

Graphical Abstracts

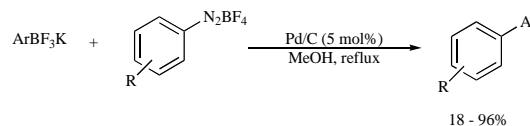
Letters in Organic Chemistry; Vol. 7; 2010, 1

Pd/C-Catalyzed Cross-Coupling of Arenediazonium Salts with Potassium Aryltrifluoroborates

Lee S. Varnedoe, Brad D. Angel, Joshua L. McClellan and James M. Hanna, Jr.*

*Department of Chemistry, Physics, and Geology, Winthrop University, Sims Science Building, Rock Hill, SC 29733, USA

The Pd/C-catalyzed cross-coupling of diazonium salts with aryltrifluoroborates is described.



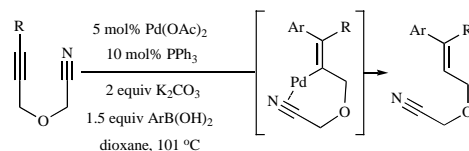
Letters in Organic Chemistry; Vol. 7; 2010, 7

The Nitrile Functionality as a Directing Group in the Palladium-Catalysed Addition of Aryl Boronic Acids to Alkynes

Arantxa Rodriguez and Wesley J. Moran*

*Department of Chemical & Biological Sciences, University of Huddersfield, Queensgate, Huddersfield, HD1 3DH, UK

The nitrile group is shown to direct the palladium-catalysed hydroarylation of internal alkynes bearing a pendant nitrile with boronic acids.



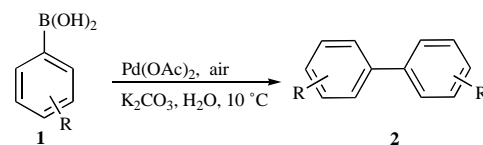
Letters in Organic Chemistry; Vol. 7; 2010, 11

Homocoupling Reaction of Aryl Boronic Acids Catalyzed by Pd(OAc)2/ K2CO3 in Water under Air Atmosphere

Nan Wu*, Xinnian Li, Xin Xu, Yumei Wang, Yunyun Xu and Xi Chen

*Department of Aviation Oil and Material, Xuzhou Airforce College, Xuzhou, Jiangsu, China

A convenient method for the synthesis of symmetry biaryls via homocoupling reaction of aryl boronic acids catalyzed by Pd(OAc)2 in water under air without phase transfer catalysts was reported.



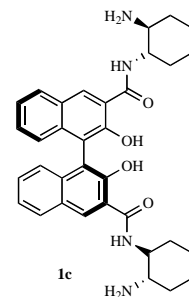
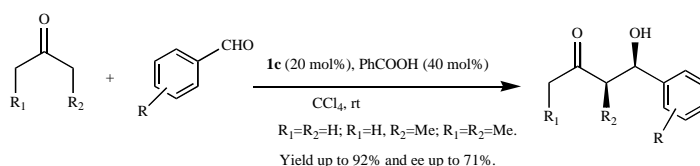
Letters in Organic Chemistry; Vol. 7; 2010, 15

Direct Asymmetric Aldol Reaction Catalyzed by C2-Symmetrical Chiral Primary Amine Organocatalysts

Gong-Jian Zhu, Chao-Shan Da*, Ya-Ning Jia, Xiao Ma and Lei Yi

*Institute of Biochemistry & Molecular Biology, School of Life Sciences, Lanzhou University, Lanzhou 730000, China

Yield up to 92% and ee up to 71%.



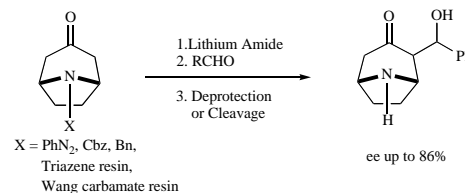
Letters in Organic Chemistry; Vol. 7; 2010, 21

Studies on Aldol Reactions of Nortropinone Derivatives in Solution and on Solid Phase

Ryszard Lazny*, Aneta Nodzewska and Michal Sienkiewicz

*Institute of Chemistry, University of Bialystok, ul. Hurtowa 1, 15-339 Bialystok, Poland

Polymer-anchored (Merrifield, trityl chloride, Wang *p*-nitrophenyl carbonate and triazene supports) nortropinone, or *N*-protected nortropinone derivatives in solution, were subjected to deprotonation with LDA or chiral lithium amides, and the resulting lithium enolates were trapped with an aldehyde. The aldols were obtained with moderate to good yields (44-84%) and enantioselectivities (44-86% ee).



