Direct and catalytic synthesis of quinoxaline derivatives from epoxides and ene-1,2-diamines

Tetrahedron Letters 43 (2002) 3971

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Silica gel induced cleavage of aziridines by aromatic amines under solvent free conditions

Tetrahedron Letters 43 (2002) 3975

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Mn(III)-mediated radical C–C bond formation: regioselective α' -allylation of α,β -unsaturated ketones

Tetrahedron Letters 43 (2002) 3977

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

Mn(OAc)₃-mediated regioselective α' -allylation of α,β -unsaturated enones is described. α' -Allyl α,β -unsaturated enones are obtained through a radical process in good yields.

Selective chromogenic response via regioselective binding of cations: a novel approach in chemosensor design

Tetrahedron Letters 43 (2002) 3981

Demet Ataman and Engin U. Akkaya*

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A simple synthesis of 2-substituted oxazolines and oxazines

Tetrahedron Letters 43 (2002) 3985

Agnieszka Cwik, a Zoltán Hell, a.* Adrienn Hegedüs, a Zoltán Finta and Zoltán Horváth

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β-Aminoalcohols react with carboxylic acids in the presence of a zeolite, Ersorb-4 (E-4), resulting in the formation of oxazoline derivatives in good yields.

Structural requirements for *ipso*-nitration with cerium(IV) ammonium nitrate (CAN)

Tetrahedron Letters 43 (2002) 3989

H. Asghedom, R.T. LaLonde* and F. Ramdayal

Department of Chemistry, State University of New York, College of Environmental Science and Forestry (SUNY-ESF), Syracuse, NY 13210-2726, USA

A short synthesis of quinazolinocarboline alkaloids rutaecarpine, hortiacine, euxylophoricine A and euxylophoricine D from methyl N-(4-chloro-5H-1,2,3-dithiazol-5-ylidene)anthranilates

Tetrahedron Letters 43 (2002) 3993

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Convergent stereospecific total synthesis of monocillin I and radicicol: some simplifications and improvements

Tetrahedron Letters 43 (2002) 3997

Isabelle Tichkowsky and Robert Lett*

Unité Mixte CNRS-AVENTIS Pharma (UMR 26), 102, route de Noisy, 93235 Romainville, France

The stereospecific formation of the key-intermediate macrolide having the desired conjugated *E,Z*-dienone *trans*-epoxide has been achieved in a much higher yield, via a modification of our first synthesis. The configuration at 6' of the intermediates is also shown to have no significant incidence on all the steps of the sequence.

Х

Improvements of the total synthesis of monocillin I and radicicol via Miyaura-Suzuki couplings

Tetrahedron Letters 43 (2002) 4003

Isabelle Tichkowsky and Robert Lett*

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The palladium-catalyzed coupling of the vinyl-disianylborane, formed in situ, affords two isocoumarins (R = TBS, H), which can be used for the synthesis of radicicol in 72% global overall yield from the alkyne. Advantages over related vinylboron or vinyltin couplings are discussed.

Suzuki cross-coupling of aryl halides with aryl boronic acids catalyzed by phosphine-free $NiCl_2 \cdot 6H_2O$

Tetrahedron Letters 43 (2002) 4009

Danilo Zim and Adriano L. Monteiro*

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NiCl₂·6H₂O, without any auxiliary ligand or reducing agent, is an active and simple catalyst precursor for the Suzuki cross-coupling reaction of aryl bromides and iodides.

$$R$$
 + $(HO)_2B$ NiCl₂.6H₂O K_3PO_4 ; dioxane

Chemo-, regio- and stereoselective Mitsunobu reaction of unprotected pyrimidine bases with hydroxypyrrolidines

Tetrahedron Letters 43 (2002) 4013

Barbara Richichi,^b Stefano Cicchi,^a Ugo Chiacchio,^c Giovanni Romeo^{b,*} and Alberto Brandi^{a,*}

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^bDipartimento Farmaco-Chimico, Università di Messina, Viale Annunziata, Messina I-98100, Italy

