



Tetrahedron Letters Vol. 49, No. 27, 2008

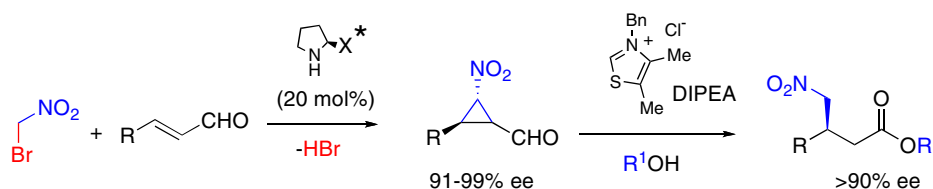
Contents

COMMUNICATIONS

Organocatalytic asymmetric nitrocyclopropanation of α,β -unsaturated aldehydes

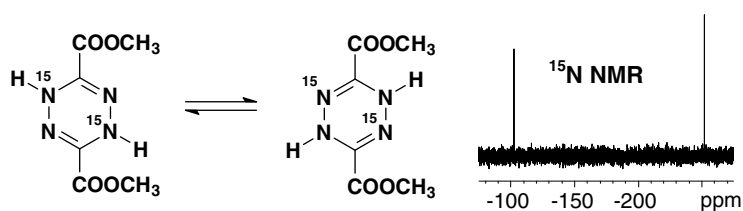
pp 4209–4212

Jan Vesely, Gui-Ling Zhao, Agnieszka Bartoszewicz, Armando Córdoba *

A ^{15}N NMR study of tautomerism in dimethyl dihydro-1,2,4,5-tetrazine-3,6-dicarboxylate

pp 4213–4215

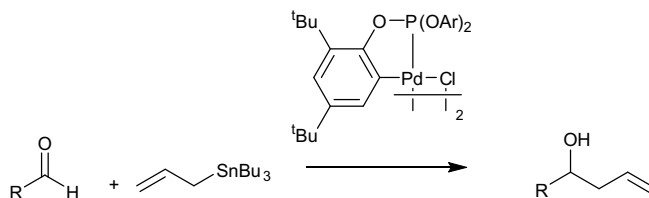
Antonín Lyčka *, Štěpán Frebort, Numan Almonasy



Palladacyclic and platinumacyclic catalysts for the allylation of aldehydes

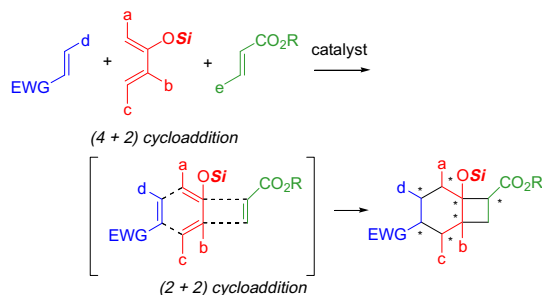
pp 4216–4219

Robin B. Bedford *, Lukasz T. Pilarski



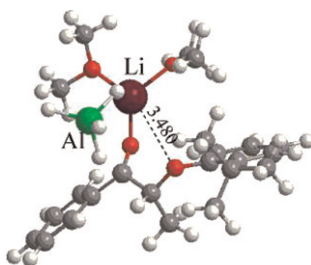
Catalytic multicomponent cycloaddition assembling three different substances to form highly substituted bicyclo[4.2.0]octanes

pp 4220–4222

Kiyosei Takasu ^{*}, Kazato Inanaga, Masataka Ihara

Solvent effects on the diastereoselection in LiAlH_4 reduction of α -substituted ketones

pp 4223–4226

Yasumitsu Suzuki, Daisuke Kaneno, Masaya Miura, Shuji Tomoda ^{*}

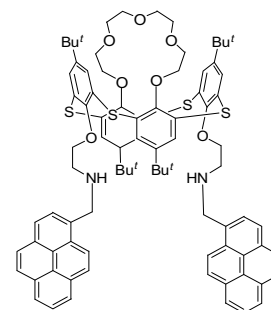
It was found that steric effects of solvent may be responsible for the diastereoselection in LiAlH_4 reduction of acyclic ketones.