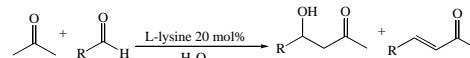
Letters in Organic Chemistry; Vol. 7; 2010, 27

An Environment-Friendly and Efficient Method for Aldol Condensation Catalyzed by L-Lysine in Pure Water

Yan Zhang, Man Gang Wang, Jun Liang and Zhi Cai Shang*

*Department of Chemistry, Zhejiang University, Hangzhou 310027, P. R. China

This is a new example of a nonmetallic small-molecule catalyst for direct intermolecular aldol reactions. We found L-lysine is an effective catalyst for this condensation between unmodified acetone and a variety of aldehydes. What's more encouraging is that this reaction was carried out in pure water and the organo-catalyst could be reused without any loss of its activity after many runs



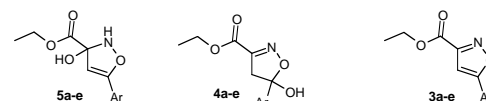
Letters in Organic Chemistry; Vol. 7; 2010, 32

Synthesis of 2,3 and 4,5-Dihydro-hydroxy-isoxazoles and Isoxazoles Under Different PH Conditions

Virginie Andrzejak, Régis Millet, Jamal El Bakali, Abdelhalim Guelzim, Sebastien Gluszok, Philippe Chavatte, Jean-Paul Bonte, Claude Vaccher*, Emmanuelle Lipka*

*Université Lille Nord de France, Faculté des Sciences Pharmaceutiques et Biologiques, Laboratoire de Chimie Analytique, EA4034, IFR114, 3 rue du Pr. Laguesse, BP-83, 59006 Lille, France

Reaction between aryl 1,3-diketoesters 2a-e and hydroxylamine hydrochloride has been investigated under different experimental conditions. Whereas acid conditions gave principally 3,5-isoxazole esters (3a-e), reactions under neutral and basic conditions led to different 4,5 and 2,3-dihydro-hydroxy-isoxazoles 4a-e and 5a-e.



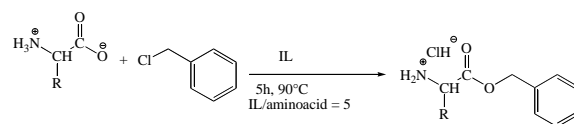
Letters in Organic Chemistry; Vol. 7; 2010, 39

Esterification of Unprotected α -Amino Acids in Ionic Liquids as the Reaction Media

Daniele Biondini, Lucia Brinchi, Raimondo Germani*, Laura Goracci and Gianfranco Savelli

*CEMIN, Centro di Eccellenza Materiali Innovativi Nanostrutturati, Dipartimento di Chimica, Università di Perugia, Via Elce di Sotto, 8, I-06123 Perugia, Italy

1,3-dimethylimidazolium methanesulfonate [MMIM][MsO] is used to prepare α -amino acids benzylic esters from unprotected amino acids and benzyl chloride.



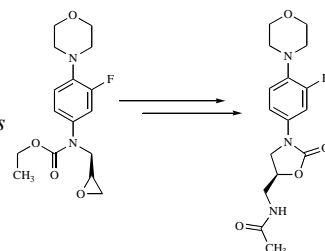
Letters in Organic Chemistry; Vol. 7; 2010, 45

A New Practical Synthesis of Linezolid: An Antibacterial Drug

Ganta Madhusudhan Reddy*, Akula Ramulu and Padi Pratap Reddy

*Research and Development, Innovation Plaza, Integrated Product Development, Dr. Reddy's Laboratories Ltd., Survey Nos 42, 45,46 and 54, Bachupally, Qutubullapur, R. R. Dist. 500 072, India

A new practical synthesis of linezolid.