°Dipartimento di Scienze Chimiche, Università di Catania,

Viale A. Doria 6, Catania I-95125, Italy

Synthesis of mannose-6-phosphate analogs: large-scale preparation of isosteric mannose-6-phosphonate via cyclic sulfate precursor

Tetrahedron Letters 43 (2002) 4017

Nikolai A. Khanjin and Jean-Louis Montero*

Laboratoire de Chimie Biomoléculaire, UM2, ENSCM, 8 Rue de l'Ecole Normale, 34296 Montpellier Cedex 5, France A concise and efficient synthesis of the isosteric mannose-6-phosphonate 2b is presented via cyclic sulfate 5.

Synthesis of 1'-β-D-glucopyranosyl-1,2,3-triazole-4,5-dimethanol-4,5-bis(isopropylcarbamate) as potential antineoplastic agent

Tetrahedron Letters 43 (2002) 4021

Najim A. Al-Masoudia,* and Yaseen A. Al-Soudb

^aFakultät für Chemie, Universität Konstanz, Postfach 5560, D-78457 Konstanz, Germany

^bDepartment of Chemistry, College of Science, University of Al al-Bayt, Al-Mafraq, Jordan

The title compound was prepared from β-D-azidoglucose via two different routes with diverse yields.

RO
$$N_3$$
 RO N_4 RO N_5 RO

Effective 'non-aqueous hydrolysis' of oximes with iodic acid in dichloromethane under mild, heterogeneous conditions

Tetrahedron Letters 43 (2002) 4023

Sosale Chandrasekhar* and Kovuru Gopalaiah

Department of Organic Chemistry, Indian Institute of Science, Bangalore 560 012, India

(i) HIO₃ (3 eq.)/CH₂Cl₂/RT/6-24h.

R, R' = Ar, Me, H, cycloalkyl (8 cases)

Totally diastereoselective synthesis of a new chiral quinoline diazaphospholidine ligand and its derivatives

Tetrahedron Letters 43 (2002) 4025

Guillaume Delapierre, Mathieu Achard and Gérard Buono*

ENSSPICAM, UMR 6516 'Synthèse, Catalyse et Chiralité', Av. Escadrille Normandie Niemen, F-13397 Marseille Cedex 20, France

A totally diastereoselective synthesis afforded a new chiral P,N ligand and its derivatives, respectively, in two or three steps from 8-bromoquinoline in good overall yields (52–61%).

Stereoselective synthesis of octahydro-3b*H*-[1,3]dioxolo[4",5":4',5']-furo[2',3':5,6]pyrano[4,3-*b*]quinolines via intramolecular hetero-Diels-Alder reactions catalyzed by bismuth(III) chloride

Tetrahedron Letters 43 (2002) 4029

Gowravaram Sabitha, a.* E. Venkata Reddy, J. S. Yadav, K. V. S. Rama Krishnab and A. Ravi Sankarb

^aOrganic Division I, Indian Institute of Chemical Technology, Hyderabad 500 007, India

^bNMR Group, Indian Institute of Chemical Technology, Hyderabad 500 007, India

Tetrahedron Letters 43 (2002) 4033

Progress towards the total synthesis of guanacastepene A. Approaches to the construction of quaternary carbons and the 5-7-6 tricyclic carbon skeleton

Truc M. Nguyen and Daesung Lee*

Department of Chemistry, University of Wisconsin-Madison, Madison, WI 53706, USA

An efficient method for the cleavage of *p*-methoxybenzylidene (PMP), tetrahydropyranyl (THP) and 1,3-dithiane protecting groups by SelectfluorTM

Tetrahedron Letters 43 (2002) 4037

Junjie Liu and Chi-Huey Wong*

Department of Chemistry and the Skaggs Institute for Chemical Biology, The Scripps Research Institute, 10550 North Torrey Pines Road, La Jolla, CA 92037, USA

$$\begin{array}{c} S \\ \\ R \end{array} \begin{array}{c} \underline{\hspace{0.5cm}} \text{Selectflour}^{TM} \\ \end{array} \begin{array}{c} R \end{array} \begin{array}{c} CHO \\ \end{array}$$

