

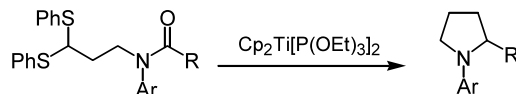
Formation of pyrrolidines by the titanocene(II)-promoted intramolecular reaction of *N*-[3,3-bis(phenylthio)propyl]anilides

Tetrahedron Letters 44 (2003) 5571

Takeshi Takeda,* Jun Saito and Akira Tsubouchi

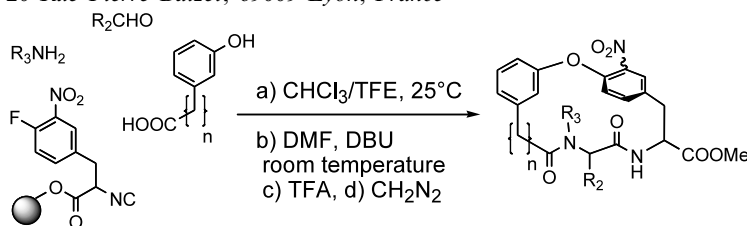
Department of Applied Chemistry, Tokyo University of Agriculture and Technology, Koganei, Tokyo 184-8588, Japan

The intramolecular reaction of *N*-[3,3-bis(phenylthio)propyl]anilides with the titanocene(II) species gave pyrrolidines in good yields.



Solid-phase synthesis of natural product-like macrocycles by a sequence of Ugi-4CR and $\text{S}_{\text{N}}\text{Ar}$ -based cycloetherification

Tetrahedron Letters 44 (2003) 5575

Pierre Cristau,^a Jean-Pierre Vors^b and Jieping Zhu^{a,*}^aInstitut de Chimie des Substances Naturelles, CNRS, 91198 Gif-sur-Yvette Cedex, France^bBayer CropScience, 14–20 Rue Pierre Baizet, 69009 Lyon, France

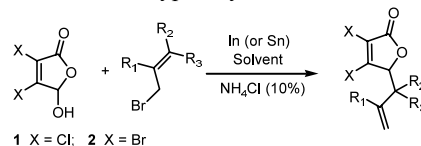
Metal-mediated allylation of mucohalic acids: facile formation of γ -allylic α,β -unsaturated γ -butyrolactones

Tetrahedron Letters 44 (2003) 5579

Ji Zhang,* Peter G. Blazecka, Heidi Berven and Daniel Belmont

Chemical Research and Development, Pfizer Global Research & Development, Ann Arbor Laboratories, Pfizer, Inc., 2800 Plymouth Road, Ann Arbor, MI 48105, USA

Mucohalic acids {mucochloric acid (**1**, 3,4-dichloro-5-hydroxy-5*H*-furan-2-one and mucobromic acid (**2**, 3,4-dibromo-5-hydroxy-5*H*-furan-2-one)} were employed as aldehydes in the indium- and tin-mediated Barbier-type allylation reactions and afforded γ -allylic α,β -unsaturated γ -butyrolactones in good to excellent yield.

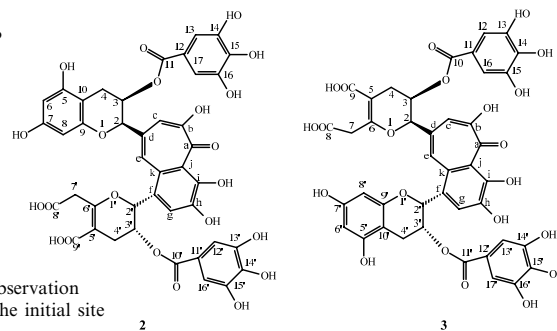


Chemical studies of the antioxidant mechanism of theaflavins: radical reaction products of theaflavin 3,3'-digallate with hydrogen peroxide

Tetrahedron Letters 44 (2003) 5583

Shengmin Sang,^{a,*} Shiyang Tian,^b Jin-woo Jhoo,^a Hsin Wang,^b Ruth E. Stark,^b Robert T. Rosen,^a Chung S. Yang^c and Chi-Tang Ho^a^aDepartment of Food Science and Center for Advanced Food Technology, Rutgers University, 65 Dudley Road, New Brunswick, NJ 08901-8520, USA^bDepartment of Chemistry, Graduate Center and College of Staten Island, City University of New York, 2800 Victory Boulevard, Staten Island, NY 10314-6600, USA^cDepartment of Chemical Biology, Ernest Mario School of Pharmacy, Rutgers University, 164 Frelinghuysen Road, Piscataway, NJ 08854-8020, USA

Two major reaction products were isolated and identified from the reaction products of theaflavin 3,3'-digallate with hydroxyl radicals generated by hydrogen peroxide. The observation of these compounds indicated that the A ring rather than the benzotropolone moiety is the initial site for formation of reaction products in the hydrogen peroxide oxidant system.

