Mild benzhydrylation and tritylation of saccharidic hydroxyls promoted by acid washed molecular sieves

Tetrahedron Letters 44 (2003) 3733

Matteo Adinolfi, Gaspare Barone, Alfonso Iadonisi* and Marialuisa Schiattarella

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OH
O
OH
O
OR
$$\frac{Ph_2CHOH, AW 300 MS}{rt, toluene}$$
 $R = DPM, 86\%$
OR
OR
OR
 $\frac{Ph_3COH, AW 300 MS}{rt, toluene}$
 $R = Tr, 95\%$

A new biocatalytic route to enantiopure N-carbamoyl amino acids by fast enzyme screening

Tetrahedron Letters 44 (2003) 3737

Harald Trauthwein, a,* Oliver May, b Uwe Dingerdissen, a Stefan Buchholz and Karlheinz Drauzc

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^bDegussa AG, Project House Biotechnology, Rodenbacher Chaussee 4, D-63457 Hanau-Wolfgang, Germany

^cDegussa AG, Business Unit Fine Chemicals, D-63457 Hanau-Wolfgang, Germany

Proteases catalyze the enantioselective enzymatic deamidation of (rac)-N-carbamoyl amino acid amides to enantiopure (L)-N-carbamoyl amino acids in high yields and excellent enantioselectivities.

Non-defluorinative electrochemical silylation of ethyl trifluoroacetate: a practical synthesis of trifluoroacetyltrimethylsilane via its ethyltrimethylsilyl ketal

Tetrahedron Letters 44 (2003) 3741

Michel Bordeau, a,* Philipe Clavel, Alic Barba, Muriel Berlande, Claude Biran and Nicolas Roquesc

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bInstitute of Chemistry, Academy of Sciences, Academiei Str. 3, MD2028 Chisinau, Republic of Moldova

^cRhodia Organique Fine, 85, avenue des frères Perret, BP 62, 69192 Saint-Fons, France

OEt
$$OEt$$
 OEt OET

Stereoselective synthesis of the C_7 – C_{21} segment of epothilone A via asymmetric alkoxyallyl- and crotylboration

Tetrahedron Letters 44 (2003) 3745

P. Veeraraghavan Ramachandran,* Bodhuri Prabhudas, Debarshi Pratihar, J. Subash Chandra and M. Venkat Ram Reddy

Herbert C. Brown Center for Borane Research, Department of Chemistry, 560 Oval Drive, Purdue University, West Lafayette, IN 47907-2084, USA

Toward the total synthesis of phorboxazole A: synthesis of an advanced C4-C32 subunit using the Jacobsen hetero Diels-Alder reaction

Ian Paterson* and Chris A. Luckhurst

University Chemical Laboratory, Lensfield Road, Cambridge CB2 1EW, UK

An entry to new isoxazoline analogues of dideoxynucleosides by bromonitrile oxide 1,3-dipolar cycloaddition

Tetrahedron Letters 44 (2003) 3755

Evdoxia Coutouli-Argyropoulou* and Paraskevi Pilanidou

Department of Chemistry, Aristotle University of Thessaloniki, Thessaloniki 54124, Greece

$$OR \xrightarrow{[BrCNO]} Br \xrightarrow{N} O \xrightarrow{B, NaH} B \xrightarrow{N} O OR$$

R = COPh, H

Tetrahedron Letters 44 (2003) 3759

supposed *tele* nucleophilic aromatic substitution

Keith A. Monk, Rogelio Siles, Kevin G. Pinney and Charles M. Garner*

Synthesis of 4-methoxy-3,5-dinitrobenzaldehyde: a correction to

B = adenine, uracil, thymine

Department of Chemistry and Biochemistry, Baylor University, PO Box 97348, Waco, TX 76798, USA

An asymmetric Kharasch reaction mediated by D-xylose: long range diastereocontrol

Tetrahedron Letters 44 (2003) 3763

Eric J. Enholm* and Ashwin Bhardawaj

Department of Chemistry, University of Florida, Gainesville, FL 32611, USA

The reaction of triptycene haloquinones with alkoxides. An unusual route to pentiptycene quinones

Tetrahedron Letters 44 (2003) 3767

Spyros Spyroudis* and Nikoletta Xanthopoulou

Laboratory of Organic Chemistry, Chemistry Department, University of Thessaloniki, Thessaloniki 54124, Greece

Pentiptycene quinone 4 was formed from the reaction of triptycene haloquinones 3 with alkoxides.