Ratiometry of monomer/excimer emissions of dipyrenyl thiacalix[4]arene for Cu^{2+} and K^+ switched INHIBIT logic gate with NOT and YES logic functions

pp 4227–4230

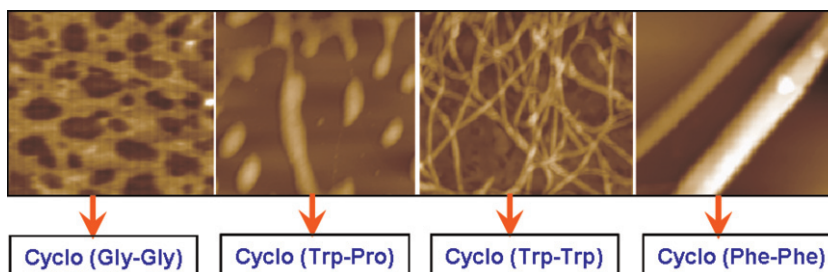
Abhimanew Dhir, Vandana Bhalla ^{*}, Manoj Kumar ^{*}

A new thiacalix[4]arene derivative of 1,3-*alternate* conformation possessing two pyrene moieties has been synthesized and its ability to recognize cations and to form logic gates has been examined.



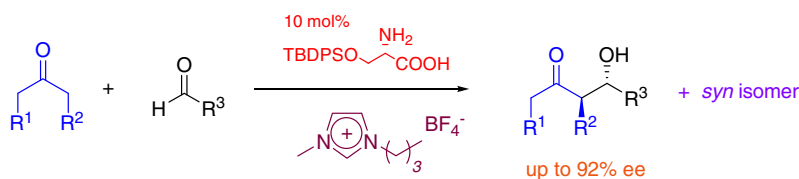
Participation of aromatic side chains in diketopiperazine ensembles

pp 4231–4234

K. B. Joshi, Sandeep Verma ^{*}

A recyclable non-immobilized siloxy serine organocatalyst for the asymmetric direct aldol reaction

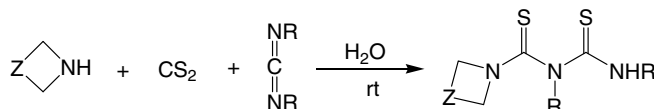
pp 4235–4238

Yong-Chua Teo ^{*}, Guan-Leong Chua

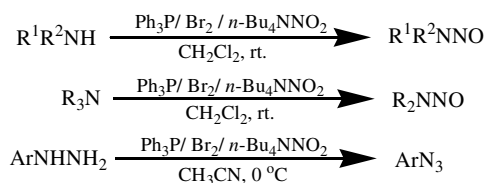
A recyclable siloxy-L-serine organocatalyst has been developed to catalyze asymmetric direct aldol reactions in [bmim][BF₄], furnishing the β-hydroxy carbonyl scaffold in high enantio- and diastereoselectivities using a selection of aromatic aldehydes and cycloalkanes. The siloxy serine organocatalyst in the ionic liquid can be reused for up to four successive cycles with comparable enantioselectivities.

**Efficient synthesis of *N,N'*-dialkyl-*N''*-dialkylaminocarbothioyl thioureas from cyclic secondary amines, CS₂, and *N,N'*-dialkyl carbodiimides in water**

pp 4239–4241

Issa Yavari ^{*}, Nargess Hosseini, Loghman Moradi, Anvar Mirzaei**Ph₃P/Br₂/*n*-Bu₄NNO₂ as an efficient system for the preparation of *N*-nitrosamines and azides**

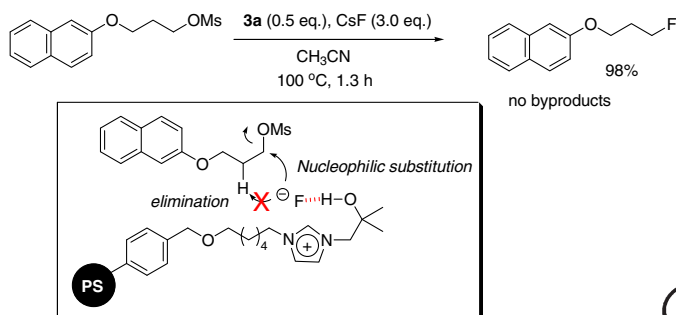
pp 4242–4244

Nasser Iranpoor ^{*}, Habib Firouzabadi ^{*}, Najmeh Nowrouzi**Polymer-supported protic functionalized ionic liquids for nucleophilic substitution reactions: superior catalytic activity compared to other ionic resins**