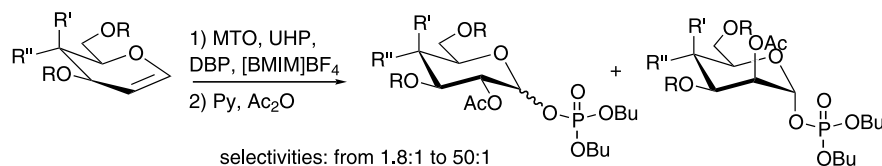


Methyltrioxorhenium catalyzed domino epoxidation-nucleophilic ring opening of glycols

Tetrahedron Letters 44 (2003) 5589

Gianluca Soldaini, Francesca Cardona and Andrea Goti*

Dipartimento di Chimica Organica "Ugo Schiff", Polo Scientifico, Università di Firenze, via della Lastruccia 13, I-50019 Sesto Fiorentino, Firenze, Italy



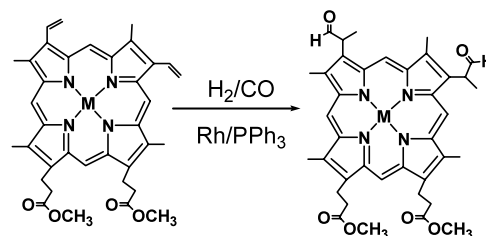
Hydroformylation: a versatile tool for the synthesis of new β -formyl-metalloporphyrins

Tetrahedron Letters 44 (2003) 5593

Andreia Peixoto,^a Mariette M. Pereira,^{a,*} M. Graça P. M. S. Neves,^b Artur M. S. Silva^b and José A. S. Cavaleiro^b

^a*Departamento de Química, Universidade de Coimbra, Rua Larga, 3004-535 Coimbra, Portugal*

^b*Departamento de Química, Universidade de Aveiro, 3810-193 Aveiro, Portugal*

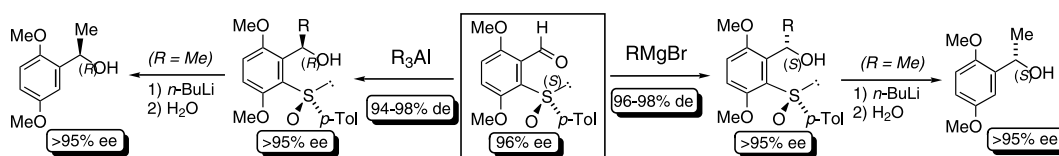


Diastereodivergent additions of aluminum and magnesium reagents to [(S,S)-3,6-dimethoxy-2-(p-tolylsulfinyl)-benzaldehyde

Tetrahedron Letters 44 (2003) 5597

Antonio Almorín, M. Carmen Carreño,* Álvaro Somoza and Antonio Urbano*

Departamento de Química Orgánica (C-I), Universidad Autónoma, Cantoblanco, 28049 Madrid, Spain

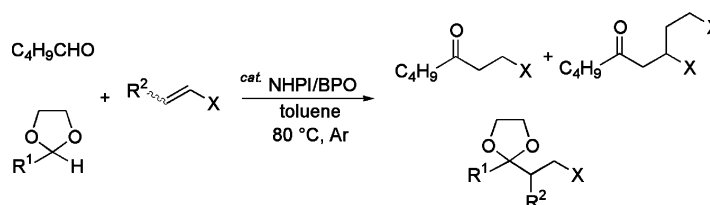


Addition of aldehydes and their equivalents to electron-deficient alkenes using *N*-hydroxyphthalimide (NHPI) as a polarity-reversal catalyst

Tetrahedron Letters 44 (2003) 5601

Shinya Tsujimoto, Satoshi Sakaguchi and Yasutaka Ishii*

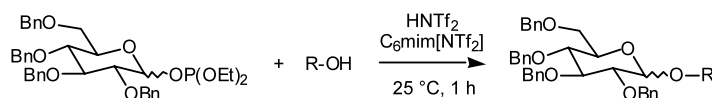
Department of Applied Chemistry & High Technology Research Center, Faculty of Engineering, Kansai University, Suita, Osaka 564-8680, Japan



Tetrahedron Letters 44 (2003) 5605

Kaname Sasaki, Hideyuki Nagai, Shuichi Matsumura and Kazunobu Toshima*

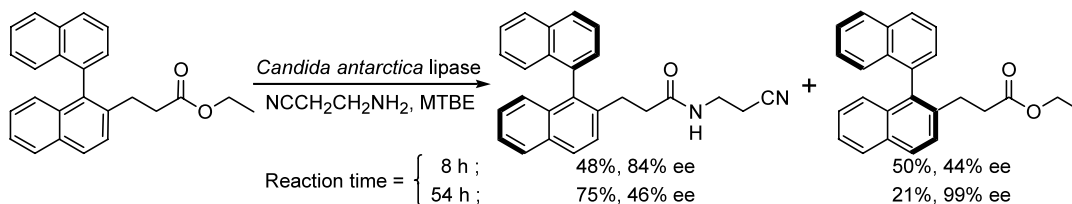
Department of Applied Chemistry, Faculty of Science and Technology, Keio University, 3-14-1 Hiyoshi, Kohoku-ku, Yokohama 223-8522, Japan



