



Tetrahedron Vol. 66, Issue 23, 2010

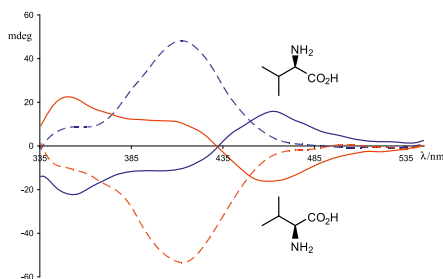
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ARTICLES

Enantioselective CD analysis of amino acids based on chiral amplification with a stereodynamic probe

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Marwan W. Ghosn, Christian Wolf*

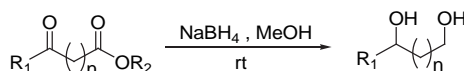


Stereodynamic 1,8-bis(3'-formyl-4'-hydroxyphenyl)naphthalene, **1**, reacts with two amino acid molecules to a rigid chiral diimine scaffold showing distinctive Cotton effects. In situ CD analysis of the reaction mixture provides information on the enantiomeric excess and the absolute configuration of the substrate.

**Reduction of aromatic and aliphatic keto esters using sodium borohydride/MeOH at room temperature: a thorough investigation**

pp 3995–4001

Juryoung Kim, Kathlia A. De Castro, Minkyung Lim, Hakjune Rhee*



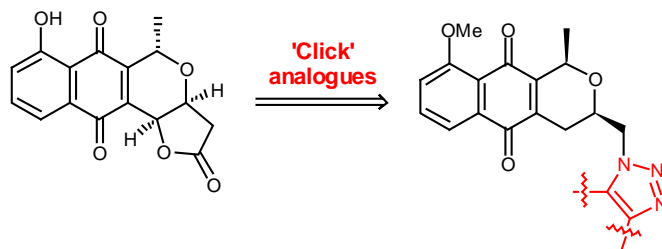
$n = 0, 1, 2, 3$
 $\text{R}_1 =$ substituted alkyl or aryl
 $\text{R}_2 = \text{Me or Et}$



Synthesis of triazole analogues of the nanaomycin antibiotics using 'click chemistry'

pp 4002–4009

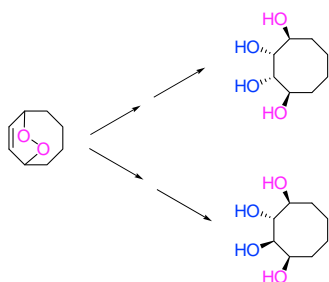
Kris Rathwell, Jonathan Sperry, Margaret A. Brimble*



A concise and stereospecific synthesis of some cyclitols containing eight-membered rings: cyclooctane-1,2,3,4-tetraols

pp 4010–4015

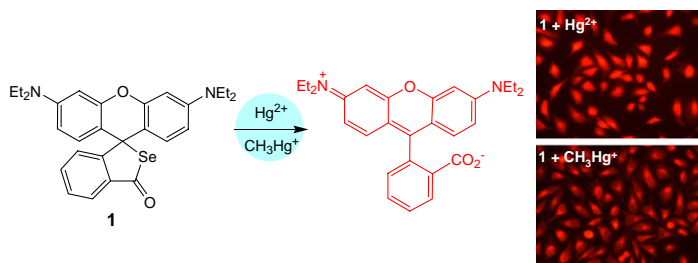
Emine Salamci*



A selenolactone-based fluorescent chemodosimeter to monitor mercury/methylmercury species in vitro and in vivo

pp 4016–4021

Xiaoqiang Chen, Kyung-Hwa Baek, Youngmee Kim, Sung-Jin Kim, Injae Shin*, Juyoung Yoon*



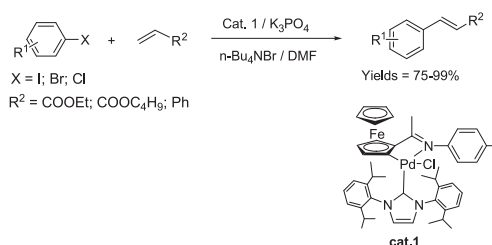
A fluorescent probe based on selenolactone displays fluorescence enhancement and UV-vis spectral change for mercury/methylmercury species and is applied to detect the species in vivo.



