

Tetrahedron Letters Vol. 49, Nos. 29–30, 2008

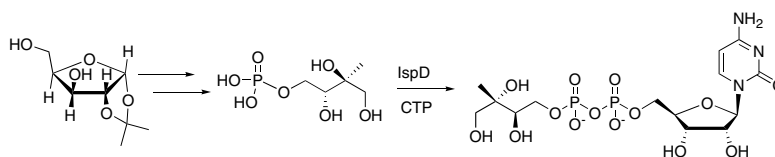
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COMMUNICATIONS

Chemoenzymatic synthesis of 4-diphosphocytidyl-2-C-methyl-D-erythritol: a substrate for IspE

pp 4461–4463

Prabakaran Narayanasamy^{*}, Hyungjin Eoh, Dean C. Crick^{*}

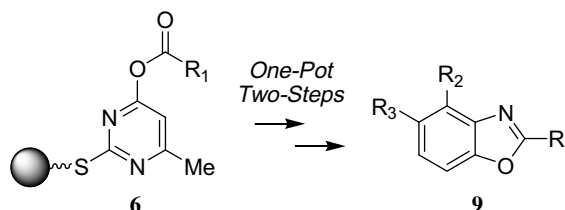


Chemoenzymatic synthesis of 4-diphosphocytidyl-2-C-methyl-D-erythritol using 2-C-methyl-D-erythritol 4-phosphate and 4-diphosphocytidyl-2-c-methyl-D-erythritol synthase.

A one-pot, two-step microwave-assisted synthesis of highly functionalized benzoxazoles using solid-supported reagents (SSRs)

pp 4464–4466

Marco Radi, Sara Saletti, Maurizio Botta^{*}

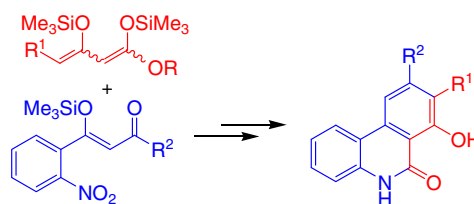


An efficient one-pot, two-step protocol for the microwave-assisted solid-phase synthesis of substituted benzoxazole has been developed starting from acylating solid-supported reagents **6**. The combination of a parallel synthesizer and a microwave reactor, allowed us to quickly prepare a collection of substituted benzoxazole **9** in high purity and satisfactory yields.

Synthesis of functionalized 6(5H)-phenanthridinones based on a [3+3]-cyclocondensation/lactamization strategy

pp 4467–4469

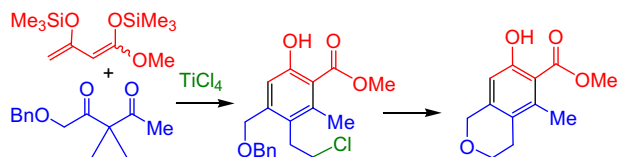
Mirza A. Yawer, Ibrar Hussain, Inam Iqbal, Anke Spannenberg, Peter Langer^{*}



Chelation control in the [3+3] annulation reaction of alkoxy-substituted 1,1-dialkylcyclopropanes with 1,3-bis(trimethylsilyloxy)-1,3-butadienes

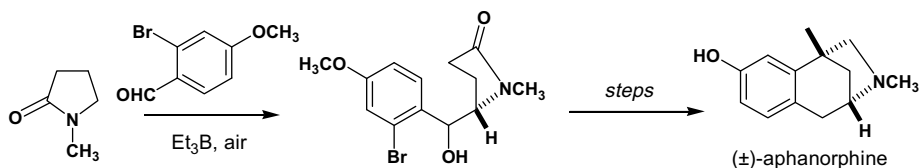
pp 4470–4472

Jennifer Hefner, Peter Langer *


Synthesis of (±)-aphanorphine: a new approach to tricyclic 3-benzazepine scaffold using two radical C–C bond-forming reactions

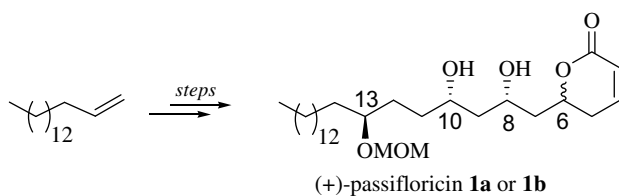
pp 4473–4475

Takehiko Yoshimitsu *, Chie Atsumi, Emiko Iimori, Hiroto Nagaoka, Tetsuaki Tanaka *