Tetrahedron Letters 44 (2003) 5609

Naoto Aoyagi,* Shinji Kawauchi and Taeko Izumi

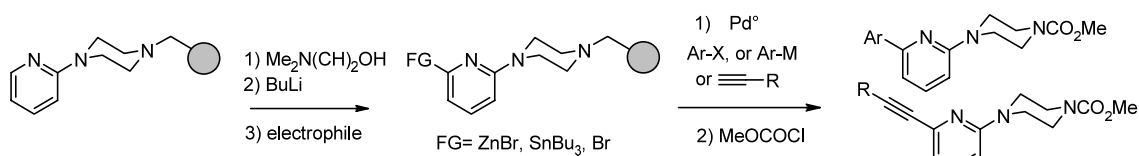
Department of Chemistry and Chemical Engineering, Graduate School of Science and Engineering, Yamagata University, Jyonan, Yonezawa, Yamagata 992-8510, Japan



Tetrahedron Letters 44 (2003) 5613

Frédéric Louërat, Philippe Gros* and Yves Fort*

Synthèse Organique et Réactivité, UMR 7565, Faculté des Sciences, Université Henri Poincaré, Nancy Boulevard des Aiguillettes, BP 239, 54506 Vandoeuvre-lès-Nancy, France



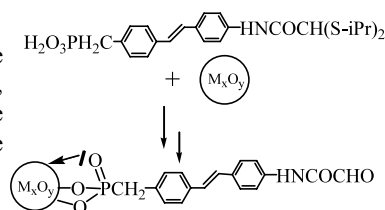
Tetrahedron Letters 44 (2003) 5617

Samiran Kar,^a Jean-Olivier Durand,^{a,*} Michel Granier,^a Pascal Joly^b and Oleg Melnyk^{b,*}

aChimie Moléculaire et Organisation du Solide UMR 5637, case courrier 007, Université Montpellier 2, place Eugène Bataillon, F-34095 Montpellier cedex 05, France

^b*Institut Pasteur de Lille, 1, rue du Professeur Calmette, F-59021 Lille cedex, France*

The synthesis of a phosphonic acid possessing a protected COCHO group, by using the Heck reaction is described. After grafting this phosphonic acid on metal oxides Al_2O_3 , TiO_2 or SnO_2 , the cleavage of the dithiane group was successful. The reactivity of the supported-COCHO group was examined by using model reactions with hydroxylamine and hydrazine derivatives.



Highly efficient and versatile acetylation of alcohols catalyzed by cerium(III) triflate

Tetrahedron Letters 44 (2003) 5621

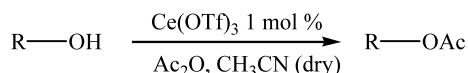
Renato Dalpozzo,^a Antonio De Nino,^a Loredana Maiuolo,^a Antonio Procopio,^{a,*} Monica Nardi,^a Giuseppe Bartoli^b and Roberto Romeo^c

^aDipartimento di Chimica, Università della Calabria, I-87030 Arcavacata di Rende (CS), Italy

^bDipartimento di Chimica Organica 'A. Mangini', viale Risorgimento 4, I-40136 Bologna, Italy

^cDipartimento Farmaco-Chimico Università di Messina 'A. Mangini', Viale SS. Annunziata, I-98168 Messina, Italy

A new application of cerium(III) trifluoromethane sulfonate, as very mild method to promote acetylation of alcohols and phenols, is presented.

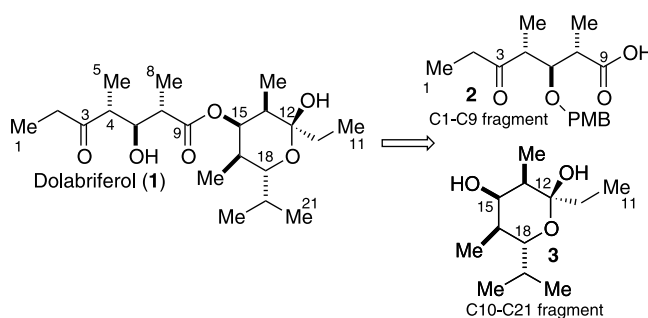


Synthetic studies directed toward the total synthesis of dolabriferol

Tetrahedron Letters 44 (2003) 5625

Luiz C. Dias* and Márcio A. de Sousa

Instituto de Química, Universidade Estadual de Campinas,
UNICAMP CP 6154, 13084-971 Campinas, SP, Brazil



Identification of a highly effective asymmetric phase-transfer catalyst derived from α -methylnaphthylamine

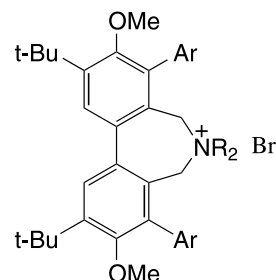
Tetrahedron Letters 44 (2003) 5629

Barry Lygo,^{a,*} Bryan Allbutt^a and S. Russell James^b

^aSchool of Chemistry, University of Nottingham, Nottingham NG7 2RD, UK

^bAstraZeneca, Process R&D, Silk Road Business Park, Charter Way, Macclesfield, Cheshire SK10 2NA, UK

Synthesis of a series of quaternary ammonium salts of the type shown here has led to the identification of a highly effective catalyst for the asymmetric alkylation of glycine imines.