Study on the Heck reaction promoted by carbene adduct of cyclopalladated ferrocenylimine and the related reaction mechanism

pp 4022–4028

Gerui Ren, Xiuling Cui, Erbing Yang, Fan Yang, Yangjie Wu*



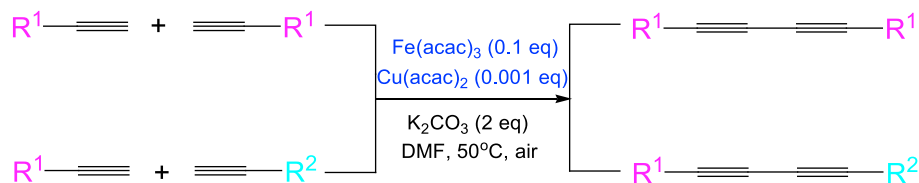
On the basis of kinetic studies, in situ ^{13}C NMR spectra investigations and Hg poisoning experiments, it was proposed that the Heck reaction catalyzed by carbene adduct of cyclopalladated ferrocenylimine proceeded through a classical Pd(0)/Pd(II) cycle and the palladacycle was only a reservoir of the catalytically active Pd(0) species.



Iron/copper promoted oxidative homo-coupling reaction of terminal alkynes using air as the oxidant

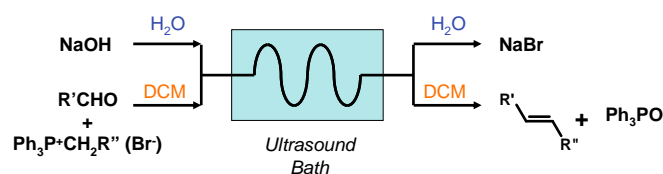
pp 4029–4031

Xu Meng, Chuanbin Li, Baochun Han, Tiansheng Wang, Baohua Chen*

R¹, R²= aromatic, aliphatic and heterocyclic acetylenes**Effect of phase transfer chemistry, segmented fluid flow, and sonication on the synthesis of cinnamic esters**

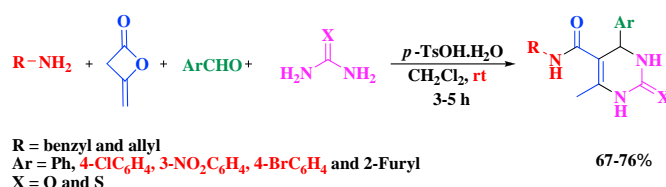
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Mauro Riccaboni*, Elena La Porta, Andrea Martorana, Roberta Attanasio

**Diketene as an alternative substrate for a new Biginelli-like multicomponent reaction: one-pot synthesis of 5-carboxamide substituted 3,4-dihydropyrimidine-2(1H)ones**

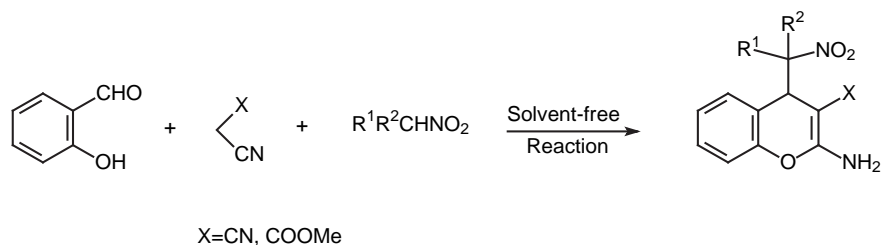
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Ahmad Shaabani*, Mozhdeh Seyyedhamzeh, Ali Maleki, Fatemeh Hajishaabanha