Structure and total synthesis of cyclodidemnamide B, a cycloheptapeptide from the ascidian *Didemnum molle*

Axelle Arrault, Anne Witczak-Legrand, Philippe Gonzalez, Nataly Bontemps-Subielos and Bernard Banaigs*

Centre de Phytopharmacie, UMR5054 CNRS, Université de Perpignan, 66860 Perpignan, France

Tetrahedron Letters 43 (2002) 4041

A new method for benzylic deprotonative lithiation: synthesis of 1- and 1,3-disubstituted (aza)phthalans

Tetrahedron Letters 43 (2002) 4045

Yves Fort,* Philippe Gros and Alain L. Rodriguez

Synthèse Organique et Réactivité, UMR CNRS-UHP 7565, Université Henri Poincaré-Nancy I, BP 239, 54506 Vandoeuvre-Lès-Nancy, France

2,5-Bis(diphenylmethylene)-3-cyclopentenone: a solvent-dependent cobalt cluster mediated propargyl radical coupling process

Tetrahedron Letters 43 (2002) 4049

John H. Kaldis and Michael J. McGlinchey*

Department of Chemistry, McMaster University, Hamilton, Ontario, Canada L8S 4M1

Protonation of $(1,1\text{-diphenyl-}2\text{-propyn-}1\text{-ol})\text{Co}_2(\text{CO})_6$ with HBF₄ in THF affords the radical $(\text{Co}_2(\text{CO})_6)[\text{HC}\equiv\text{C-CPh}_2^{\bullet}]$, which dimerizes at the methyne position; subsequent cyclization and carbonylation yields 2,5-bis-(diphenylmethylene)-3-cyclopentenone.

Efficient synthesis of 6-mono-bromo-1,1'-bi-2-naphthol

Tetrahedron Letters 43 (2002) 4055

Dongwei Cai,* Robert D. Larsen and Paul J. Reider

Department of Process Research, Merck Research Laboratories, PO Box 2000, Rahway, NJ 07065, USA

Solid-phase synthesis of functionalized 1,2,3-triazoles

Tetrahedron Letters 43 (2002) 4059

Benjamin E. Blass,* Keith R. Coburn, Amy L. Faulkner, Cheryl L. Hunn,

Michael G. Natchus, M. Sharon Parker, David E. Portlock, Joshua S. Tullis and Richard Wood

Procter and Gamble Pharmaceuticals, Health Care Research Center, 8700 Mason Montgomery Road, Mason, OH 45040, USA

Functionalized 1,2,3-triazoles are prepared by 2+3 cycloaddition of resin bound α -azido esters with substituted alkynes. The reaction is regioselective when the electron-deficient alkyne methyl propiolate is used.

$$\underset{\mathsf{HO}}{\overset{\mathsf{O}}{\longrightarrow}}_{\mathsf{R_1}}^{\mathsf{Br}} \Longrightarrow \underset{\mathsf{R_1}}{\overset{\mathsf{O}}{\longrightarrow}}_{\mathsf{R_1}}^{\mathsf{R_2}} \Longrightarrow \underset{\mathsf{HO}}{\overset{\mathsf{R_2}}{\longrightarrow}}_{\mathsf{N_3}}^{\mathsf{N_3}} \Longrightarrow$$

Synthesis of chiral 4-nitrophenyl alkyl methylphosphonothioates: $BF_3 \cdot Et_2O$ -catalyzed alcoholysis of phosphonamidothioates

Tetrahedron Letters 43 (2002) 4063

Putta Mallikarjuna Reddy and Ildiko M. Kovach*

Department of Chemistry, The Catholic University of America, Washington, DC 20064, USA

Short synthesis of protease inhibitors via modified Passerini condensation of N-Boc- α -aminoaldehydes

Tetrahedron Letters 43 (2002) 4067

Luca Banfi,* Giuseppe Guanti,* Renata Riva, Andrea Basso and Emiliano Calcagno

Dipartimento di Chimica e Chimica Industriale, via Dodecaneso 31, I-16146 Genoa, Italy

A straightforward entry into α -hydroxyamide or α -oxoamide protease inhibitors has been realised by modified Passerini condensation of N-Boc- α -aminoaldehydes.