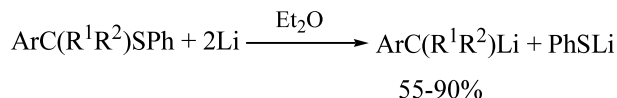


Reductive lithiation of alkyl phenyl sulfides in diethyl ether. A ready access to α,α -dialkylbenzylolithiums

Tetrahedron Letters 44 (2003) 5633

Constantinos G. Screttas,* Georgios A. Heropoulos, Maria Micha-Screttas, Barry R. Steele and Dimitrios P. Catsoulacos

Institute of Organic and Pharmaceutical Chemistry, National Hellenic Research Foundation, Vas. Constantinou Avenue 48, Athens 116 35, Greece

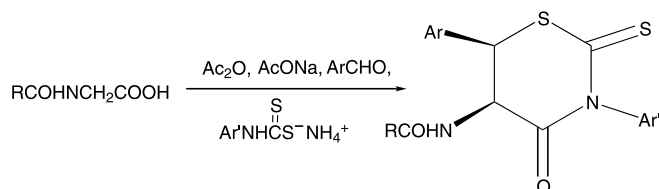


Microwave activated solvent-free cascade reactions yielding highly functionalised 1,3-thiazines

Tetrahedron Letters 44 (2003) 5637

Lal Dhar S. Yadav* and Amrish Singh

Department of Chemistry, University of Allahabad, Allahabad 211 002, India

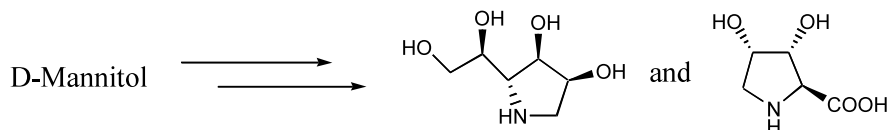


Stereoselective synthesis of 1,4-dideoxy-1,4-imino-D-allitol and formal synthesis of (2*S*,3*R*,4*S*)-3,4-dihydroxyproline

Tetrahedron Letters 44 (2003) 5641

A. Madhan and B. Venkateswara Rao*

Organic Division III, Indian Institute of Chemical Technology, Hyderabad 500007, India

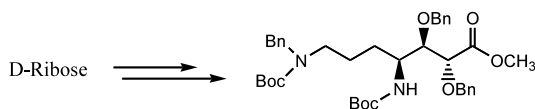


An efficient synthesis of protected (2*R*,3*R*,4*S*)-4,7-diamino-2,3-dihydroxyheptanoic acid, a constituent of callipeltins A and D

Tetrahedron Letters 44 (2003) 5645

A. Ravi Kumar and B. Venkateswara Rao*

Organic Chemistry Division III, Indian Institute of Chemical Technology, Hyderabad 500007, India

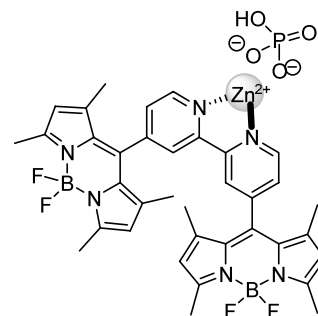


Novel fluorescent chemosensor for anions via modulation of oxidative PET: a remarkable 25-fold enhancement of emission

Tetrahedron Letters 44 (2003) 5649

Ali Coskun, Bilge T. Baytekin and Engin U. Akkaya*

Department of Chemistry, Middle East Technical University, TR-06531, Ankara, Turkey



Regiochemical observations on the lithiation of 1,2,4-trichlorobenzene and reaction with DMF and oxamide electrophiles in THF

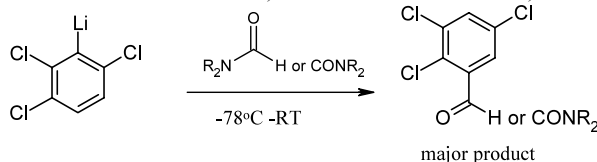
Tetrahedron Letters 44 (2003) 5653

Andrew J. Burton,^{a,*} Kevin S. Cardwell,^a Matthew J. Fuchter,^a Mika K. Lindvall,^c Rajnikant Patel,^b Terry W. Packham,^b Jeremy C. Prodger,^a Mark B. Schilling^a and Matthew D. Walker^a

^aGlaxoSmithKline R & D, Chemical Development, Medicines Research Centre, Stevenage, Hertfordshire SG1 2NY, UK

^bGlaxoSmithKline R & D, Process Technologies, Temple Hill, Dartford, Kent DA1 5AH, UK

^cGlaxoSmithKline R & D, Computational and Structural Sciences, Medicines Research Centre, Stevenage, Hertfordshire SG1 2NY, UK