pp 4245–4248

Sandip S. Shinde, Byoung Se Lee, Dae Yoon Chi ^{*}

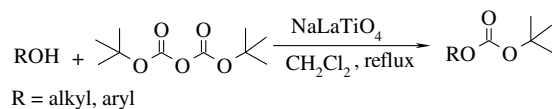
Tertiary alcohol containing polymer PS[him-⁺OH][OMs] exhibited superior activity and good recyclability without any loss of catalytic activity or product yield.



Chemoselective *O*-*tert*-butoxycarbonylation of hydroxy compounds using NaLaTiO₄ as a heterogeneous and reusable catalyst

pp 4249–4251

Savita J. Singh, Radha V. Jayaram *

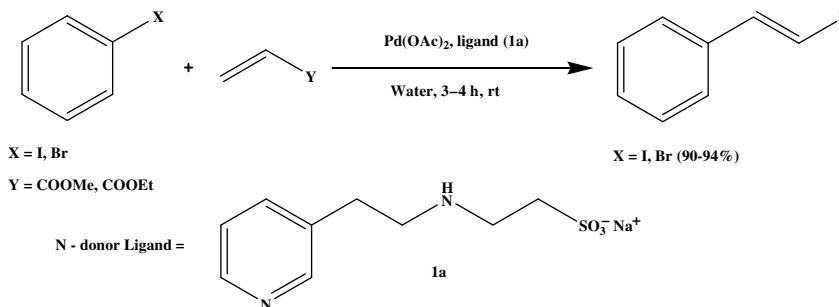


A facile, efficient and chemoselective protocol for *O*-*tert*-butoxycarbonylation of various hydroxy compounds has been developed using NaLaTiO₄ (layered perovskite) as a novel catalyst.

Sodium 2-(2-pyridin-3-ylethylamino)sulfonate: an efficient ligand and base for palladium-catalyzed Heck reaction in aqueous media

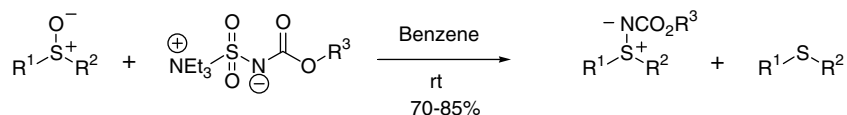
pp 4252–4255

Shivaji S. Pawar, Deepak V. Dekhane, Murlidhar S. Shingare, Shivaji N. Thore *


A novel, easy and mild preparation of sulfilimines from sulfoxides using the Burgess reagent

pp 4256–4259

Sadagopan Raghavan *, Shaik Mustafa, Kailash Rathore

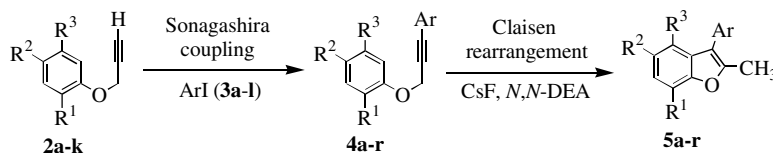


A novel preparation of sulfilimines from the corresponding sulfoxides using the Burgess reagent is described.


A simple approach to highly functionalized benzo[*b*]furans from phenols and aryl iodides via aryl propargyl ethers

pp 4260–4264

V. S. Prasada Rao Lingam, Ramanatham Vinodkumar, Khagga Mukkanti *, Abraham Thomas, Balasubramanian Gopalan



A variety of mono- and disubstituted phenols are alkylated with propargyl bromide to give phenyl 2-propynyl ethers, which were further coupled with aryl iodides under Sonogashira-reaction conditions to give 3-phenoxy-1-aryl-1-propyne derivatives. The latter compounds underwent Claisen rearrangement followed by ring closure to give functionalized benzo[*b*]furans in moderate to good yields.