Asymmetric synthesis of (+)-passifloricin A and its 6-epimer

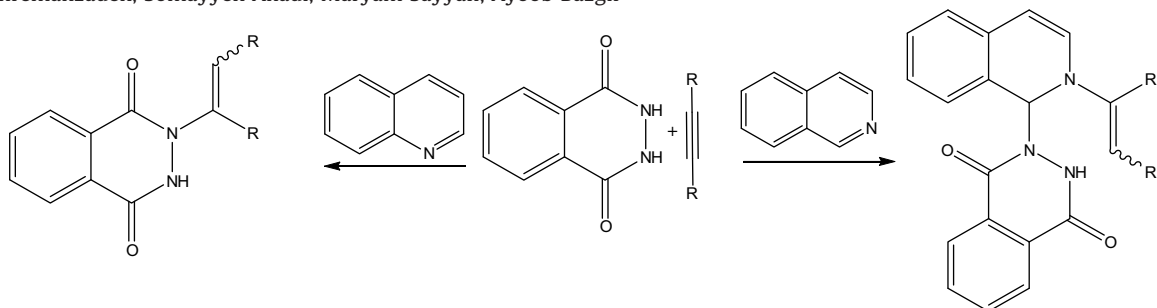
pp 4476–4478

S. Chandrasekhar *, Ch. Rambabu, A. Syamprasad Reddy


Reaction of phthalhydrazide and acetylenedicarboxylates in the presence of N-heterocycles: an efficient synthesis of phthalazine derivatives

pp 4479–4482

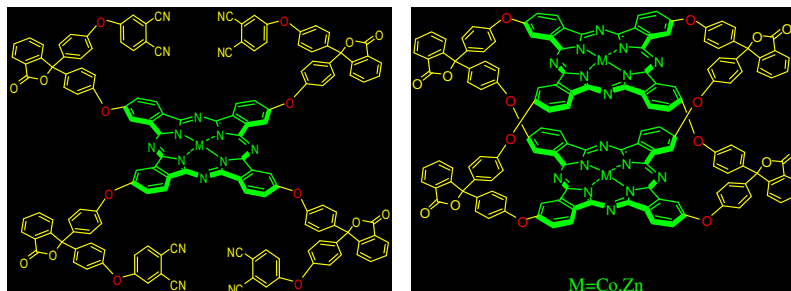
Ramin Ghahremanzadeh, Somayyeh Ahadi, Maryam Sayyafi, Ayoob Bazgir *



Synthesis, characterization, electrochemical and CO₂ sensing properties of novel mono and ball-type phthalocyanines with four phenolphthalein units pp 4483–4486

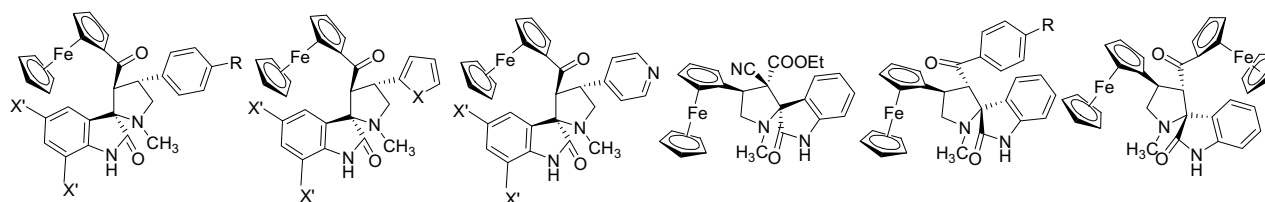
Selçuk Altun, Ahmet Altındal, A. Rıza Özkaya, Mustafa Bulut, Özer Bekaroğlu *

Novel mono and ball-type phthalocyanines were synthesized from 3,3-bis(4-hydroxy-phenyl)isobenzofuran-1(3*H*)-one (phenolphthalein). The effect of temperature on the CO₂ sensing properties of a spin-coated thin film of **7** was also investigated.