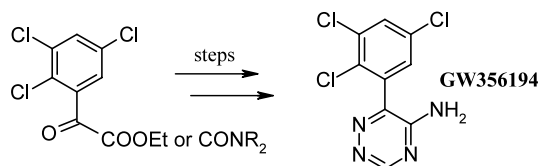


Novel syntheses of the amino-1,2,4-triazine GW356194: identification of a synthesis amenable to scale up

Tetrahedron Letters 44 (2003) 5657

Fiona M. Adam, Andrew J. Burton,^{*} Kevin S. Cardwell, Richard A. Cox, Richard A. Henson, Keith Mills, Jeremy C. Prodger, Mark B. Schilling and Daniel T. Tape

GlaxoSmithKline R&D, Chemical Development, Medicines Research Centre, Stevenage, Hertfordshire SG1 2NY, UK



Regioselective acylation of ginsenosides by Novozyme 435

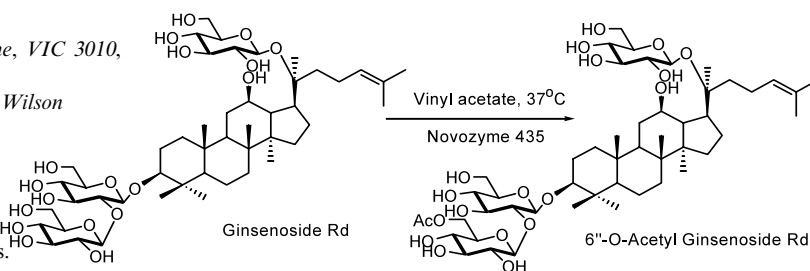
Tetrahedron Letters 44 (2003) 5661

Rongwei Teng,^{a,*} Chingseng Ang,^a David McManus,^b David Armstrong,^b Shaiolim Mau^a and Antony Bacic^{a,*}

^aCRC for Bioproducts, Plant Cell Biology Research Centre, School of Botany, the University of Melbourne, VIC 3010, Australia

^bCRC for Bioproducts, Tridan Limited – Albright & Wilson (Aust) Limited Partnership, VIC 3013, Australia

Ginsenosides Rd, Rg3, 20R Rg3, Rh2, Re, gypenoside XVII and pseudoginsenoside F11 were regioselectively acylated with lipase (Novozyme 435) and vinyl acetate to generate mono-acyl ginsenosides.

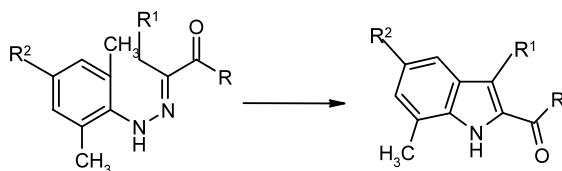


Fischer indolisation of 2,6-dialkyl and 2,4,6-trialkylphenylhydrazones of diketones and ketoesters

Tetrahedron Letters 44 (2003) 5665

Shambabu J. Maddirala, Vidya S. Gokak, Sharanabasava B. Rajur and Linganaagouda D. Basanagoudar^{*}

Department of Chemistry, Karnatak University, Dharwad 580 003, India



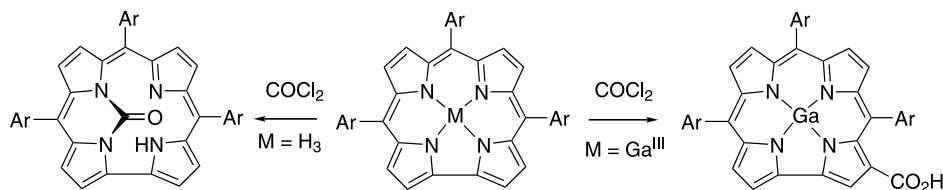
One-step conversions of a simple corrole into chiral and amphiphilic derivatives

Tetrahedron Letters 44 (2003) 5669

Irena Saltsman,^a Israel Goldberg^{b,*} and Zeev Gross^{a,*}

^aDepartment of Chemistry and Institute of Catalysis Science and Technology, Technion-Israel Institute of Technology, Haifa 32000, Israel

^bSchool of Chemistry, Sackler Faculty of Exact Sciences, Tel Aviv University, Tel Aviv 69978, Israel

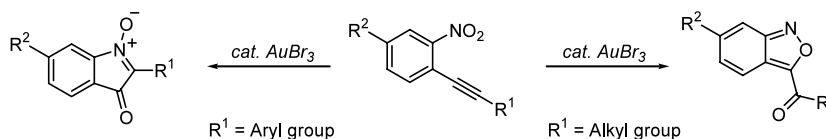


AuBr₃-catalyzed cyclization of *o*-(alkynyl)nitrobenzenes. Efficient synthesis of isotogens and anthranils

Tetrahedron Letters 44 (2003) 5675

Naoki Asao,* Kenichiro Sato and Yoshinori Yamamoto*

Department of Chemistry, Graduate School of Science, Tohoku University, Sendai 980-8578, Japan



