



Tetrahedron Vol. 66, Issue 12, 2010

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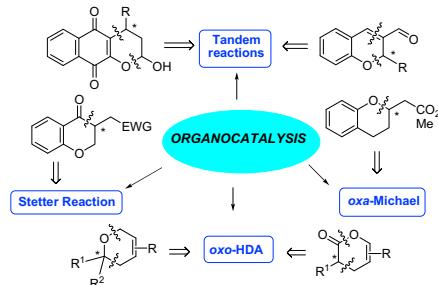
## REPORT

**Asymmetric organocatalytic synthesis of six-membered oxygenated heterocycles**

Marta G. Núñez, Pilar García, Rosalina F. Moro, David Díez\*

pp 2089–2109

This work reviews a number of methods that make use of organocatalysis to enantioselectively synthesize six-membered oxygen-containing heterocycles that have appeared in the literature over the last few years. An overview of the most important developments in this area organized by the main transformations leading to the oxygenated heterocycles is reported. The scope and limitations of these reactions will be highlighted.

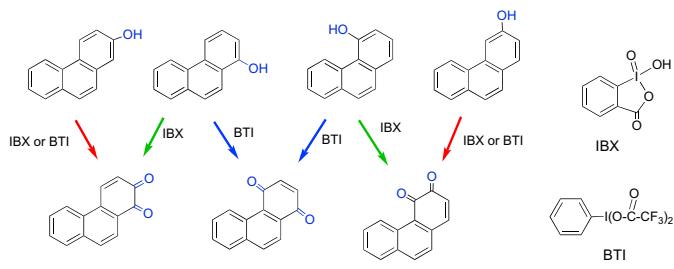


## ARTICLES

**Regiospecific oxidation of polycyclic aromatic phenols to quinones by hypervalent iodine reagents**

Anhui Wu, Yazhen Duan, Daiwang Xu, Trevor M. Penning, Ronald G. Harvey\*

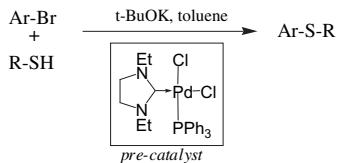
pp 2111–2118



**C–S bond formation catalyzed by *N*-heterocyclic carbene palladium phosphine complexes**

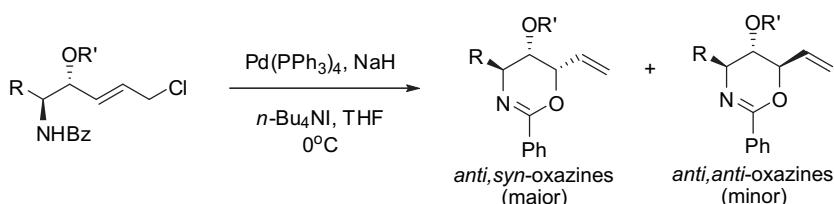
Ching-Feng Fu, Yi-Hung Liu, Shei-Ming Peng, Shiu-Tzung Liu\*

pp 2119–2122

**Stereoselective intramolecular cyclization of  $\gamma$ -allylbenzamide via  $\pi$ -allylpalladium complex catalyzed by Pd(0)**

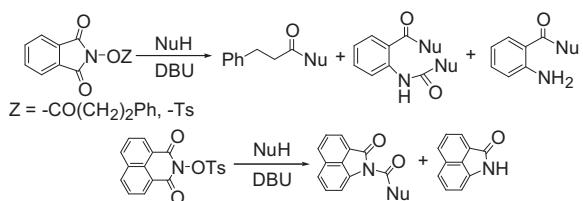
Van-Thoai Pham, Jae-Eun Joo, Kee-Young Lee, Tai-Won Kim, Yu Mu, Won-Hun Ham\*

pp 2123–2131

**Studies on the Lossen-type rearrangement of *N*-(3-phenylpropionyloxy) phthalimide and *N*-tosyloxy derivatives with several nucleophiles**

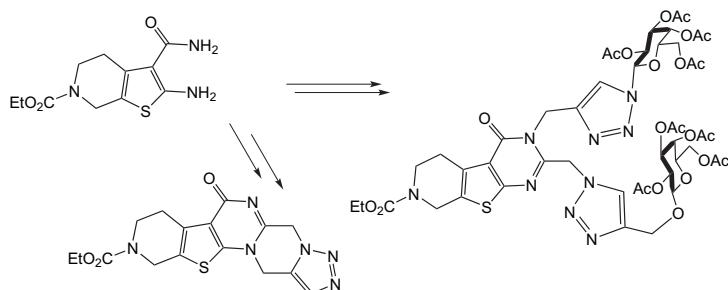
Md. Chanmiya Sheikh\*, Shunsuke Takagi, Asako Ogasawara, Masayuki Ohira, Ryuta Miyatake, Hitoshi Abe, Toshiaki Yoshimura, Hiroyuki Morita

pp 2132–2140

**A convenient method for constructing novel tetrahydropyrido[4',3':4,5]thieno[2,3-*d*]-pyrimidinones-carbohydrate and amino acid conjugates via copper(I)-catalyzed alkyne-azide ‘Click Chemistry’**

