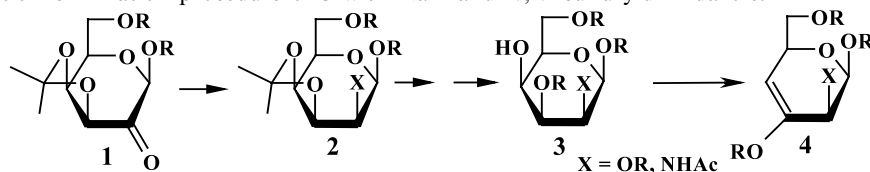
An efficient and highly regioselective synthesis of 4-deoxy- and 2-acetamido-2,4-dideoxy-β-D-threo-hex-3-enopyranosides

Tetrahedron Letters 43 (2002) 1685

Emanuele Attolino, Giorgio Catelani* and Felicia D'Andrea

Dipartimento di Chimica Bioorganica e Biofarmacia, Università degli Studi di Pisa, Via Bonanno, 33, I-56126 Pisa, Italy

Hex-3-enopyranosides 4, having potential value as synthetic intermediates, were obtained with very high yields by a simultaneous activation–elimination procedure of 3 with NaH and *N,N'*-sulfuryldiimidazole.

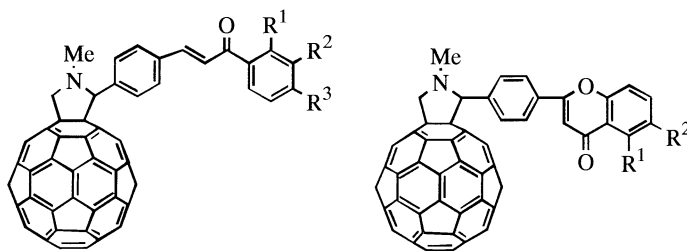


Synthesis of novel [60]fullerene–flavonoid dyads

Tetrahedron Letters 43 (2002) 1689

Maria D. L. de la Torre, Gian L. Marcorin, Giovanna Pirri,
Augusto C. Tomé,* Artur M. S. Silva and
José A. S. Cavaleiro

*Department of Chemistry, University of Aveiro,
3810-193 Aveiro, Portugal*

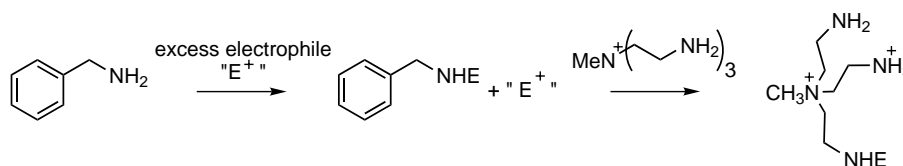


A new high-loading water-soluble scavenger for anhydrides, acid chlorides and isocyanates

Tetrahedron Letters 43 (2002) 1693

Noha Ghanem, Jean Martinez and Didier Stien*

LAPP-UMR5810, Université de Montpellier 2, CC19, 34095 Montpellier cedex 5, France

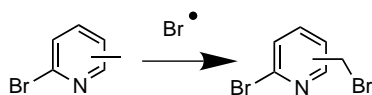


Alternative approach to the free radical bromination of oligopyridine benzylic-methyl group

Tetrahedron Letters 43 (2002) 1697

Sébastien Bedel, Gilles Ulrich* and Claude Picard

*Laboratoire de Synthèse et Physico-chimie de Molécules d'Intérêt Biologique, UMR 5068, Université Paul Sabatier,
118 rte de Narbonne, 31062 Cedex 4, Toulouse, France*

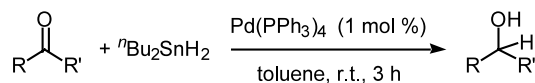


Palladium-catalyzed reduction of ketones with ⁿBu₂SnH₂

Tetrahedron Letters 43 (2002) 1701

Ikuyo Kamiya and Akiya Ogawa*

Department of Chemistry, Faculty of Science, Nara Women's University, Kitaouyanishi-machi, Nara 630-8506, Japan