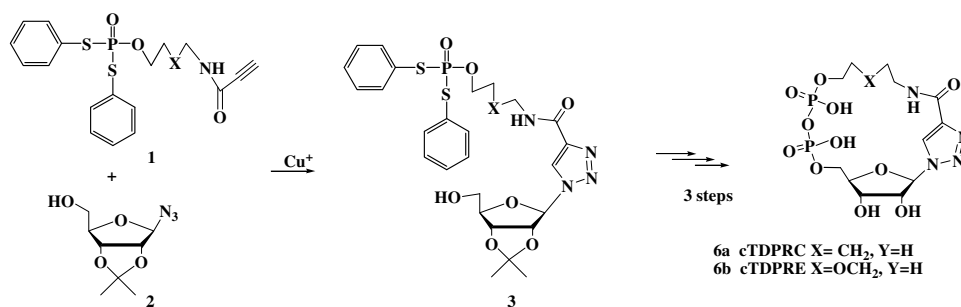
Synthesis of ferrocenyl monospirooxindolopyrrolidines—a facile [3+2]-cycloaddition of azomethine ylides pp 4487–4490

A. R. Suresh Babu, R. Raghunathan *



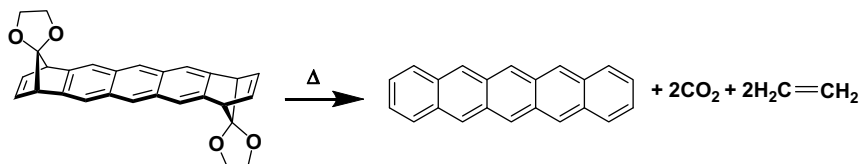
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Lingjun Li, Baichuan Lin, Zhenjun Yang, Liangren Zhang, Lihe Zhang *



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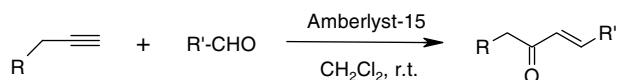
Hsin-Hui Huang, Hsing-Hung Hsieh, Chung-Chih Wu *, Chao-Chen Lin, Pi-Tai Chou *, Ta-Hsien Chuang, Yuh-Sheng Wen, Tahsin J. Chow *



The cation exchange resin-promoted coupling of alkynes with aldehydes: one-pot synthesis of α,β -unsaturated ketones

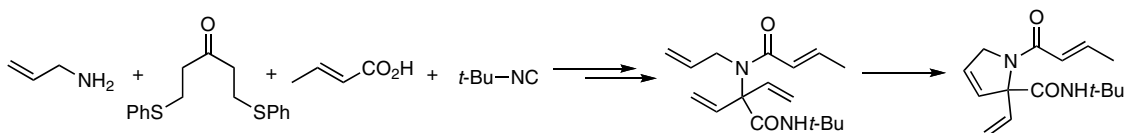
pp 4498–4500

J. S. Yadav*, B. V. Subba Reddy, P. Vishnumurthy

**Applications of the Ugi reaction with ketones**

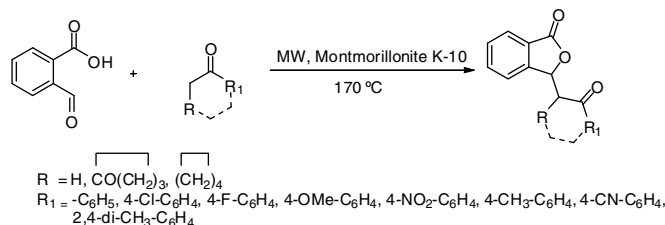
pp 4501–4504

Suvi T. M. Simila, Stephen F. Martin*

**Microwave-assisted solid acid-catalyzed one-pot synthesis of isobenzofuran-1(3H)-ones**

pp 4505–4508

Shainaz M. Landge, Martin Berryman, Béla Török*

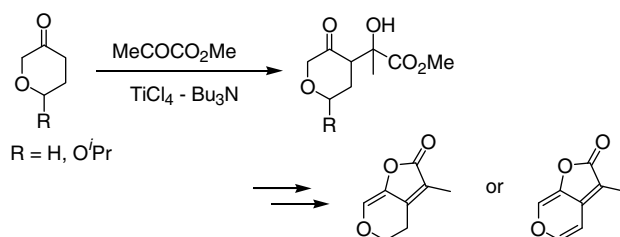


A new, solid acid-catalyzed microwave-assisted environmentally benign synthesis of isobenzofuran-1(3H)-ones is described. Montmorillonite K-10 appeared to be an excellent catalyst for the condensation and successive lactonization reactions. Reaction of phthalaldehyde (2-carboxybenzaldehyde) with methylaryl and cyclic ketones was initiated by microwave irradiation and occurred in one step. The reactions were complete in 10–30 min providing excellent yields (90–98%).