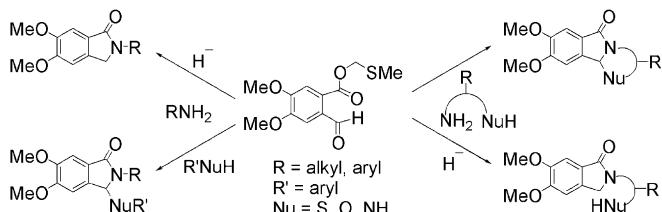
Mohamed A. Ameen, Sebastian Karsten, Jürgen Liebscher\*

pp 2141–2147



**Mild and efficient syntheses of diverse isoindolinones from *ortho*-phthaldehydic acid methylthiomethyl ester**  
Usha Ghosh\*, Rituparna Bhattacharyya, Ashish Keche

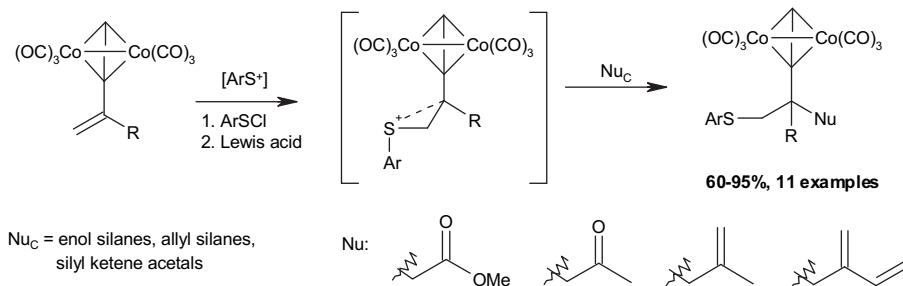
pp 2148–2155



**A novel approach towards the preparation of functionalized alkyne derivatives via ArS-mediated  $\text{Ad}_E$  reaction of cobaltcarbonyl complexed conjugated enynes**

pp 2156–2161

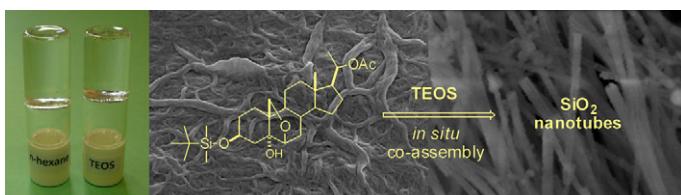
Vasily V. Tumanov\*, Georgy V. Zatonsky, William A. Smit



**Self-assembly of a silylated steroid-based organogelator and its use as template for the in situ sol-gel polymerization of tetraethyl orthosilicate**

pp 2162–2167

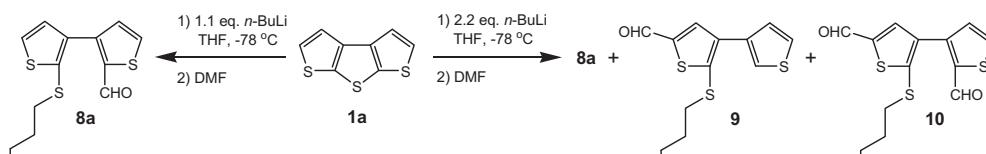
Valeria C. Edelsztein, Gerardo Burton, Pablo H. Di Chenna\*



**The preparation of substituted bithiophenyl aldehydes via the ring opening of dithieno[2,3-*b*:3',2'-*d*]-thiophene in the presence of *n*-BuLi**

pp 2168–2174

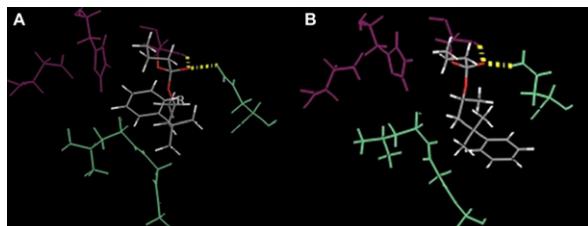
Zhen Wang, Chunmei Zhao, Dongfeng Zhao, Chunli Li, Junli Zhang, Hua Wang\*



**Enantioselective transesterification catalysis by nanosized serine protease subtilisin Carlsberg particles in tetrahydrofuran**

pp 2175–2180

Betzaida Castillo, Yamixa Delgado, Gabriel Barletta, Kai Griebenow\*

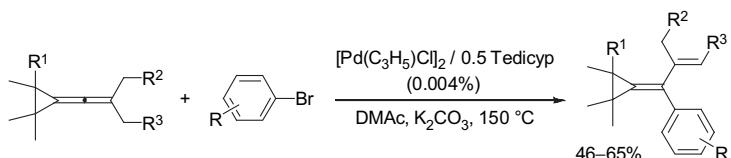


Modeling of the tetrahedral intermediates of (R)-A and (S)-B 4-methyl-4-phenyl-2-pentanol in the active site of subtilisin Carlsberg reveals the reason for high enantioselectivity ( $E=240$ ).