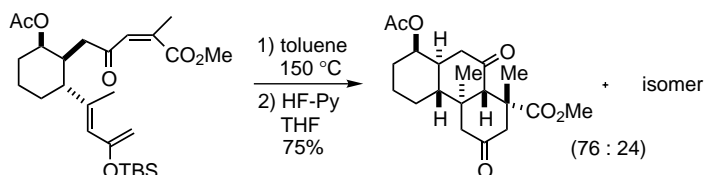


Synthetic studies of zoanthamine alkaloids. Stereoselective synthesis of the ABC ring system of norzoanthamine by an intramolecular Diels–Alder reaction

Tetrahedron Letters 43 (2002) 1705

Mio Sakai, Minoru Sasaki, Keiji Tanino and Masaaki Miyashita*

Division of Chemistry, Graduate School of Science, Hokkaido University, Sapporo 060-0810, Japan



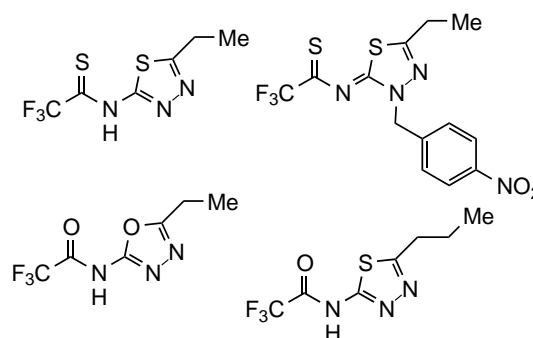
Remarkable discrepancy in the predominant structures of acyl-(or thioacyl)aminothiadiazoles, acyl(or thioacyl)aminoxadiazoles and related compounds having the potential for rotational, geometrical and tautomeric isomerism

Tetrahedron Letters 43 (2002) 1709

Yoshimitsu Nagao,^{a,*} Hitoshi Iimori,^a Satoru Goto,^a Terukage Hirata,^a Shigeki Sano,^a Hiroshi Chuman^a and Motoo Shiro^b

^a*Faculty of Pharmaceutical Sciences, The University of Tokushima, Sho-machi, Tokushima 770-8505, Japan*

^b*Rigaku Corporation, 3-9-12 Matsubara-cho, Akishima-shi, Tokyo 196-8666, Japan*



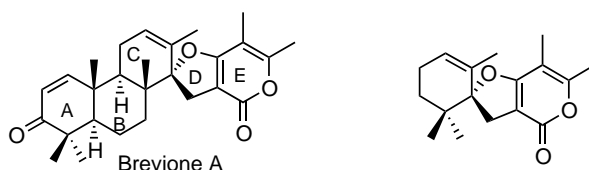
Synthetic studies on breviones: construction of the CDE ring system

Tetrahedron Letters 43 (2002) 1713

Hirosato Takikawa,^{a,*} Manabu Hirooka^a and Mitsuru Sasaki^b

^a*Department of Biofunctional Chemistry, Kobe University, Rokkodai 1-1, Nada-ku, Kobe 657-8501, Japan*

^b*Center of Cooperative Research and Development, Kobe University, Rokkodai 1-1, Nada-ku, Kobe 657-8501, Japan*

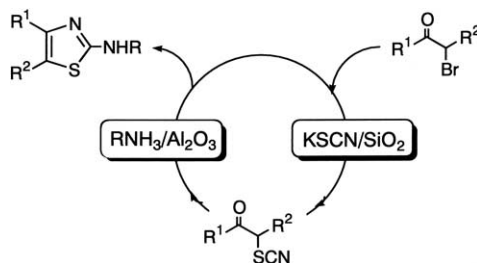


One-pot synthesis of 2-aminothiazoles using supported reagents

Tetrahedron Letters 43 (2002) 1717

Mitsuo Kodomari,* Tadashi Aoyama and Yoshitada Suzuki

Department of Applied Chemistry, Shibaura Institute of Technology, Shibaura, Minato-ku, Tokyo 108-8548, Japan