**Solvent-free cascade reaction: direct multicomponent assembling of 2-amino-4H-chromene scaffold from salicylaldehyde, malononitrile or cyanoacetate and nitroalkanes**

pp 4043–4048

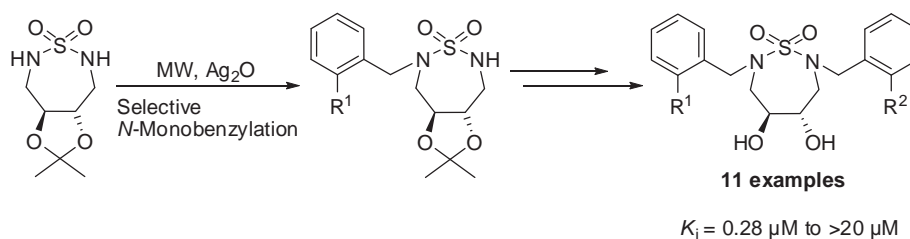
Michail N. Elinson*, Alexey I. Ilovaisky, Valentina M. Merkulova, Pavel A. Belyakov, Alexander O. Chizhov, Gennady I. Nikishin



Synthesis of a small library of non-symmetric cyclic sulfamide HIV-1 protease inhibitors

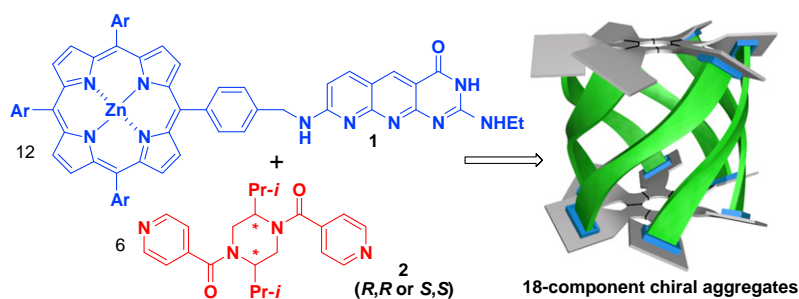
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Anna Ax, Advait A. Joshi, Kristina M. Orrling, Lotta Vrang, Bertil Samuelsson, Anders Hallberg, Anders Karlén, Mats Larhed*

**Chiral eighteen-component three-dimensional supramolecular entities stabilized by the hydrogen bonding and coordination interactions**

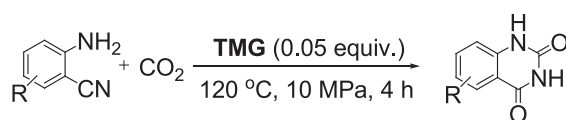
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Shi-Gui Chen, Yong-Chun Fu, Gui-Tao Wang, Guang-Yu Li, Yuguo Ma*, Xi-Kui Jiang, Zhan-Ting Li*

**Chemical fixation of CO₂: efficient synthesis of quinazoline-2,4(1H, 3H)-diones catalyzed by guanidines under solvent-free conditions**

pp 4063–4067

Jian Gao, Liang-Nian He*, Cheng-Xia Miao, Sébastien Chanfreau



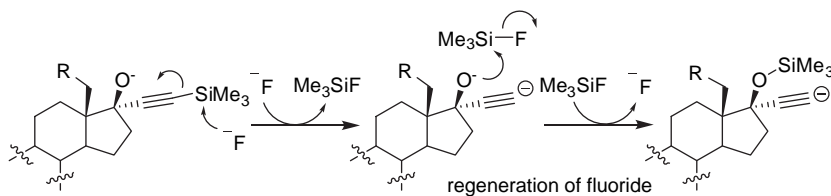
R=H, F, Cl, Br, OMe

60–95% Yield

**One-pot ethynylation and catalytic desilylation in synthesis of mestranol and levonorgestrel**

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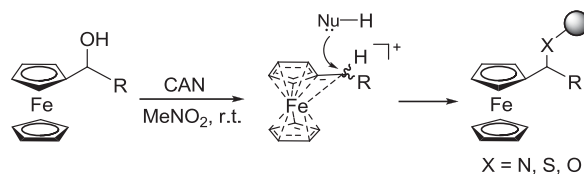
Fung Fuh Wong*, Shih Hsien Chuang, Sheng-chuan Yang, Yu-Hsiang Lin, Wen-Che Tseng, Shao-Kai Lin, Jiann-Jyh Huang*