Stereoselective synthesis of L-isonucleosides

Tetrahedron Letters 44 (2003) 3771

Sílvia Aragonès, Fernando Bravo,* Yolanda Díaz, Mª Isabel Matheu and Sergio Castillón*

Departament de Química Analítica i Química Orgànica, Universitat Rovira i Vigili, Pl. Imperial Tarraco 1, 43005 Tarragona, Spain

Synthesis of α - and β -C-glycosides of N-acetylglucosamine

Tetrahedron Letters 44 (2003) 3775

Glenn J. McGarvey,* Frank W. Schmidtmann, Tyler E. Benedum and Darin E. Kizer Department of Chemistry, University of Virginia, Charlottesville, VA 22903, USA

Synthesis and reactions of the first cyclopentadienyl isonitriles

Tetrahedron Letters 44 (2003) 3781

Klaus Banert,* Frank Köhler and Barbara Meier

Chemnitz University of Technology, Institute of Chemistry, Strasse der Nationen 62, D-09111 Chemnitz, Germany

Quite different products were generated by photolysis of 1a either in aprotic solvents like chloroform or in methanol.

Palladium-catalyzed cycloreductions of haloene-ynes in the presence of triethylsilane

Chang Ho Oh* and Su Jin Park

Department of Chemistry, Hanyang University, Sungdong-Gu, Seoul 133-791, Republic of Korea

Palladium-catalyzed cycloreduction of haloene-ynes 1 in the presence of triethylsilane gave the cycloreduced products 3 in excellent yields.

A novel 2:1 cycloadduct of dimethyl acetylenedicarboxylate with 3,5-diphenyl-4-methoximino-4*H*-pyrazole 1,2-dioxide

Tetrahedron Letters 44 (2003) 3789

Andre L. Kilpatrick, Kalyan Nagulapalli, Joel M. Esken, Gregory M. Ferrence and John F. Hansen* Department of Chemistry, Illinois State University, Normal, IL 61790-4160, USA

Intramolecular oxyselenenylation and deselenenylation reactions in water, conducted by employing polymer-supported arylselenenyl bromide

Tetrahedron Letters 44 (2003) 3793

Ken-ichi Fujita,* Shigeru Hashimoto, Akihiro Oishi and Yoichi Taguchi

National Institute of Advanced Industrial Science and Technology (AIST), AIST Tsukuba Central 5, 1-1-1, Higashi, Tsukuba, Ibaraki 305-8565, Japan

Zirconium-catalyzed enantiotopic group-selective synthesis of hydrindanes

Tetrahedron Letters 44 (2003) 3797

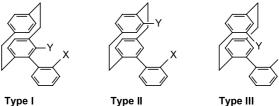
Miwako Mori,* Tomoko Takaki, Muneyoshi Makabe and Yoshihiro Sato

Graduate School of Pharmaceutical Sciences, Hokkaido University, Sapporo 060-0812, Japan

A novel class of bidentate ligands with a conformationally flexible biphenyl unit built into a planar chiral [2.2]paracyclophane backbone

V. I. Rozenberg,* D. Yu. Antonov, R. P. Zhuravsky, E. V. Vorontsov and Z. A. Starikova

A.N. Nesmeyanov Institute of Organoelement Compounds, Russian Academy of Sciences, 28 ul. Vavilova, 119991 Moscow, Russia



N-Salicyl- β -aminoalcohols as a new class of ligand for catalytic asymmetric Strecker reactions

Tetrahedron Letters 44 (2003) 3805

Woraluk Mansawat, Worawan Bhanthumnavin and Tirayut Vilaivan*

Organic Synthesis Research Unit, Department of Chemistry, Faculty of Science, Chulalongkorn University, Phayathai Road, Patumwan, Bangkok 10330, Thailand

An enantioselective Strecker synthesis employing novel chiral titanium complex catalysts derived from chiral N-salicyl- β -amino alcohols is described. Imines derived from aromatic aldehydes gave Strecker products in excellent yields (>90%) and in up to 86% ee.

Direct conversion of 4-amino-2-phenyl-2-oxazolines into either 2-arylimino-1,3-oxazolidine or 2-arylimino-1,3-thiazolidine hydrochlorides

Tetrahedron Letters 44 (2003) 3809

Antonio Guirado, a,* Raguel Andreua and Jesús Gálvezb

^aDepartamento de Química Orgánica, Facultad de Química, Universidad de Murcia, Campus de Espinardo, 30071-Murcia, Apartado 4021, Spain bDepartamento de Química Física, Facultad de Química, Universidad de Murcia, Campus de Espinardo, 30071-Murcia, Apartado 4021, Spain Unprecedented heterocycle—heterocycle inter-conversions of aminooxazolines to either aryliminooxazolidines or aryliminothiazolidines have been achieved by treatment with arylisocyanates or arylisothiocyanates, respectively, followed by addition of hydrochloric acid.