Quaternary ammonium salt-based chromogenic and fluorescent chemosensors for fluoride ions

pp 4265–4268

Vijay Luxami, Nidhi Sharma, Subodh Kumar *

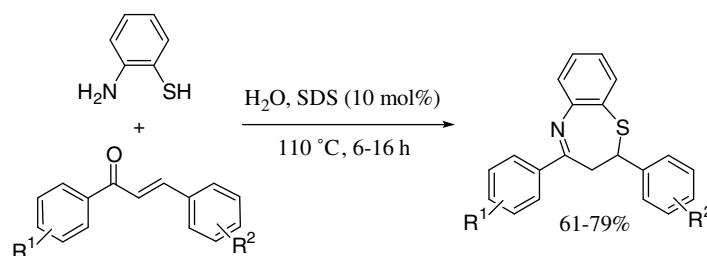


Chemosensors **5** and **6** exhibit visible absorption (yellow to pink) and emission (low emission to green fluorescent) changes with fluoride ions only and can be used for ratiometric fluorescence analysis of fluoride ions.

**'On water' synthesis of 2,4-diaryl-2,3-dihydro-1,5-benzothiazepines catalysed by sodium dodecyl sulfate (SDS)**

pp 4269–4271

Gaurav Sharma, Raj Kumar, Asit K. Chakrabarti *

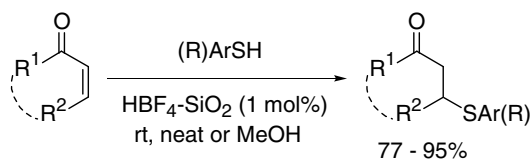


An efficient synthesis of 2,4-diaryl-2,3-dihydro-1,5-benzothiazepines has been achieved by the reaction of 1,3-diaryl-2-propenones with 2-aminothiophenol in water catalysed by SDS.

Fluoroboric acid adsorbed on silica-gel (HBF₄-SiO₂) as a new, highly efficient and reusable heterogeneous catalyst for thia-Michael addition to α,β-unsaturated carbonyl compounds

pp 4272–4275

Gaurav Sharma, Raj Kumar, Asit K. Chakrabarti *

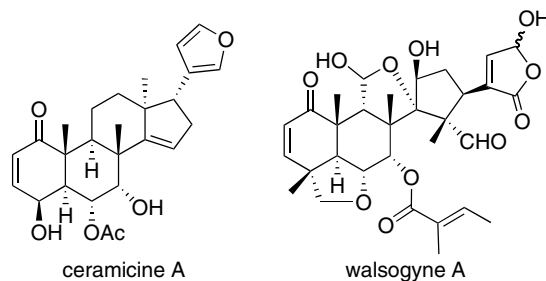


HBF₄-SiO₂ efficiently catalyses the thia-Michael addition to α,β-unsaturated carbonyl compounds and finds application in the one-pot synthesis of 2,3-dihydro-1,5-benzothiazepines.

Ceramicine A and walsogyne A, novel limonoids from two species of Meliaceae

pp 4276–4278

Khalit Mohamad, Yusuke Hirasawa, Chong Soon Lim, Khalijah Awang, A. Hamid A. Hadi, Koichi Takeya, Hiroshi Morita *

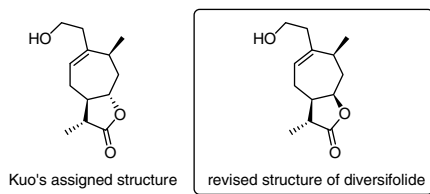


Two novel limonoids, ceramicine A with no methyls at C-4, and walsogyne A with a ring C-seco limonoid, have been isolated from the barks of *Chisocheton ceramicus* and *Walsura chrysogyne*, respectively, and the structures were fully elucidated on the basis of spectroscopic data. Ceramicine A and walsogyne A showed a moderate cytotoxic activity.