Nucleophilic substitution of ferrocenyl alcohols by cerium ammonium nitrate: C–N, C–S, and C–O bonds formation

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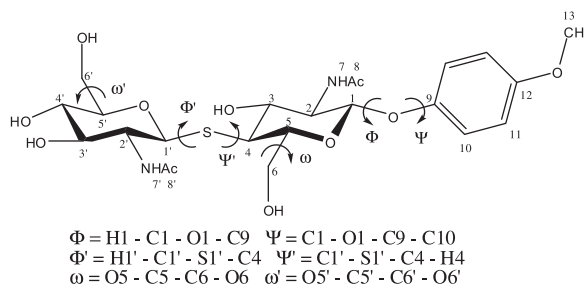
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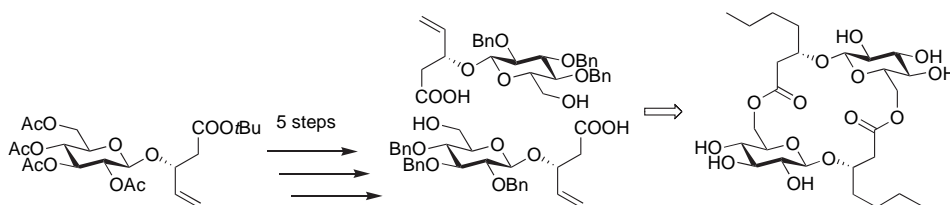
Anja Fettke, Markus Kramer, Erich Kleinpeter*



Efficient synthesis of the functional central core lactides, a constituent of antibiotic fattviracins

pp 4089–4100

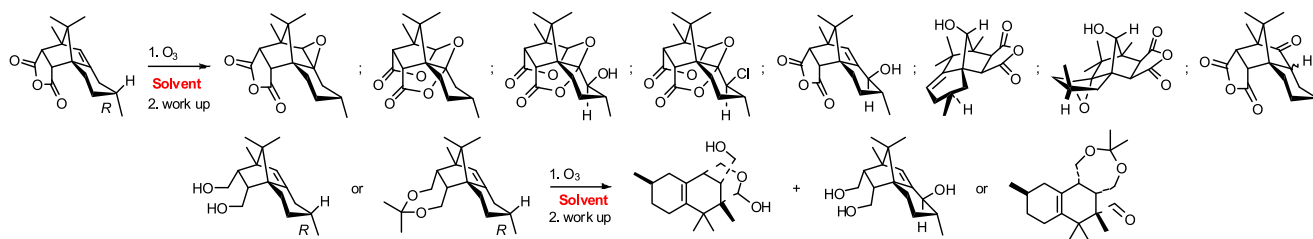
Eisuke Kaji*, Teruaki Komori, Masaki Yokoyama, Tomomi Kato, Takashi Nishino, Tatsuya Shirahata



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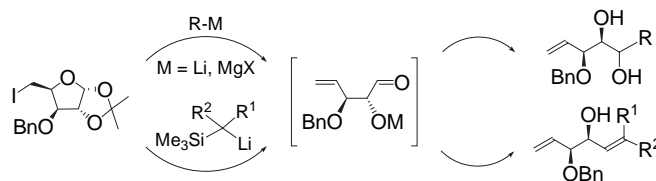
Céline Reynaud, Michel Giorgi, Henri Doucet*, Maurice Santelli*



Domino reactions of 5-deoxy-5-iodo-D-xylo- and -L-arabinofuranose derivatives with organometallic reagents. A way towards polyfunctionalized building-blocks