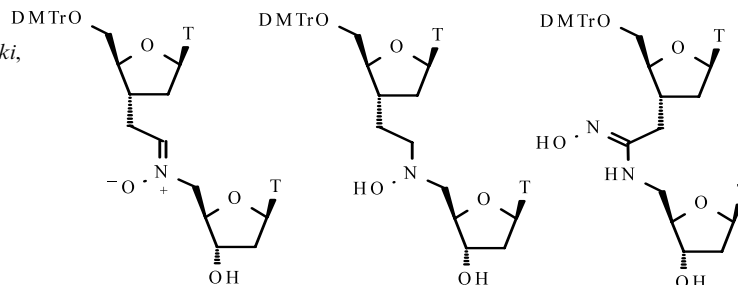
Synthesis of dinucleotides containing nitrone, hydroxylamine and amidoxime linkages

Tetrahedron Letters 44 (2003) 5679

John K. Gallos* and Constantinos C. Dellios

Department of Chemistry, Aristotle University of Thessaloniki, Thessaloniki 541 24, Greece

The synthesis of three new thymidine dimers with nitrone, hydroxylamine and amidoxime linkages, suitable for incorporation into oligonucleotide chains, is reported.



The indium(III) chloride-catalysed hydrolysis and in situ Mukaiyama-type reaction of arylmethyl ketone derived silyl enol ethers under solvent-free conditions

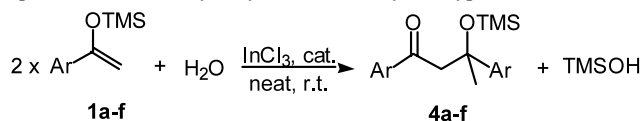
Tetrahedron Letters 44 (2003) 5683

Sirirat Chancharunee,^{a,b} Patrick Perlmutter^{a,*} and Maya Statton^a

^aSchool of Chemistry and the Centre for Green Chemistry, Monash University, PO Box 23, Victoria 3800, Australia

^bDepartment of Chemistry, Naresuan University, Phitsanulok, Thailand

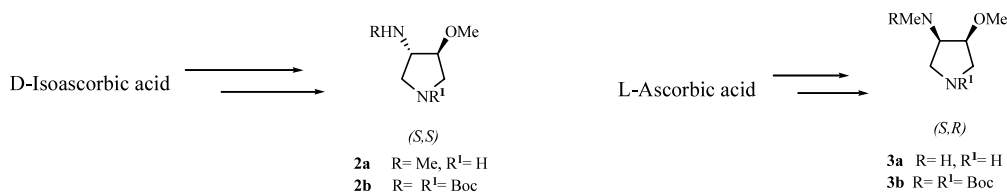
Treatment of trimethylsilyl enol ethers of arylmethyl ketones with catalytic amounts of indium(III) chloride under solvent-free conditions leads to a remarkably efficient process of in situ hydrolysis and Mukaiyama-type addition to the resulting ketones.



A short, simple and general approach for the synthesis of (3*S*,4*S*)-3-methoxy-4-methylamino pyrrolidine and (3*S*,4*R*)-3-methoxy-4-methylamino pyrrolidine

A. Ravi Kumar, J. Santhosh Reddy and B. Venkateswara Rao*

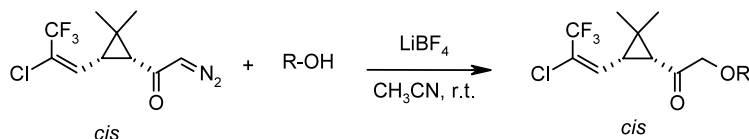
Organic Chemistry Division III, Indian Institute of Chemical Technology, Hyderabad 500 007 India



LiBF₄: a mild and novel reagent for the O-H insertion reactions of α-diazoketones

J. S. Yadav,* B. V. S. Reddy and P. Vishnumurthy

Division of Organic Chemistry, Indian Institute of Chemical Technology, Hyderabad-500 007, India

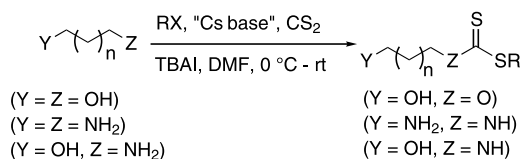


Selective mono protection of diols, diamines, and amino alcohols using cesium bases

Advait S. Nagle, Ralph N. Salvatore, Richard M. Cross, Elona A. Kapxhiu, Suma Sahab, Cheol Hwan Yoon and Kyung Woon Jung*

Department of Chemistry (SCA 400), University of South Florida, 4202 E. Fowler Avenue, Tampa, FL 33620-5250, USA

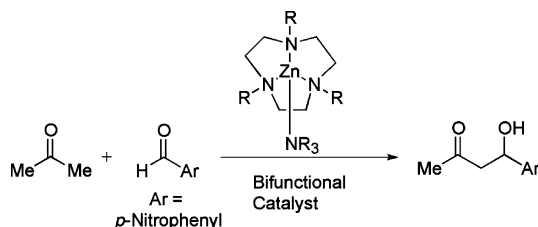
An efficient protocol for selective mono protection of diols, diamines, and amino alcohols was developed via three component coupling involving CS₂ in the presence of TBAI and a cesium base.