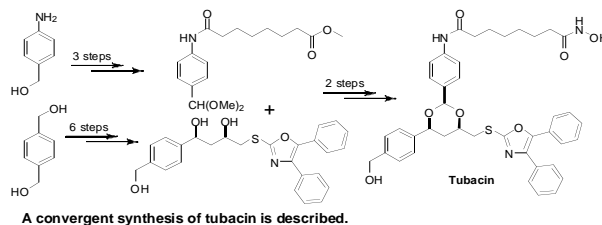


Letters in Organic Chemistry; Vol. 7; 2010, 50

A New Approach to Tubacin

Jian Hong*, Xin Xu, Debasis Das*, Pengyu Yang, Shu-Hui Chen and Ge Li

*Division of Discovery Chemistry Service, WuXi AppTec Inc., 288 Fute Zhong Road, Waigaoqiao Free Trade Zone, Shanghai 200131, P.R., China

A new simple synthesis of tubacin is reported. It entails the formation of the *syn*-1,3-diol unit and its stereoselective ketalization with a functionalized benzaldehyde derivative.

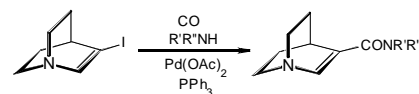
Letters in Organic Chemistry; Vol. 7; 2010, 54

Iodoalkene-Based Approach Towards Carboxamides of Biological Importance: Aminocarbonylation of 2-iodobornene and 3-iodo-2-quinuclidene

László Horváth, Andrea Petz and László Kollár*

*Department of Inorganic Chemistry, University of Pécs, Hungary

Skeletons of biological importance were functionalised in homogeneous palladium-catalysed aminocarbonylation.

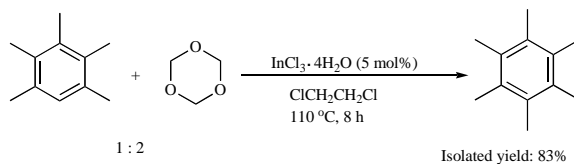


Letters in Organic Chemistry; Vol. 7; 2010, 61

InCl₃·4H₂O-Catalyzed Trioxane as a New Methylating Agent For *multi*-Methylated Aromatics Affording Hexamethyl Benzene

Song-Jie Chen and Ruimao Hua*

*Department of Chemistry, Tsinghua University, Innovative Catalysis Program, Key Laboratory of Organic Optoelectronics & Molecular Engineering of Ministry of Education, Beijing 100084, China

Hexamethylbenzene was prepared from the methylation of pentamethylbenzene using trioxane as new methylating agent catalyzed by InCl₃·4H₂O.

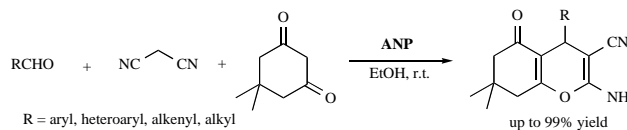
Letters in Organic Chemistry; Vol. 7; 2010, 64

A Cheap Amino Alcohol Catalyzed One-Pot, Tri-Component Synthesis of Tetrahydrochromene Derivatives

Shaojun Song, Zixing Shan* and Yong Jin

*Department of Chemistry, Wuhan University, Wuhan 430072, China

One-pot reaction of dimedone, aldehydes and malononitrile catalyzed by ANP furnished 4H-pyran derivatives in high yield.



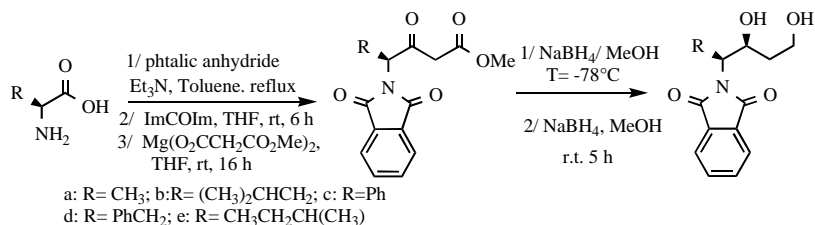
Letters in Organic Chemistry; Vol. 7; 2010, 69

Diastereoselective Synthesis of γ -Phthalimido- β -Hydroxy Esters and *N*-Protected 4-Amino-1,3-Diols Starting from Natural α -Amino Acids

Amel Essersi, Ridha Touati and Béchir Ben Hassine*

*Laboratoire de Synthèse Organique Asymétrique et Catalyse Homogène (01UR1201), Faculté des Sciences de Monastir, Avenue de l'Environnement, 5019 Monastir, Tunisie

Diastereoselective synthesis of γ -phthalimido- β -hydroxy esters.



