Palladium-catalyzed cross-coupling reaction of allyl acetates with pinacol aryl- and vinylboronates

Tetrahedron Letters 44 (2003) 4311

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Pinacol aryl- and vinylboronates couple efficiently with allyl acetates in the presence of a palladium catalyst prepared in situ from PdCl₂ and TFP to give the coupled products in moderate to good yields under mild conditions.

$$R_1$$
 OAc $Pd(0)$ R_1 R_2 R_3 $= aryl, vinyl$

Phosphite dendrimers and their organometallic derivatives

Tetrahedron Letters 44 (2003) 4315

Elżbieta Poniatowska and Grzegorz M. Salamończyk*

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Intramolecularly metal-complexed phosphite dendrimers have been synthesized.

Detection of primary aromatic amines on solid phase

Tetrahedron Letters 44 (2003) 4319

Jan Mařík, Aimin Song and Kit S. Lam*

Division of Hematology and Oncology, Department of Internal Medicine, University of California Davis Cancer Center, 4501 X Street, Sacramento, CA 95817, USA

A method for the detection of aromatic amines on solid support has been developed. This chloranil test can detect as little as $5 \mu mol g^{-1}$ of primary aromatic amines attached to the resin.

Microwave-initiated living free radical polymerization: rapid formation of custom Rasta resins

Tetrahedron Letters 44 (2003) 4321

David D. Wisnoski,* William H. Leister, Kimberly A. Strauss, Zhijian Zhao and Craig W. Lindsley Department of Medicinal Chemistry, Technology Enabled Synthesis Group, Merck Research Laboratories, PO Box 4, West Point, PA 19486, USA

Tandem palladium-catalyzed borylation and Suzuki coupling (BSC) to thienocarbazole precursors

Tetrahedron Letters 44 (2003) 4327

Isabel C. F. R. Ferreira, Maria-João R. P. Queiroza, and Gilbert Kirschb

^aDepartamento de Química, Universidade do Minho, 4710-057 Braga, Portugal

^bLaboratoire d'Ingénierie Moleculaire et Biochimie Pharmacologique, Université de Metz, Faculté des Sciences, Ile du Saulcy, 57045 Metz, France

New 2-methyl-2'-nitro diaryl compounds in the benzo[b]-thiophene series were prepared by palladium-catalyzed, two-step, one-pot borylation/Suzuki coupling (BSC) reaction in good to high yields. These compounds were explicated to the corresponding new linear ring A substitute.

cyclized to the corresponding new linear ring A substituted thienocarbazoles.

and Officer Krisch

S

1. Borylation

2. Suzuki coupling

$$R^2$$
 R^1
 R^1
 R^1
 R^1
 R^2
 R^2

Design, synthesis and evaluation of novel P450 fluorescent probes bearing α -cyanoether

Tetrahedron Letters 44 (2003) 4331

Rong Zhang, a Kyung-Don Kang, a,b Guomin Shan and Bruce D. Hammocka,b,*

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CHO
$$\frac{\text{HC}(OR)_3}{\text{ZnC}_2}$$
 OR $\frac{\text{TMSCN}}{\text{BF}_3 \cdot \text{OE}_2}$ OR $\frac{\text{CN}}{\text{R} = \text{CH}_3, \text{C}_2\text{H}_5;}}$ $\frac{\text{CN}}{\text{CH}_3}$ $\frac{\text{CN}}{\text{CN}_3}$ $\frac{\text{CN}}{\text{$

Amino acid recognition of pyridine bis(oxazoline)-copper(II) complex in aqueous solvent

Tetrahedron Letters 44 (2003) 4335

Hae-Jo Kim, a Riaz Asif, Doo Soo Chunga and Jong-In Honga, b,*

^aDepartment of Chemistry, College of Natural Sciences, Seoul National University, Seoul 151-742, Republic of Korea ^bCenter for Molecular Design and Synthesis, KAIST, Taejon 305-701, Republic of Korea

Surprising 1,7-cyclization of vinyl carbonyl ylides generated from reaction of indanetrione with vinyl diazo compounds

Tetrahedron Letters 44 (2003) 4339

Masashi Hamaguchi, a.* Kazuma Takahashi, Takumi Oshima and Hatsue Tamura b.*

^aDepartment of Materials Chemistry, Graduate School of Engineering, Osaka University, Toyonaka 560-0043, Japan ^bDepartment of Applied Chemistry, Graduate School of Engineering, Osaka University, Toyonaka 560-0043, Japan

The first stereoselective total synthesis of lankanolide. Part 1: Computer-assisted design and lactonization of model *seco-*acid derivatives