New heterocyclic selenenamides: 1,2,4-benzoselenadiazin-3(4H)-ones and 1,3,2-benzodiselenazoles

Tetrahedron Letters 43 (2002) 4071

Krystian Kloc, Jacek Młochowski,* Karol Osajda, Ludwik Syper and Halina Wójtowicz

Institute of Organic Chemistry, Biochemistry and Biotechnology, Wrocław University of Technology, Wyb. Wyspiańskiego 27, 50-370 Wrocław, Poland

The syntheses of the hitherto unknown selenium and nitrogen containing ring systems 1 and 2 are described.

$$R^{1}= Pr, Bu, c-Hex$$
 R^{1}
 $R^{2}= Pr, Bu, i-Bu, t-Bu, sec-Bu$

Dry reaction of indoles with carbonyl compounds on Montmorillonite K10 clay: a mild, expedient synthesis of diindolylalkanes and vibrindole A

Tetrahedron Letters 43 (2002) 4075

Manas Chakrabarty, ** Nandita Ghosh, ** Ramkrishna Basak and Yoshihiro Harigaya b

^aDepartment of Chemistry, Bose Institute, 93/1, APC Road, Kolkata 700009, India

^bSchool of Pharmaceutical Sciences, Kitasato University, Minato-ku, Tokyo 108, Japan

Dry reaction of indoles 1a-d with carbonyl compounds 2a-p on clay furnished vibrindole A 3a, other 3,3'-diindolylalkanes 3b-h, j-r, their 2,2'-(5,7) and 2,3'-(6,8) isomers along with tris(3-indolyl)methane 4 in an isolated case.

β-Ketothioester as a reactive Knoevenagel donor

Tetrahedron Letters 43 (2002) 4079

Yujiro Hayashi,* Yuji Miyamoto and Mitsuru Shoji

Department of Industrial Chemistry, Faculty of Engineering, Science University of Tokyo, Kagurazaka, Shinjuku-ku, Tokyo 162-8601, Japan

$$R^{1}$$
 X + R^{2} CHO X + R^{2} CHO X $X = SEt$ $X = ST$ X

The Universal Rink-isonitrile resin: applications in Ugi reactions

Tetrahedron Letters 43 (2002) 4083

Jack J. Chen,* Adam Golebiowski, Sean R. Klopfenstein and Laura West

Combinatorial Chemistry Group, Procter and Gamble Pharmaceuticals, 8700 Mason-Montgomery Road, Mason, OH 45040, USA

Phytoremediation of bisphenol A by cultured suspension cells of Eucalyptus perriniana-regioselective hydroxylation and glycosylation

Tetrahedron Letters 43 (2002) 4087

Hiroki Hamada, a,* Ryotoku Tomi, Yoshihisa Asada and Tsutomu Furuya a

^aDepartment of Applied Science, Okayama University of Science, 1-1 Ridai-cho, Okayama 700-0005, Japan ^bSchool of Phamaceutical Sciences, Kitasato University, Shirokane, Minato-ku, Tokyo 108-8641, Japan

Efficient and clean synthesis of N-alkyl carbamates by transcarboxylation and O-alkylation coupled reactions using a DBU-CO₂ zwitterionic carbamic complex in aprotic polar media

Tetrahedron Letters 43 (2002) 4091

Eduardo R. Pérez, Michele Odnicki da Silva, Vanessa C. Costa, Ubirajara P. Rodrigues-Filho and Douglas W. Franco*