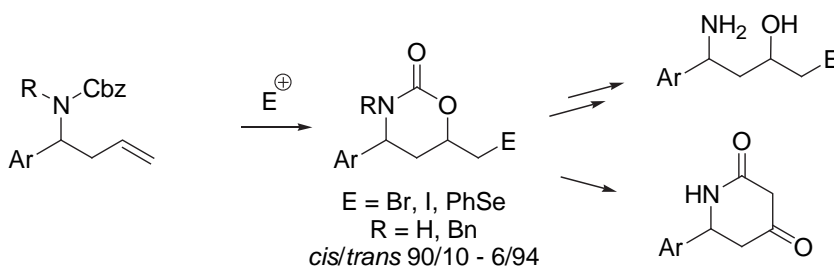
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Ariane Bercier, Richard Plantier-Royon*, Charles Portella*


Diastereoselective synthesis of 6-functionalized 4-aryl-1,3-oxazinan-2-ones and their application in the synthesis of 3-aryl-1,3-aminoalcohols and 6-arylpiperidine-2,4-diones

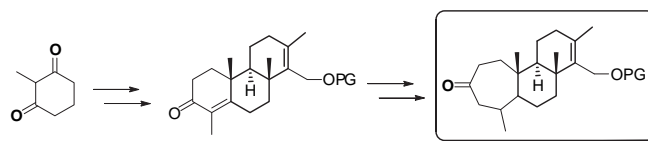
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Sven Mangelinckx, Yahya Nural, H. Ali Dondas, Bram Denolf, Reijo Sillanpää, Norbert De Kimpe*


Synthesis of the western half of breviones C, D, F and G

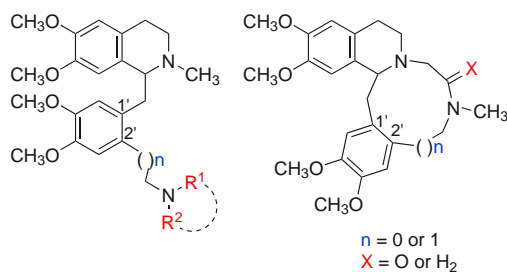
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Francisco A. Macías*, Ceferino Carrera, Nuria Chinchilla, Frank R. Fronczek, Juan C.G. Galindo


Synthesis of 2'-aminoalkyl-1-benzylisoquinoline derivatives and medium sized ring analogues with mu opioid receptor binding activities

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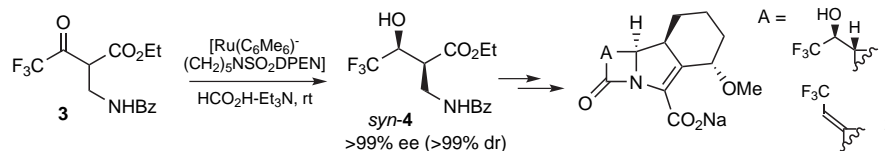
Uta Mbere-Nguyen, Alison T. Ung*, Stephen G. Pyne*



Stereoselective synthesis of fluorine-containing analogues of anti-bacterial sanfetrinem and LK-157

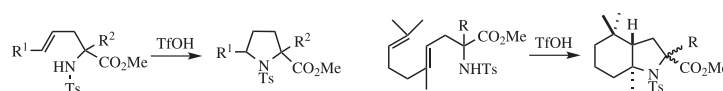
pp 4144–4149

Barbara Mohar*, Michel Stephan, Uroš Urleb

**Carbenium ion trapping using sulfonamides: an acid-catalysed synthesis of pyrrolidines by intramolecular hydroamination**