The direct aldol reaction using bifunctional catalysts

Michael A. Calter* and Robert K. Orr

Department of Chemistry, University of Rochester, Rochester, NY 14627-0216, USA

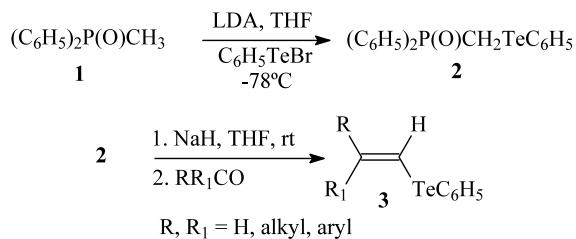


Preparation and reactivity of phenyltelluroalkylphosphine oxides. Vinylic tellurides

Tetrahedron Letters 44 (2003) 5703

Claudio C. Silveira,* Antonio L. Braga and Rafael C. Guadagnin

Departamento de Química, Universidade Federal de Santa Maria, Caixa Postal 5001, 97105-900 Santa Maria, RS, Brazil

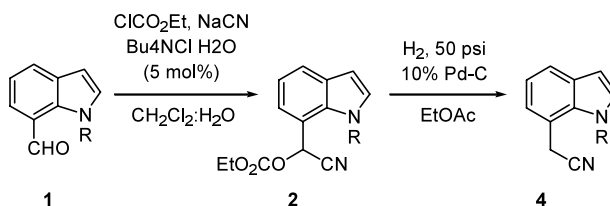


Synthesis of 7-cyano- and 7-acetamido-indoles via cyanocarbonation/hydrogenation of 7-formyl indole

Tetrahedron Letters 44 (2003) 5707

Stanley P. Kolis,* Marcella T. Clayton, John L. Grutsch and Margaret M. Faul

Global Chemical Process Research and Development, Eli Lilly and Company, Indianapolis, IN 46285-4813, USA



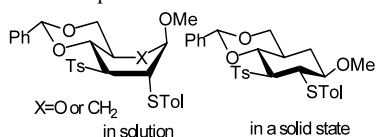
Preparation and structural determination of methyl 3-C-*p*-tolylsulfonyl-2-C-*p*-tolylthio-β-D-glucopyranoside derivatives and their 5a-carba-DL-analogs having non-chair conformation in solutions

Tetrahedron Letters 44 (2003) 5711

Tohru Sakakibara,* Kiyotaka Suzuki, Akiko Sakai, Miwa Shindo, Chihiro Nagano, Shinya Narumi, Yasuhiro Kajihara and Katsura Mochizuki

Graduate School of Integrated Science, Yokohama City University, Seto, Kanazawa-ku, Yokohama 236-0027, Japan

Methyl 4,6-*O*-benzylidene-2,3-dideoxy-3-C-*p*-tolylsulfonyl-2-C-*p*-tolylthio-β-D-glucopyranoside and its 5a-carba-DL-analog exist mainly in a non-chair conformation in solutions, but the latter occupies a chair conformation in a solid state.



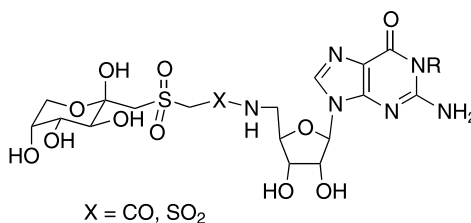
Toward partial fucosyl transferase transition state analogues: methylene sulfono sulfonamide as surrogate of pyrophosphate

Tetrahedron Letters 44 (2003) 5715

Gérald Carchon, Françoise Chrétien and Yves Chapleur*

Groupe SUCRES, UMR 7565 CNRS, Université Henri Poincaré, Nancy 1, INCM, BP 239, F-54506 Nancy-Vandoeuvre, France

Analogues of fucosyl transferase transition state.



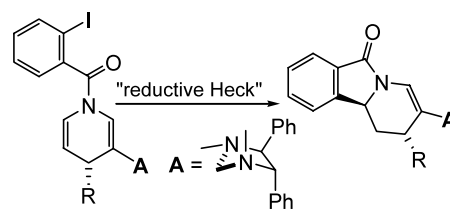
Revision of the stereochemistry of the reductive Heck cyclisation of 1-(2-iodobenzoyl)-4-substituted-1,4-dihydro-pyridine-3-carbaldehyde amins

Tetrahedron Letters 44 (2003) 5719

Pierre Mangeney* and Christophe Pays

Laboratoire de Chimie Organique, UMR 7611 Université P. et M. Curie, 4 place Jussieu, F-75252 Paris cedex 05, France

The stereochemistry of the Heck versus reductive Heck cyclisations were revisited.