$$Ph = 0 \quad \begin{array}{c} R \\ N \\ N \\ H \\ O \end{array}$$

$$\begin{array}{c} R \\ N \\ H \\ O \end{array}$$

$$\begin{array}{c} R \\ N \\ Ar \\ Y \end{array}$$

$$\begin{array}{c} H \\ Cl^{-} \\ 88-97\% \\ Y = 0, S \end{array}$$

An easy and efficient synthesis of 3-nitrochromans

Tetrahedron Letters 44 (2003) 3813

Ching-Fa Yao,* Yeong-Jiunn Jang and Ming-Chung Yan

Department of Chemistry, National Taiwan Normal University, 88, Sec. 4, Tingchow Road, Taipei, Taiwan 116 ROC

$$R_1$$
 NO_2
 R_2
 NO_2
 R_2
 NO_2
 R_2
 NO_2
 R_3
 R_4
 R_4
 R_5
 R_7
 R_8
 R_8
 R_9
 R_9

Microwave-assisted Suzuki coupling on a KF-alumina surface: synthesis of polyaryls

Basudeb Basu,* Pralay Das, Md. Mosharef H. Bhuiyan and Satadru Jha

Department of Chemistry, University of North Bengal, Darjeeling 734 430, India

A variety of conjugated polyaryls may be synthesized through one-pot microwave-assisted palladium-catalyzed consecutive Suzuki couplings on a surface of KF-alumina in dry media.

$$R = (X)n + (X)$$

An efficient synthesis of 2-amino-3-cyano-2-pyrrolin-4-ones, via the corresponding open chain tautomers (aminoacetylmalononitriles)

Tetrahedron Letters 44 (2003) 3821

Stylianos Hamilakis and Athanase Tsolomitis*

The Laboratory of Organic Chemistry, The School of Chemical Engineering, The National Technical University of Athens, Athens 157 80, Greece

The preparation of 2-amino-3-cyano-2-pyrrolin-4-ones, by a simple procedure from glycine imidazolides and malononitrile, is described here.

$$\begin{array}{c} X-NHCH_2COOH \\ 1 \\ X=-COPh, -COMe, -Z, -Boc \\ \end{array} \begin{array}{c} \begin{array}{c} CN \\ Malononitrile \\ \hline \\ CH_2CI_2, r.t. \\ \end{array} \begin{array}{c} + \\ X-NHCH_2 \\ \hline \\ X-NHCH_2 \\ \end{array} \begin{array}{c} CN \\ CN \\ \hline \\ X-NHCH_2 \\ \end{array} \begin{array}{c} + \\ CN \\ \hline \\ X-NHCH_2 \\ \end{array} \begin{array}{c} + \\ CN \\ \hline \\ NH_2 \\ \end{array}$$

Synthesis of enantiopure 1,2-diamine attached to cross-linked polystyrene and its application to an insoluble catalyst for asymmetric hydrogenation

Tetrahedron Letters 44 (2003) 3825

Shinichi Itsuno,* Atsushi Tsuji and Miyuki Takahashi

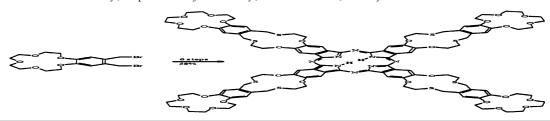
Department of Materials Science, Toyohashi University of Technology, Toyohashi 441-8580, Japan

The synthesis and characterization of a new metal-free phthalocyanine substituted with four diloop macrocyclic moieties

Tetrahedron Letters 44 (2003) 3829

Ahmet Bilgin, Beytullah Ertem and Yaşar Gök*

Karadeniz Technical University, Department of Chemistry, 61080 Trabzon, Turkey



Solid-phase synthesis of a type II' β-turn peptido-mimetic library

John H. Grimes, Jr., a,* Yvonne M. Angellb and Wayne D. Kohnc

^aEli Lilly & Company, Sphinx Laboratories, PO Box 13951, RTP, NC 27709, USA ^bAffymax Inc., 4001 Miranda Ave., Palo Alto, CA 94304, USA

^cLilly Research Laboratories, Lilly Corporate Center, Indianapolis, IN 46285 USA

Lewis acid-catalyzed novel [3+2] cycloaddition of methylenecyclopropanes with activated aldehydes or ketones

Tetrahedron Letters 44 (2003) 3839

Min Shi* and Bo Xu

State Key Laboratory of Organometallic Chemistry, Shanghai Institute of Organic Chemistry, Chinese Academy of Sciences, 354 Fenglin Lu, Shanghai 200032, China

The reactions of methylenecyclopropanes 1 with activated aldehydes or ketones give [3+2] cycloaddition products in the presence of a Lewis acid under mild reaction conditions.