Synthesis of diversifolide and structure revision

pp 4279–4281

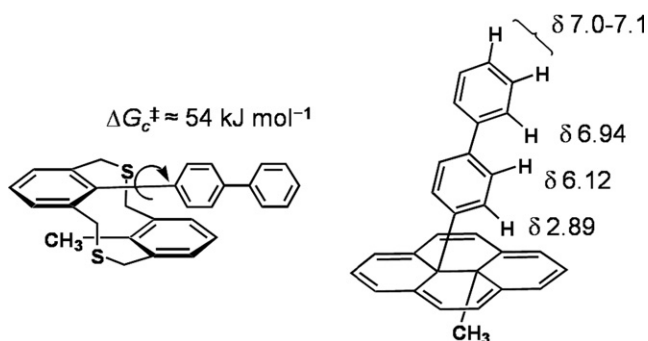
Kazumasa Matsuo, Hiromasa Yokoe, Kozo Shishido *, Mitsuru Shindo *

**10a-(4-Biphenyl)-10b-methyl-10a,10b-dihydropyrene: a conformational study and ring current effect**

pp 4282–4285

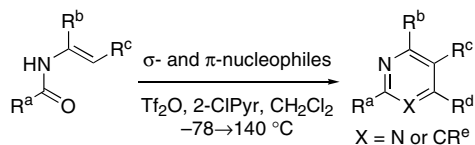
Sook-Yee Yoon, Yee-Hing Lai *

A unique terphenyl has one ring that is rigid, another undergoes free rotation and the third experiences restricted mobility. A dihydropyrene exhibits a ring current effect extended to eight conjugated carbon atoms away from its molecular plane.

**Observations on the use of microwave irradiation in azaheterocycle synthesis**

pp 4286–4288

Matthew D. Hill, Mohammad Movassaghi *

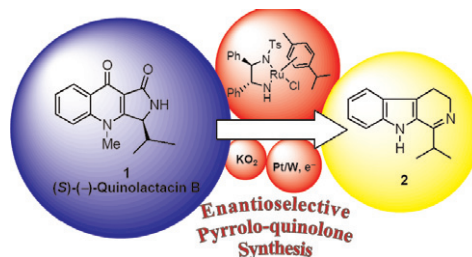


A comparison of conventional heating and microwave irradiation in the synthesis of azaheterocycles is discussed. Microwave irradiation was found to increase the yields of the desired products, shorten the reaction times, and extended this chemistry to recalcitrant amide substrates and weak nucleophiles.

Enantioselective total synthesis of (S)-(-)-quinolactacin B

pp 4289–4291

Nagula Shankaraiah, Wender A. da Silva, Carlos Kleber Z. Andrade, Leonardo Silva Santos *



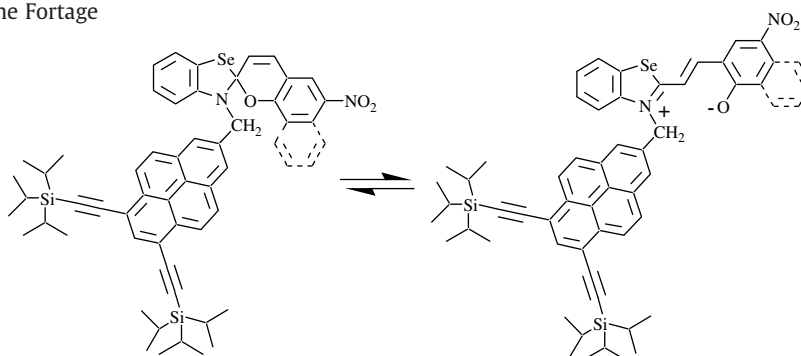
The enantioselective total synthesis of (-)-quinolactacin B (-)-1 was performed in seven steps and 33% overall yield from tryptamine. The synthetic quinolactacin B displayed optical rotations that was in accordance with that of the natural product, thereby supporting the (S) configuration for natural quinolactacin B. The final product stereochemical assignment is in agreement with the proposed by Nakagawa and co-workers.