Investigating thio-analogues of PSE acetals: a more complex reaction

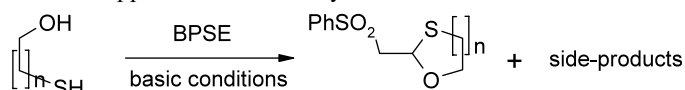
Tetrahedron Letters 44 (2003) 5723

Elena Cabianca,^{a,b} Arnaud Tatibouët,^a Florence Chéry,^a Christelle Pillard,^a Ottorino De Lucchi^b and Patrick Rollin^{a,*}

^a*ICOA-UMR 6005/Université d'Orléans, BP 6759, F-45067 Orléans Cedex 2, France*

^b*Dipartimento di Chimica, Università Ca' Foscari di Venezia, Dorsoduro 2137, I-30123 Venezia, Italy*

The reaction of hydroxylated thiols with 1,2-bis-phenylsulfonylethylene (BPSE) was investigated: in contrast with diols, a more complex reaction was observed and application to carbohydrate-based PSE oxathianes was envisaged.



Synthesis of alkylated iridolactone analogs

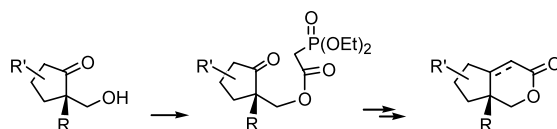
Tetrahedron Letters 44 (2003) 5727

Zineb Guerrab,^{a,b} Boujemaâ Daou,^a Souad Fkih-Tetouani,^a Mohammed Ahmar^b and Bernard Cazes^{b,*}

^a*Université Mohammed V-Agdal, Laboratoire de Chimie des Plantes et de Synthèse Organique et Bioorganique, Av. Ibn Battouta, BP 1014 Rabat, Morocco*

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Iridolactone analogs with an alkyl group at the bicyclic junction are easily prepared from α -alkyl- α -hydroxymethylcyclopentanones.



An approach to substituted dihydroisoquinolin-1(2H)-ones from Baylis–Hillman adducts

Tetrahedron Letters 44 (2003) 5731

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In this communication an easy and straightforward approach to the synthesis of 3,4-disubstituted dihydroisoquinolinones from Baylis–Hillman adducts, is described.

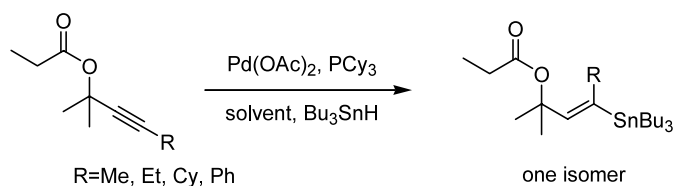


Palladium-catalyzed hydrostannylations of highly hindered acetylenes in hexane

Tetrahedron Letters 44 (2003) 5737

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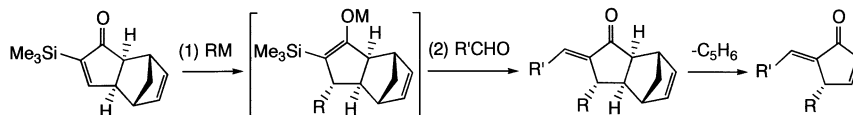


Conjugate addition–Peterson olefination reactions: expedient routes to cross conjugated dienones

Tetrahedron Letters 44 (2003) 5741

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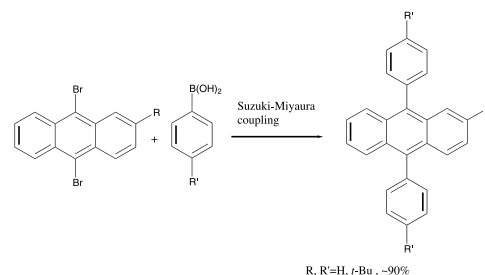
Synthesis of *t*-butylated diphenylanthracene derivatives as blue host materials for OLED applications

Tetrahedron Letters 44 (2003) 5747

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This paper describes the cost-effective synthesis and the photoluminescence of diphenylanthracene derivatives, which are found to be potential blue host materials for organic light emitting diode (OLED) technology.

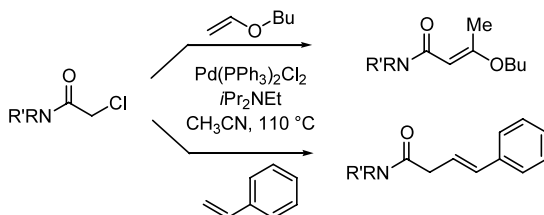


Palladium-catalyzed Heck-type reaction of 2-chloro acetamides with olefins

Tetrahedron Letters 44 (2003) 5751

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Chlorosulfonation of 2-acylthiophenes: an examination on the reaction regiochemistryArturo Arduini,^a Andrea Pochini,^{a,*} Andrea Secchi^a and Franco Ugozzoli^b^a*Dipartimento di Chimica Organica e Industriale dell'Università, Parco Area delle Scienze 17/A, Parma I-43100, Italy*^b*Dipartimento di Chimica Generale e Inorganica Chimica Analitica Chimica Fisica dell'Università, Parco Area delle Scienze 17/A, 43100 Parma, Italy*