Tatsuo Hamada,* Yukinari Kobayashi, Mitsugu Kiyokawa and Osamu Yonemitsu

Faculty of Pharmaceutical Sciences, Hokkaido University, Sapporo 060-0812, Japan

The first stereoselective total synthesis of lankanolide. Part 2

Tetrahedron Letters 44 (2003) 4347

Tatsuo Hamada* and Yukinari Kobayashi

Faculty of Pharmaceutical Sciences, Hokkaido University, Sapporo 060-0812, Japan

Synthetic entry to the ABCD ring fragment of gymnocin-A, a cytotoxic marine polyether

Tetrahedron Letters 44 (2003) 4351

Makoto Sasaki, a,* Chihiro Tsukanob and Kazuo Tachibanab

^aLaboratory of Biostructural Chemistry, Graduate School of Life Sciences, Tohoku University, Tsutsumidori-Amamiya, Aoba-ku, Sendai 981-8555, Japan

^bDepartment of Chemistry, Graduate School of Science, The University of Tokyo and CREST, Japan Science and Technology Corporation (JST), Hongo, Bunkyo-ku, Tokyo 113-0033, Japan

Rational design and synthesis of a novel class of highly fluorescent rhodamine dyes that have strong absorption at long wavelengths

Jixiang Liu,^{a,*} Zhenjun Diwu,^b Wai-Yee Leung,^a Yixin Lu,^a Brian Patch^a and Richard P. Haugland^a

^aMolecular Probes, Inc., 29851 Willow Creek Road, Eugene, OR 97402, USA ^bMolecular Devices, Inc., 1311 Orleans Drive, Sunnyvale, CA 94089, USA

Tetrahedron Letters 44 (2003) 4355

$$\begin{array}{c|c} & & & & \\ & &$$

Excess sodium ions improve Z selectivity in Horner-Wadsworth-Emmons olefinations with the Ando phosphonate

Petri M. Pihko* and Taina M. Salo

Laboratory of Organic Chemistry, Department of Chemical Technology, Helsinki University of Technology, POB 6100, FIN-02015 HUT, Finland

1-Benzopyran-4(4H)-ones as novel activated alkenes in the Baylis-Hillman reaction: a simple and facile synthesis of indolizine-fused-chromones

Deevi Basavaiah* and Anumolu Jaganmohan Rao

School of Chemistry, University of Hyderabad, Hyderabad 500 046, India

Microwave-assisted multi-component synthesis of fused 3-aminoimidazoles

Sarah M. Ireland, Heather Tye* and Mark Whittaker

Evotec OAI, 151 Milton Park, Abingdon, Oxfordshire OX14 4SD, UK

Nucleophilic substitution of hydrogen in *meso*-nitroaryl-substituted porphyrins—unprotected at the NH-centers in the core ring

Stanisław Ostrowski, a,b,* Natalia Urbańska and Agnieszka Mikus Mikus and Agnieszka Ag

^aInstitute of Chemistry, University of Podlasie, ul. 3 Maja 54, 08-110 Siedlce, Poland ^bInstitute of Organic Chemistry,

Polish Academy of Sciences, ul. Kasprzaka 44/52, 01-224 Warszawa, Poland

Reactions of *meso*-nitroaryl-substituted porphyrins—unprotected in the core ring—with carbanions are described.

Tetrahedron Letters 44 (2003) 4369

Tetrahedron Letters 44 (2003) 4373

Tetrahedron Letters 44 (2003) 4365

A concise synthesis of a new xylyl-biaryl diphosphine ligand for asymmetric hydrogenation of ketones

Julian P. Henschke, Antonio Zanotti-Gerosa, Paul Moran,* Paul Harrison, Brendan Mullen, Guy Casy and Ian C. Lennon

Dowpharma, Chirotech Technology Limited, A Subsidiary of The Dow Chemical Company, Unit 321 Cambridge Science Park, Milton Road, Cambridge CB4 0WG, UK

$$\left(\begin{array}{c} \downarrow \\ \downarrow \\ 3 \end{array}\right)_{3} \circ \left(\begin{array}{c} \downarrow \\ \times \\ 0 \end{array}\right)_{2} \left(\begin{array}{c} \downarrow \\ \downarrow \\ 2 \end{array}\right)_{2} \left(\begin{array}{c} \downarrow \\ 2 \end{array}\right)_{2} \left$$

A concise synthesis of a symmetrical biaryl diphosphine ligand is described.