pp 4150–4166

Charlotte M. Griffiths-Jones (née Haskins), David W. Knight*

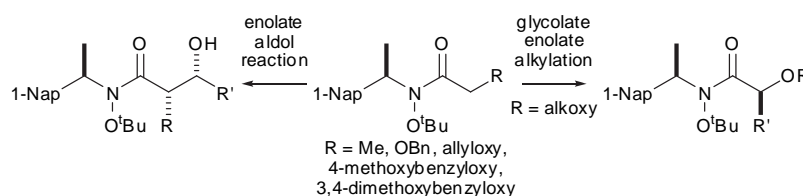


Cyclisations of homoallylic sulfonamides, both tosyl and nosyl, proceed smoothly via carbenium ion generation using trifluoromethanesulfonic (triflic) acid, the ease of cyclisation being directly related to the ion stability, to give good to excellent yields of the corresponding pyrrolidines. Polyene-derived sulfonamides can also be cyclised to the corresponding polycyclic systems in remarkably efficient cascade reactions.

Alkylation and aldol reactions of acyl derivatives of *N*-1-(1'-naphthyl)ethyl-*O*-*tert*-butylhydroxylamine: asymmetric synthesis of α -alkoxy-, α -substituted- β -alkoxy- and α,β -dialkoxyaldehydes

pp 4167–4194

Alexander N. Chernega, Stephen G. Davies*, Ai M. Fletcher, Christopher J. Goodwin, David Hepworth, R. Shyam Prasad, Paul M. Roberts, Edward D. Savory, Andrew D. Smith, James E. Thomson

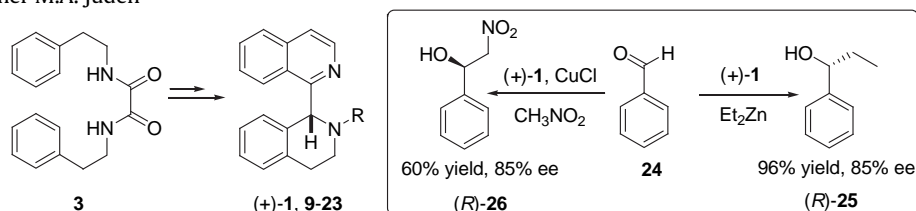


Alkylation or aldol reactions of enolates of acyl derivatives of the chiral auxiliary *N*-1-(1'-naphthyl)ethyl-*O*-*tert*-butylhydroxylamine proceed with high levels of diastereoselectivity. Subsequent reductive cleavage with LiAlH_4 gives access to enantiopure α -alkoxy-, α -substituted- β -alkoxy- and α,β -dialkoxyaldehydes.

Novel chiral C_1 -1',2',3',4'-tetrahydro-1,1'-bisoquinolines: synthesis, resolution, and applications in catalytic enantioselective reactions

pp 4195–4205

Gao Qi, Yao Qiong Ji, Zaher M.A. Judeh*



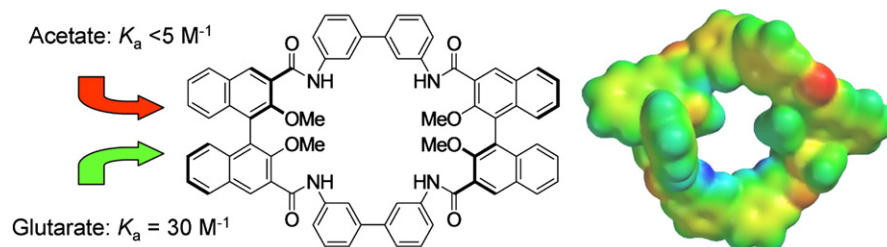
The structurally constrained C_1 -1',2',3',4'-tetrahydro-1,1'-bisoquinoline (+)-**1** was synthesized and resolved. Various derivatives were prepared from (+)-**1**. Application of (+)-**1** in asymmetric C–C bond forming reactions gave very good enantioselectivity and yield in either the addition of Et_2Zn (85% ee, 96% yield) or CH_3NO_2 (85% ee, 60% yield) to benzaldehyde.