**Arylation of alkenylenecyclopropanes via Heck reaction. A simple access to arylallylenecyclopropanes**

pp 2181–2188

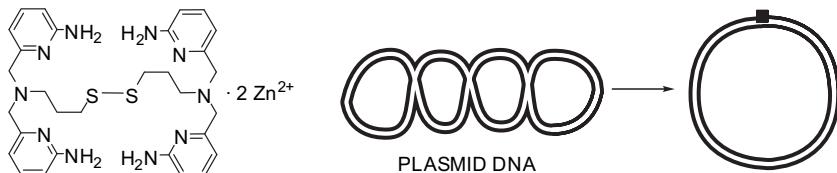
Yacoub Fall, Henri Doucet\*, Maurice Santelli\*



**Phosphate diesters and DNA hydrolysis by dinuclear Zn(II) complexes featuring a disulfide bridge and H-bond donors**

pp 2189–2195

Valentina Lombardo, Renato Bonomi, Claudia Sissi\*, Fabrizio Mancin\*

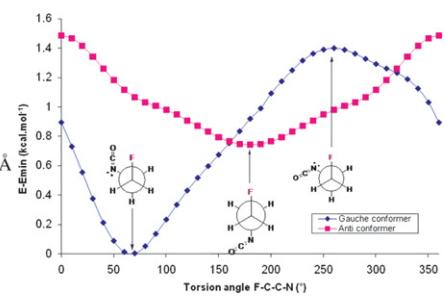
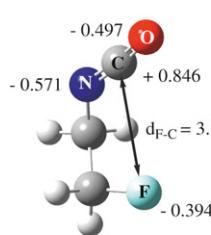


**A DFT study on the origin of the fluorine *gauche* effect in substituted fluoroethanes**

pp 2196–2202

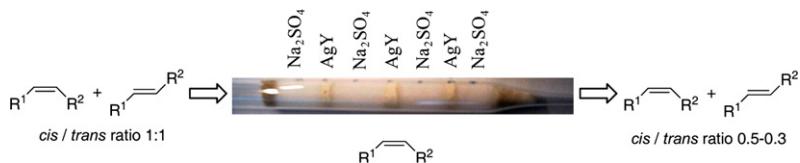
David Y. Buissonneau, Tanja van Mourik, David O'Hagan\*

DFT derived conformational energy profiles of a series of 2-substituted fluoroethanes ( $\text{F}-\text{CH}_2\text{CH}_2-\text{X}$ ) have been explored relative to 1,2-difluoroethane, a compound which exhibits a *gauche* preference. Steric, electrostatic and NBO interactions were explored. In the event the *gauche* preference for 1,2-difluoroethane is largely hyperconjugative in origin, whereas the conformational preference for the remaining structures is most reasonably explained as a balance between hyperconjugative, steric and electrostatic effects.



**Separation of cis/trans geometrical fatty acid isomers by silver-exchanged zeolite Y**  
Ioannis N. Lykakis\*, Carla Ferreri, Stanislav A. Grabovskiy, Chrysostomos Chatgilialoglu\*

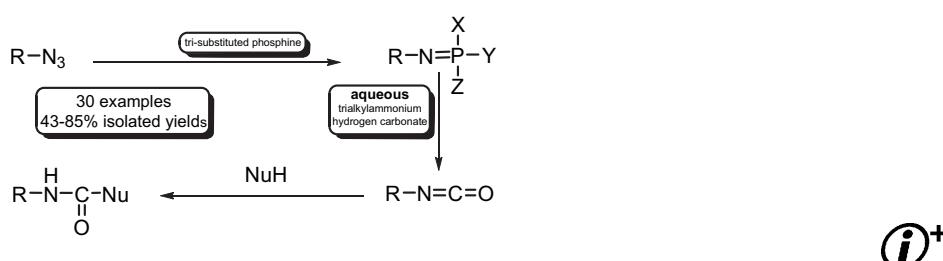
pp 2203–2209



**Straightforward carbamoylation of nucleophilic compounds employing organic azides, phosphines, and aqueous trialkylammonium hydrogen carbonate**

Andrey Yagodkin, Kerstin Löschcke, Janne Weisell, Alex Azhayev\*

pp 2210–2221

**OTHER CONTENT****Corrigendum**

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\*Corresponding author

(i)<sup>+</sup> Supplementary data available via ScienceDirect

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