Synthesis of the seed germination stimulant 3-methyl-2H-furo[2,3-c]pyran-2-ones utilizing direct and regioselective Ti-crossed aldol addition

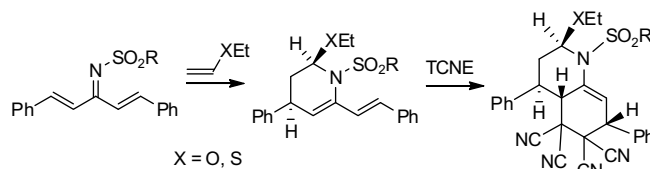
pp 4509–4512

Ryohei Nagase, Mayumi Katayama, Hiroaki Mura, Noritada Matsuo, Yoo Tanabe*



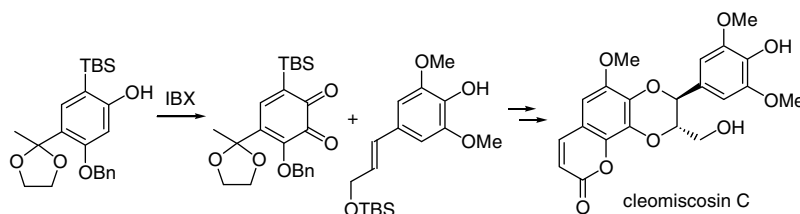
A diene-transmissive Diels–Alder reaction involving inverse electron-demand hetero-Diels–Alder cycloaddition of cross-conjugated azatrienes pp 4513–4515

Satoru Kobayashi, Tomoki Furuya, Takashi Otani, Takao Saito *



Total synthesis of cleomiscosin C via a regioselective cycloaddition reaction of *o*-quinone pp 4516–4518

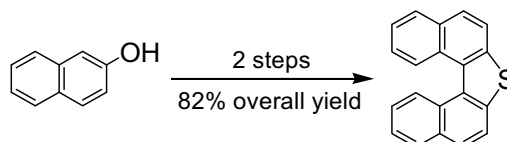
Atsuhito Kuboki *, Chie Maeda, Tetsuya Arishige, Kohei Kuyama, Mami Hamabata, Susumu Ohira *



A total synthesis of cleomiscosin C (aquillochin) has been achieved as an application of the regioselective cycloaddition of *o*-quinone and protected sinapyl alcohol.

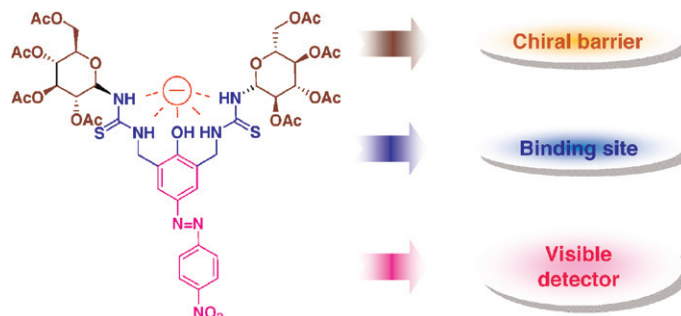
An efficient synthesis of dinaphthothiophene derivatives pp 4519–4521

Karoon Sadorn, Warapon Sinananwanich, Jetsuda Areephong, Chakkrapan Nerungsi, Chalayut Wongma, Chaveng Pakawatchai, Tienthong Thongpanchang *



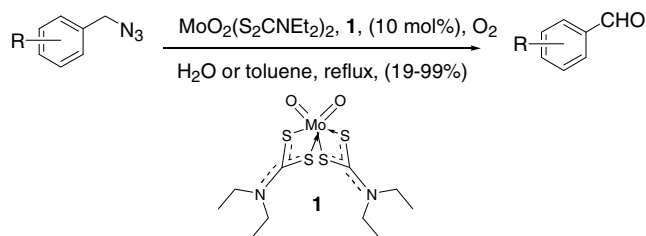
Chiral anion recognition by color change utilizing thiourea, azophenol, and glucopyranosyl groups pp 4522–4525