Copper-catalyzed imination of pyridines using PhI=NTs as nitrene precursor

Tetrahedron Letters 44 (2003) 4385

Suman L. Jain, Vishal B. Sharma and Bir Sain*

Chemical and Biosciences Division, Indian Institute of Petroleum, Dehradun 248005, India

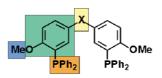
Modular diphosphine ligands based on bisphenol A backbones

Tetrahedron Letters 44 (2003) 4389

Jarl Ivar van der Vlugt,^a Josep M. Bonet,^a Allison M. Mills,^b Anthony L. Spek^b and Dieter Vogt^{a,*}

^aSchuit Institute of Catalysis, Laboratory of Homogeneous Catalysis, Eindhoven University of Technology, PO Box 513, 5600 MB Eindhoven, The Netherlands

^bDepartment of Crystal and Structural Chemistry, Padualaan 8, University of Utrecht, The Netherlands



NaSCN

Br

вмтв

Improved procedure for the synthesis of thiazolium-type peptide

Tetrahedron Letters 44 (2003) 4393

Peptide

coupling

coupling reagents: BMTB as a new efficient reagent Ralf Wischnat, a.* Joachim Rudolph, Broman Hanke, C

Roger Kaese, Achim May, Heidi Theis and Undine Zuther

^aBayer AG, Pharma Operations PH-OP-WP, Friedrich Ebert Str. 217,

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^bDepartment of Chemistry Research, Bayer Corporation,

Pharmaceutical Division, 400 Morgan Lane, West Haven, CT 06516, USA Bayer AG, Central Research, Building Q18, D-51368 Leverkusen, Germany

Using a new scalable synthesis of 2-halothiazolium-type condensation reagents, the new compound RMTR was synthesized RMTR showed

reagents, the new compound BMTB was synthesized. BMTB showed

high potency in a difficult coupling reaction of sterically hindered N-methylated amino acids.

CH₂Br

Short stereocontrolled synthesis of trans and cis-tetrahydropyrazinoisoquinolinediones

Juan Francisco González, Elena de la Cuesta and Carmen Avendaño*

Departamento de Química Orgánica y Farmacéutica, Facultad de Farmacia, Universidad Complutense, 28040 Madrid, Spain

Synthesis and N-methylation of tetrabutylammonium isocyanurate

Tetrahedron Letters 44 (2003) 4399

Jean-Louis Havet, Catherine Porte* and Alain Delacroix

Laboratoire de Chimie Industrielle, Génie des Procédés, Conservatoire National des Arts et Métiers, 2 rue Conté, 75003 Paris, France

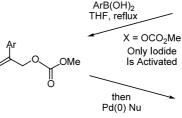
After preparation of an ammonium isocyanuric acid salt, different substituted isocyanurates are synthesized with different solvents.

Differentiating allylic and vinylic leaving groups for Pd catalysis. The use of vinvl iodide to facilitate room temperature activation of a vinyl C-X bond in the presence of allyl carbonate

Tetrahedron Letters 44 (2003) 4403

Michael G. Organ,* Elena A. Arvanitis, Anita Villani, Yvette Majkut and Stephen Hynes

The Department of Chemistry, York University, 4700 Keele Street, Toronto, Ontario, Canada M3J 1P3



Pd(0)

$$\begin{array}{c|c} Pd(0) \\ Nu, THF \\ RT \\ X = CI \\ Only Chloride \\ Is Activated \\ \end{array}$$
 Nu
$$\begin{array}{c|c} Ar \\ Nu \\ ArB(OH)_2 \end{array}$$

Novel solvent-free reaction of C_{60} with active methylene compounds in the presence of Na₂CO₃ under high-speed vibration milling

Tetrahedron Letters 44 (2003) 4407

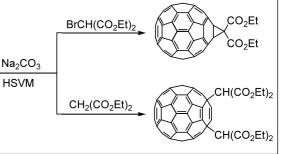
Guan-Wu Wang, a,* Ting-Hu Zhang, Yu-Jin Li, a,b Ping Lu,^a Huan Zhan,^a You-Cheng Liu,^{a,b}

Yasujiro Murata^c and Koichi Komatsu^c

^aDepartment of Chemistry, University of Science and Technology of China, Hefei, Anhui 230026, PR China

^bDepartment of Chemistry, Lanzhou University, Lanzhou, Gansu 730000, PR China

^cInstitute for Chemical Research, Kyoto University, Uji, Kyoto 611-0011, Japan



HSVM

Tributylphosphine-catalyzed ring-opening reaction of epoxides and aziridines with acetic anhydride

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Chinese Academy of Sciences, 354 Fenglin Road, Shanghai 200032, China

$$R^{1}$$
 X
 R^{2}
 PBu_{3} (10 mol%)
 R^{1}
 AcX
 ACX

A novel TTF-based donor carrying four nitronyl nitroxides

Tetrahedron Letters 44 (2003) 4415

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