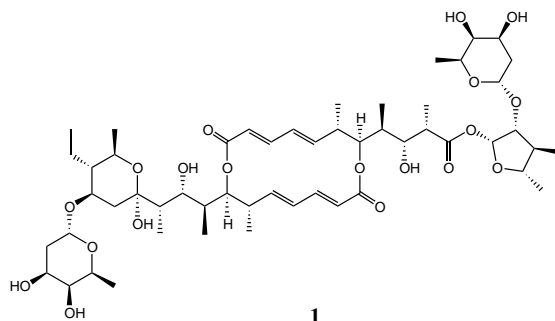
Halichoblelide, a potent cytotoxic macrolide from a *Streptomyces* species separated from a marine fish

Tetrahedron Letters 43 (2002) 1721

Takeshi Yamada, Katsuhiko Minoura and Atsushi Numata*

Osaka University of Pharmaceutical Sciences, 4-20-1, Nasahara, Takatsuki, Osaka 569-1094, Japan

Halichoblelide (**1**) with potent cytotoxicity has been produced by a strain of *Streptomyces hygroscopicus* originally separated from the marine fish *Halichoeres bleekeri*.



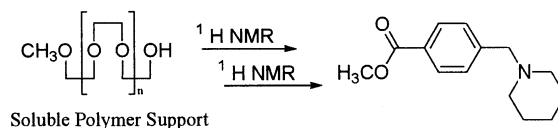
Liquid-phase combinatorial reaction monitoring by conventional ¹H NMR spectroscopy

Tetrahedron Letters 43 (2002) 1725

Jing-Ying Shey and Chung-Ming Sun*

Department of Chemistry, National Dong-Hwa University, Shou-Feng, Hualien 974, Taiwan

The application of ¹H NMR spectroscopy for complete analysis of soluble polymer-supported reactions is described.



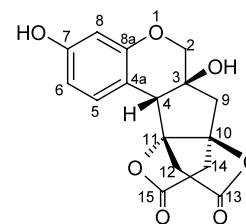
Brazilide A, a novel lactone with an unprecedented skeleton from *Caesalpinia sappan*

Tetrahedron Letters 43 (2002) 1731

Bo Ou Yang, Chang-Qiang Ke, Zhi-Sheng He, Yi-ping Yang* and Yang Ye*

Shanghai Institute of Materia Medica, Shanghai Institutes for Biological Sciences, Chinese Academy of Sciences, Shanghai 200031, China

The isolation and structural elucidation of a novel lactone named brazilide A from Sappan Lignum is described.

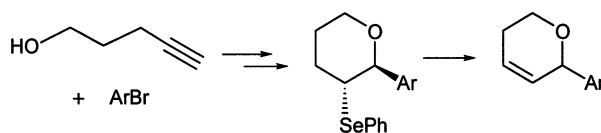


A facile synthesis of aryldihydropyrans using a Sonogashira–selenoetherification strategy

Tetrahedron Letters 43 (2002) 1735

Margaret A. Brimble,* Gabrielle S. Pavia and Ralph J. Stevenson

Department of Chemistry, University of Auckland, 23 Symonds St., Auckland, New Zealand



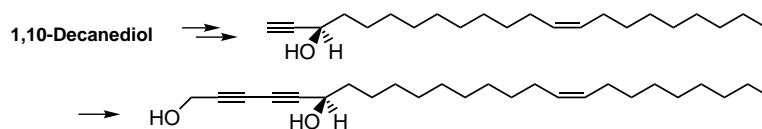
First total synthesis of stronglydiol A

Tetrahedron Letters 43 (2002) 1739

J. S. Yadav* and Rajesh Kumar Mishra

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Stronglydiol A was synthesized efficiently in a highly stereoselective manner starting from 1,10-decanediol.