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Toward the total synthesis of pseudolaric acid B. Preparation of a key intermediate by degradation and its use in the reassembly of the natural product

Tetrahedron Letters 43 (2002) 4095

Baogen Wu,^a Jean M. Karle,^c E. Blake Watkins^a and Mitchell A. Avery^{a,b,*}

^aDepartment of Medicinal Chemistry National Center for Natural Products Research, School of Pharmacy, University of Mississippi, PO Box 1848, University, MS 38677-1848, USA

^bDepartment of Chemistry, University of Mississippi, PO Box 1848, University, MS 38677-1848, USA

^cDivision of Experimental Therapeutics, Department of Medicinal Chemistry, Walter Reed Army Institute of Research, Silver Spring MD, UK A partial relay synthesis of pseudolaric acid B is described.

Tetrahedron Letters 43 (2002) 4099

Synthesis of novel 6,7-dihydrothiazolo[3,2-*b*]-1,2,4-thiadiazine 1,1-dioxides

Cyrille Landreau, David Deniaud,* Alain Reliquet and Jean Claude Meslin

Laboratoire de Synthèse Organique, UMR CNRS 6513,

Faculté des Sciences et des Techniques, 2, Rue de la Houssinière BP 92 208, F-44322 Nantes Cedex 03, France

A mild synthesis of 6,7-dihydrothiazolo[3,2-*b*]-1,2,4-thiadiazine 1,1-dioxides involving a thiazolinic diazadiene and sulfonyl chlorides is reported.

$$R$$
 S
 CI
 CI
 Et_3N
 R
 S
 R
 S
 CI
 R
 S
 R
 S

Tetrahedron Letters 43 (2002) 4103

Tetrahedron Letters 43 (2002) 4107

An expedient method for the solid-phase synthesis of α -aminoalkyl phosphonopeptides

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Synthetic studies toward cyathin diterpenoids: approach to the tricyclic system through intramolecular Heck-type cyclization

Cyrille Thominiaux,^a Angèle Chiaroni^b and Didier Desmaële^{a,*}

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^bInstitut de Chimie des Substances Naturelles, CNRS, Avenue de la Terrasse, 91198 Gif sur Yvette, France

Cesium propionate as an epoxide cleavage and inversion reagent

Tetrahedron Letters 43 (2002) 4111

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A new epoxide inversion method, based on cesium propionate as the epoxide-cleaving agent, was developed. A series of inverted epoxides, including 3,4-epoxy alcohols were prepared.

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A new synthesis of 2-nitroindoles

Tetrahedron Letters 43 (2002) 4115

Jun Jiang and Gordon W. Gribble*

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PG = SO₂Ph, Boc
$$R = H$$
, Me

Synthesis of gem-difluoroamines from allylic or halogenoamines

Tetrahedron Letters 43 (2002) 4119

Axelle Moine, Sébastien Thibaudeau, Agnès Martin,

Marie-Paule Jouannetaud and Jean-Claude Jacquesy*

Laboratoire Synthèse et Réactivité des Substances Naturelles (UMR CNRS 6514), Faculté des Sciences, 40, Avenue du Recteur Pineau, 86022 Poitiers, France

Synthesis of arylhalonium compounds [including (4-methylphenyl) phenylfluoronium] by the nuclear—chemical method

Tetrahedron Letters 43 (2002) 4123

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^aLaboratory of Radiochemistry, Natural Sciences Institute of Perm University, Perm, Russia

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^cDepartment of Radiochemistry, St. Petersburg University, St. Petersburg, Russia

^dDepartment of Chemistry, James Madison University, MSC 7701, Harrisonburg, VA 22807, USA

$$C_6T_6 \xrightarrow{\beta^-} \quad [C_6T_5He^+] \xrightarrow{\hspace*{1cm}} \quad C_6T_5^+ \ + \ He$$

$$C_6T_5^+ + XC_6H_5CH_3 \xrightarrow{An^-} [C_6T_5XC_6H_5CH_3]^+ An^-$$