Shape selectivity in the synthesis of chiral macrocyclic amides

pp 4206–4211

Stefano Colombo, Carmine Coluccini, Marco Caricato, Claudia Gargiulli, Giuseppe Gattuso*, Dario Pasini*

**Rhodium-catalyzed synthesis of γ -butyrolactams and pyrrolidines via cycloisomerization of *N*-tethered 1,6-enynes**

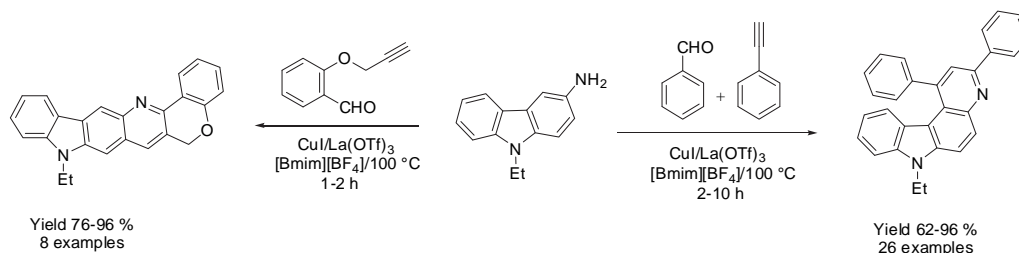
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Jianping Wang, Xiaomin Xie, Fangfang Ma, Zhiyong Peng, Lei Zhang, Zhaoguo Zhang*

**Cu/La(OTf)₃ catalyzed, one-pot synthesis of isomeric ellipticine derivatives in ionic liquid**

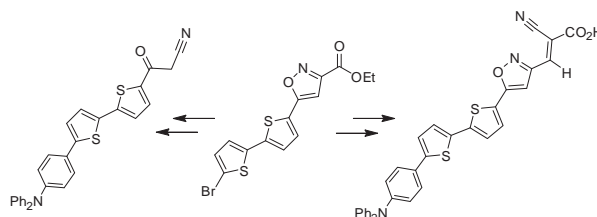
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Vikram Gaddam, Subburethinam Ramesh, Rajagopal Nagarajan*

**Donor–acceptor organic sensitizers assembled with isoxazole or its derivative 3-oxopropanenitrile**

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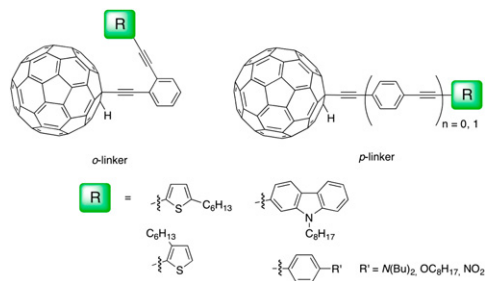
Yi-Tsung Li, Chao-Ling Chen, Yu-Yen Hsu, Hui-Chu Hsu, Yun Chi*, Bo-So Chen, Wei-Hsin Liu, Cheng-Hsuan Lai, Tsung-Yi Lin, Pi-Tai Chou*



Synthesis, characterization and DFT calculations of new ethynyl-bridged C₆₀ derivatives

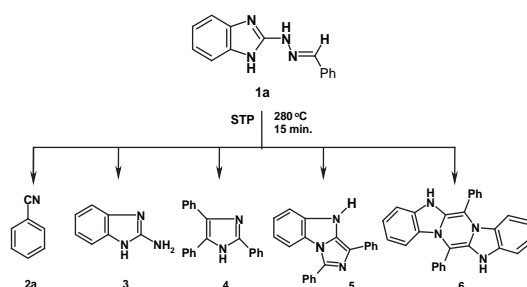
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Simon Rondeau-Gagné, Carles Curutchet, François Grenier, Gregory D. Scholes, Jean-François Morin*

**Gas-phase pyrolysis of benzimidazole derivatives: novel route to condensed heterocycles**

pp 4243–4250

Maher R. Ibrahim, Talal F. Al-Azemi, Alya Al-Etabi, Osman M.E. El-Dusouqui*, Nouria A. Al-Awadi



*Corresponding author

Supplementary data available via ScienceDirect



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