Min Ki Choi, Ha Na Kim, Hee Jung Choi, Juyoung Yoon *, Myung Ho Hyun *

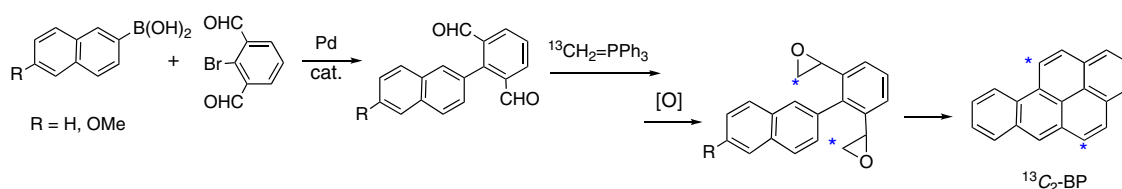


A chemoselective aerobic oxidation of benzylic azides catalyzed by molybdenum xanthate in an aqueous medium pp 4526–4530

Mahagundappa Maddani, Kandikere Ramaiah Prabhu *

**Synthesis of $^{13}\text{C}_2$ -benzo[a]pyrene and its 7,8-dihydrodiol and 7,8-dione implicated as carcinogenic metabolites** pp 4531–4533

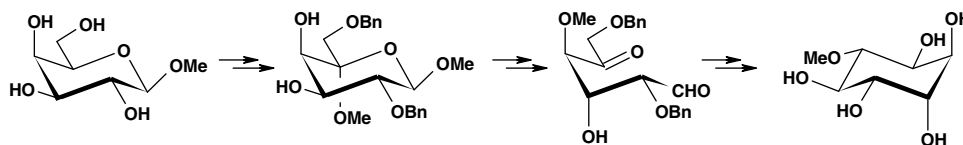
Chongzhao Ran, Daiwang Xu, Qing Dai, Trevor M. Penning, Ian A. Blair, Ronald G. Harvey *



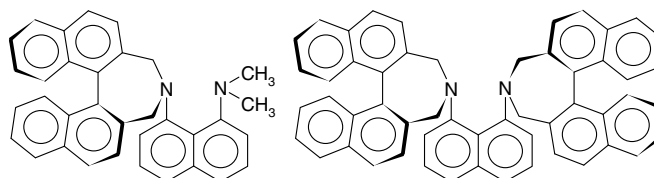
Synthesis of $^{13}\text{C}_2$ -BP and its active metabolites is accomplished via a sequence that involves Pd-catalyzed Suzuki coupling, double Wittig reaction of the dialdehyde product with $^{13}\text{CH}_2\text{PPh}_3$, epoxidation, and cyclization.

A new stereoselective approach to a selectively protected derivative of D-pinitol and its evaluation as α -L-rhamnopyranose mimetic pp 4534–4536

Giorgio Catelani *, Felicia D'Andrea, Alessio Griselli, Lorenzo Guazzelli, Laura Legnani, Lucio Toma *

**Binaphthyl substituted 1,8-bis(dimethylamino)naphthalenes, the first chiral, atropisomeric, proton sponges** pp 4537–4541

Jean-Paul Mazaleyra, Karen Wright *

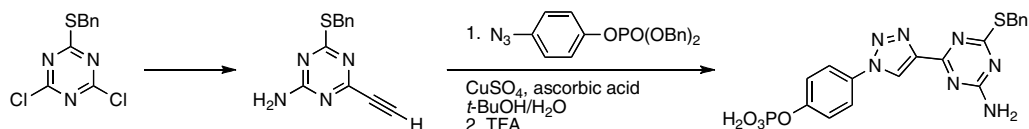


Chiral, atropisomeric, naphthalene proton sponges have been prepared by bis-N,N-dialkylation of 1,8-diaminonaphthalene, using both racemic and enantiopure (S)-2,2'-bis(bromomethyl)-1,1'-binaphthyl as alkylating agents.