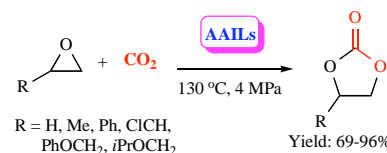
Letters in Organic Chemistry; Vol. 7; 2010, 73

Natural Amino Acid-Based Ionic Liquids as Efficient Catalysts for the Synthesis of Cyclic Carbonates From CO₂ and Epoxides under Solvent-Free Conditions

Fang Wu, Xiao-Yong Dou, Liang-Nian He* and Cheng-Xia Miao

*State Key Laboratory and Institute of Elemento-Organic Chemistry, Nankai University, Tianjin 300071, China

Amino acid-derived ionic liquid-catalyzed greener process for cyclic carbonate synthesis is reported.



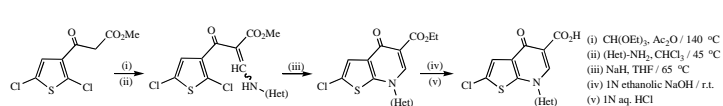
Letters in Organic Chemistry; Vol. 7; 2010, 79

Thienopyridone Antibacterials. Part IV[1]. Synthesis of Some *N*(7)-Heteroaryl-4-oxothieno[2,3-*b*]pyridine-5-carboxylic Acids and Esters

Nuha I. Sweidan, Musa Z. Nazer, Mustafa M. El-Abadelah* and Wolfgang Voelter*

*Chemistry Department, Faculty of Science, The University of Jordan, Amman 11942, Jordan and Interfakultäres Institut für Biochemie, Universität Tübingen, Hoppe-Seyler Str. 4, 72076 Tübingen, Germany

A series of 7-heteroaryl-4-oxo-4,7-dihydrothieno[2,3-*b*]pyridine-5-carboxylic acids and their methyl esters were prepared, some of which exhibited good activity, especially against *E. coli* and *Kl. pneumoniae* (MIC = 2 μ g / mL).



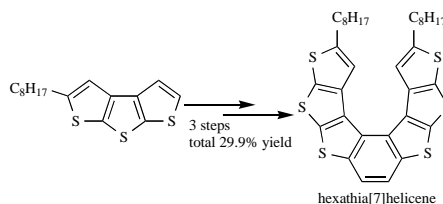
Letters in Organic Chemistry; Vol. 7; 2010, 85

The Synthesis of Octyl-Substituted Hexathia[7]heterohelicene Based on Dithieno[2,3-*b*:3',2'-*d*]thiophene Via Irradiation

Zhihua Wang, Jianwu Shi, Chunli Li, Dongfeng Zhao, Zhen Wang and Hua Wang*

*Key Lab for Special Functional Materials of Ministry of Education, Henan University, Kaifeng, 475004, China

With 2-octyl dithieno[2,3-*b*:3',2'-*d*]thiophene as raw material, three steps including formylation, McMurry reaction and photocyclization were employed to generate dioctyl-hexathia[7]heterohelicene in total yield of 29.9%. The crystal analysis shows that some short intermolecular interactions including S...S and C...S interactions were observed in the crystal of target compound.



Letters in Organic Chemistry; Vol. 7; 2010, 90

Direct Functionalization of Benzoquinolines

Victor Mamane*, Frédéric Louërat and Yves Fort

*Laboratoire SRSMC, Equipe Synthèse Organométallique et Réactivité, UMR 7565, CNRS - Nancy Université, BP 70239, 54506 Vandoeuvre-Lès-Nancy, France

Selective functionalization of benzoquinolines in *a*-position to the nitrogen.