$$R^{1}$$
 R^{2}
 R^{3}
 R^{4}
 R^{3}
 R^{4}
 R^{3}
 R^{4}
 R^{3}
 R^{4}
 R^{5}
 R^{4}
 R^{5}
 R^{4}
 R^{5}
 R^{4}
 R^{5}
 R^{5}

Synthesis and purification of 3-N-acylaminopyrazolinones using a sequence of functionalized polymers

Tetrahedron Letters 44 (2003) 3843

Jiasheng Fu and Stephen J. Shuttleworth*

Tularik Inc., Two Corporate Drive, South San Francisco, CA 94080, USA

NH₂ 1.
$$R^2COCI$$
 DIPEA HN— COR^2

N 2. SO_3H NH₂ NH_2 R^1

Synthesis of 5-endo-, 5-exo-, 6-endo- and 6-exo-hydroxylated analogues of epibatidine

Tetrahedron Letters 44 (2003) 3847

Zhi-Liang Wei, a Clifford George and Alan P. Kozikowskia,*

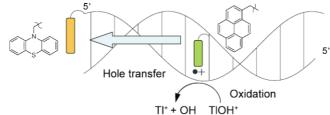
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Hole transfer in DNA: DNA as a scaffold for hole transfer between two organic molecules

Tadao Takada, Kiyohiko Kawai, Sachiko Tojo and Tetsuro Majima*

The Institute of Scientific and Industrial Research (SANKEN), Osaka University, Mihogaoka 8-1, Ibaraki, Osaka 567-0047, Japan



Highly rapid and direct synthesis of monoacylated piperazine derivatives from carboxylic acids under mild conditions

Tetrahedron Letters 44 (2003) 3855

B. P. Bandgar* and S. S. Pandit

Organic Chemistry Research Laboratory, School of Chemical Sciences, Swami Ramanand Treeth Marathwada University, Vishnupuri, Nanded 431606, India

A series of monoacylated piperazine derivatives were obtained by the reaction of carboxylic acids with 2-chloro-4,6-dimethoxy-1,3,5-triazine in dichloromethane at room temperature. Good to excellent yields, short reaction times and mild reaction conditions are important features of this methodology.

A mild, efficient and selective deprotection of *t*-butyldimethylsilyl-protected phenols using cesium carbonate

Tetrahedron Letters 44 (2003) 3859

Zhi-Yong Jiang and Yan-Guang Wang*

Department of Chemistry, Zhejiang University, Hangzhou 310027, PR China

A selective method for the deprotection of aryl t-butyldimethy-silyl (TBS) ethers is described.

OTBS
$$\frac{0.5 \text{ equiv. } Cs_2CO_3}{DMF-H_2O, \text{ rt}}$$
 OH

Copper promoted C-N and C-O bond cross-coupling with phenyl and pyridylboronates

Tetrahedron Letters 44 (2003) 3863

Dominic M. T. Chan, a,* Kevin L. Monaco, Renhua Li, Damien Bonne, Bonne,

Charles G. Clark^b and Patrick Y. S. Lam^{b,*}

^aDuPont Crop Protection, Stine-Haskell Research Center, PO Box 30, Newark, DE 19714-0030, USA ^bBristol-Myers Squibb Company, PO Box 5400, Princeton, NJ 08543-5400, USA

The C- and D-ring problems of sterol biosynthesis: hydride shift versus carbon-carbon bond migration due to conformational changes controlled by counteranion

Mugio Nishizawa,* Arpita Yadav, Hiroshi Imagawa and Takumichi Sugihara

Faculty of Pharmaceutical Sciences, Tokushima Bunri University, Yamashiro-cho, Tokushima 770-8514, Japan

Proline catalyzed aldol reactions in aqueous micelles: an environmentally friendly reaction system

Tetrahedron Letters 44 (2003) 3871

Yi-Yuan Peng, a,b Qiu-Ping Ding,b Zucheng Li,a Peng George Wangc and Jin-Pei Chenga,*

^aDepartment of Chemistry, Nankai University, Tianjin 300071, China

^bDepartment of Chemistry, Jiangxi Normal University, Nanchang 330027, China

^cDepartment of Chemistry, Wayne State University, Detroit, MI 48202, USA

$$R^{1}$$
 R^{2} R^{2}

First cross-coupling reactions of arylmagnesates: a convenient access to heteroarylquinolines

Tetrahedron Letters 44 (2003) 3877

Sylvain Dumouchel, Florence Mongin,* François Trécourt and Guy Quéguiner Laboratoire de Chimie Organique Fine et Hétérocyclique, UMR 6014, IRCOF, Place E. Blondel, BP 08, 76131 Mont-Saint-Aignan Cédex, France

2-, 3- and 4-Bromoquinolines are converted to the corresponding lithium tri(quinolyl)magnesates, which are involved in catalyzed cross-coupling reactions with heteroaryl halides.