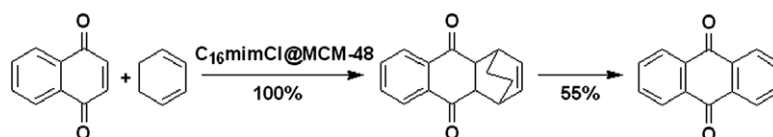


Terminal alkyne-functionalized triazine by Sonogashira coupling: synthesis of a potential cell signalling inhibitor via click chemistry pp 4542–4545

Caroline Courme, Sophie Gillon, Nohad Gresh, Michel Vidal, Christiane Garbay, Jean-Claude Florent, Emmanuel Bertounesque *

**Metal-free activation of C–C multiple bonds through halide ion pairs: Diels–Alder reactions with subsequent aromatization** pp 4546–4549

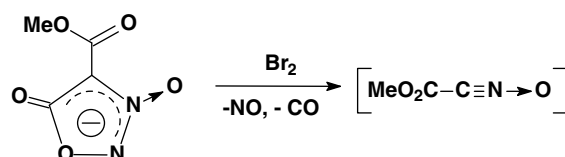
Helena Kaper, Markus Antonietti, Frédéric Goettmann *



Halide ions associated to soft cations proved able to promote the aromatisation of Diels–Alder adducts by attacking activated CC double bonds.

**Decarboxylation and ring fragmentation reactions of sydnone N-oxides** pp 4550–4552

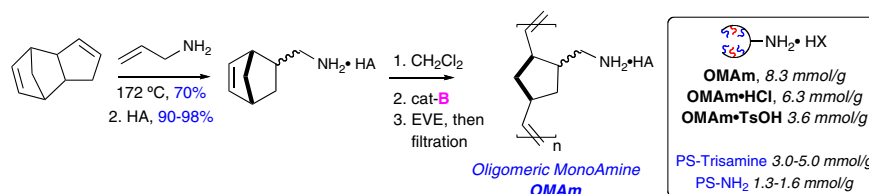
D. Scott Bohle *, Yoshihiro Ishihara, Inna Perepichka, Lijuan Zhang *



Electrophiles add to methyl ester of sydnone N-oxides give either a decarboxylated bisbenzylated sydnone, in the case of benzylbromide, or ring cleavage in the case of bromine to give a nitrile N-oxide.

**High-load, oligomeric monoamine hydrochloride: facile generation via ROM polymerization and application as an electrophile scavenger** pp 4553–4555

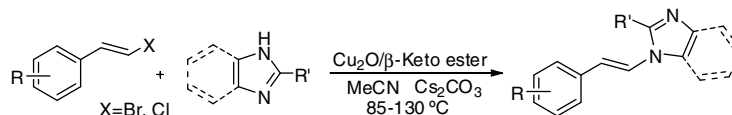
Diana S. Stoianova, Lei Yao, Alan Rolfe, Thiwanka Samarakoon, Paul R. Hanson *

A new high-load, oligomeric monoamine hydrochloride (OMAm-HCl) is reported as an effective scavenger of acid chlorides, sulfonyl chlorides, and isocyanates. The scavenger is synthesized in a straightforward protocol from the Diels–Alder reaction of dicyclopentadiene (DCPD) **1** with allylamine (neat) and subsequent ROM polymerization of the protected monomeric ammonium salt to afford the desired oligomeric ammonium salts in good yield.

Cu₂O-catalyzed Ullmann-type reaction of vinyl bromides with imidazole and benzimidazole

pp 4556–4559

Guodong Shen, Xin Lv, Weixing Qian, Weiliang Bao *

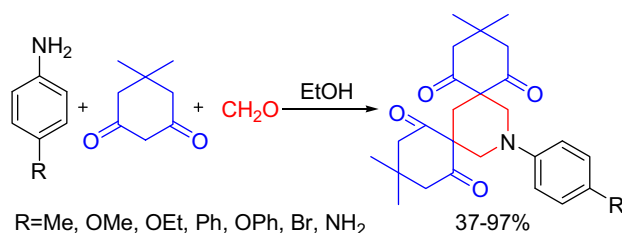


Cu₂O was found to be an efficient and economical metal catalyst in the Ullmann cross-coupling reaction of vinyl bromides with imidazole or benzimidazole. It showed high catalytic activity with the ligand ethyl 2-oxocyclohexanecarboxylate in MeCN at 80–90 °C and gave the corresponding products in good to excellent yields. The double bond geometry of the vinyl bromides was retained under the reaction condition.

A novel three-component reaction of anilines, formaldehyde and dimedone: simple synthesis of spirosubstituted piperidines

pp 4560–4562

Nikolas G. Kozlov, Aliaksei P. Kadutskii *



A novel three-component reaction of anilines, dimedone and formaldehyde is shown to provide a simple synthetic route to 3,5-dispirosubstituted piperidines.

*Corresponding author

Supplementary data available via ScienceDirect

Available online at www.sciencedirect.com

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