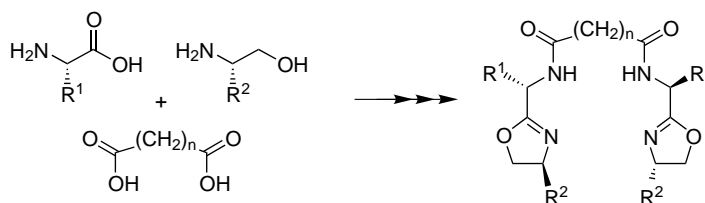


Novel highly modular C₂-symmetric oxazoline ligands—application in titanium-catalyzed diethylzinc additions to aldehydes

Tetrahedron Letters 43 (2002) 1743

Isidro M. Pastor and Hans Adolfsson*

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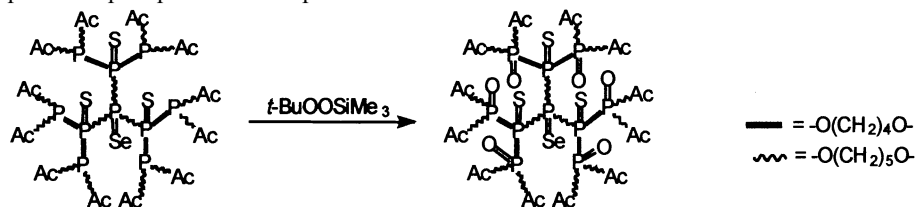
Dendrimers bearing three types of branching functions

Tetrahedron Letters 43 (2002) 1747

Grzegorz M. Salamończyk,* Maciej Kuźnikowski and Elżbieta Poniatowska

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Oxidation of phosphites to phosphates in the presence of P=S and P=Se functions has been achieved.



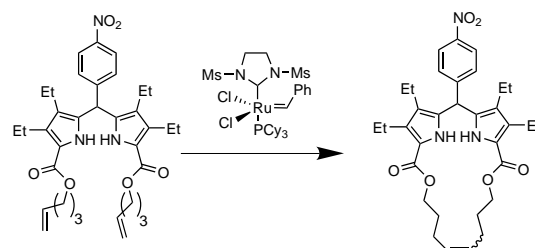
Synthesis and reactions of dipyrromethane-2,10-dicarboxylates

Tetrahedron Letters 43 (2002) 1751

Antonio Garrido Montalban,* Antonio J. Herrera, Jes Johannsen, Josephine Beck, Thomas Godet, Marianna Vrettou, Andrew J. P. White and David J. Williams

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Dipyrromethane-2,10-dicarboxylates have been prepared and their reactions studied.

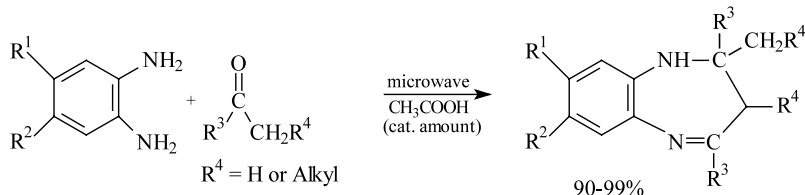


An efficient method for the synthesis of 1,5-benzodiazepine derivatives under microwave irradiation without solvent

Tetrahedron Letters 43 (2002) 1755

Minothora Pozarentzi, Julia Stephanidou-Stephanatou* and Constantinos A. Tsoleridis

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**Novel, regioselective transformation of an oxirane system.
An efficient approach to the synthesis of endocannabinoid
2-arachidonoylglycerol**

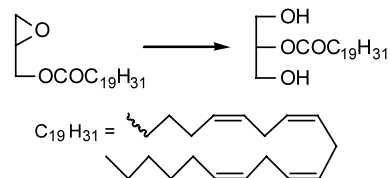
Tetrahedron Letters 43 (2002) 1759

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Efficient transformation of glycidyl arachidonate into 2-arachidonoylglycerol was developed.