Selenospiropyrans incorporating appended pyrene chromophores

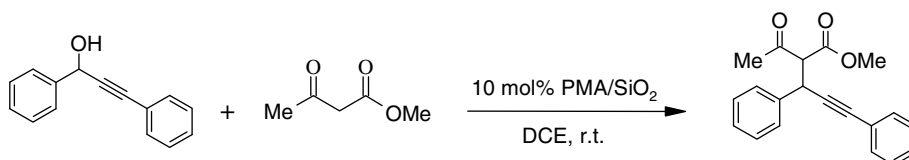
pp 4292–4295

Andrew C. Benniston*, Jérôme Fortage

**Heteropoly acid-catalyzed highly efficient alkylation of 1,3-dicarbonyl compounds with benzylic and propargylic alcohols**

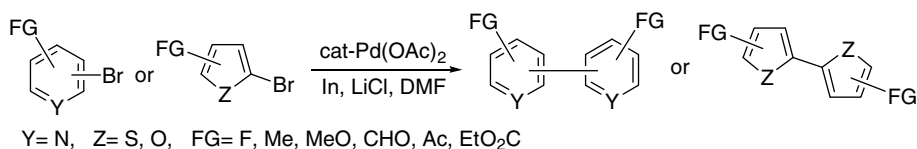
pp 4296–4301

J. S. Yadav*, B. V. Subba Reddy, T. Pandurangam, K. V. Raghavendra Rao, K. Praneeth, G. G. K. S. Narayana Kumar, C. Madavi, A. C. Kunwar

**Efficient homo-coupling reactions of heterocyclic aromatic bromides catalyzed by Pd(OAc)2 using indium**

pp 4302–4305

Kooyeon Lee, Phil Ho Lee*

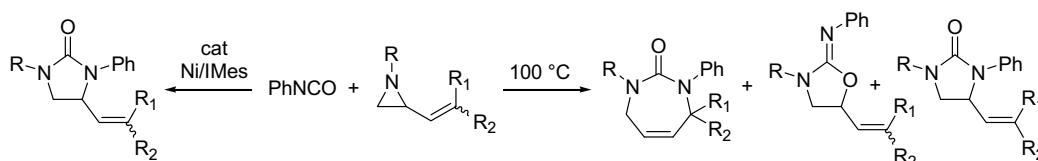


Homo-coupling reactions of heterocyclic aromatic bromides smoothly proceeded with cat-Pd(OAc)₂, indium, and LiCl in DMF to afford exclusively symmetric biaryls possessing heterocyclic aromatic ring in good to excellent yields.

Coupling of vinyl aziridines and phenyl isocyanate

pp 4306–4309

Kainan Zhang, Pramod R. Chopade, Janis Louie*

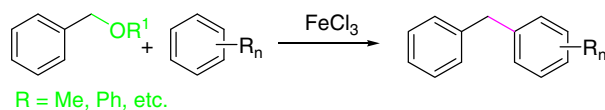


Thermal coupling of vinyl aziridines and phenyl isocyanate was evaluated. Although oxazolidinone products were predominant, some reactions afforded a seven-membered ring heterocycle. When Ni/IMes was employed as a catalyst, a wider array of vinyl aziridines underwent coupling reactions. The Ni catalyzed reactions generally afforded vinyl imidazolidinones as major products.

Benylation of arenes through FeCl₃-catalyzed Friedel–Crafts reaction via C–O activation of benzyl ether

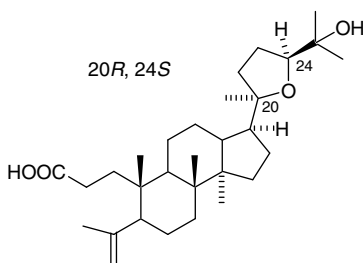
pp 4310–4312

Bi-Qin Wang, Shi-Kai Xiang, Zuo-Peng Sun, Bing-Tao Guan, Ping Hu, Ke-Qing Zhao *, Zhang-Jie Shi *

**Isoeichlerianic acid from *Aglaia silvestris* and revision of the stereochemistry of foveolin B**

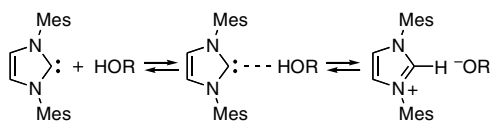
pp 4313–4315

Christoph Seger, Silvia Pointinger, Harald Greger, Otmar Hofer *

**On the interactions of *N,N*-bismesitylimidazolin-2-yl and alcohols**

pp 4316–4318

Michael A. Schmidt, Peter Müller, Mohammad Movassaghi *

The interaction of *N,N*-bismesitylimidazolin-2-yl (IMes) with alcohols is discussed.

*Corresponding author

Supplementary data available via ScienceDirect

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