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Organic & Biomolecular Chemistry

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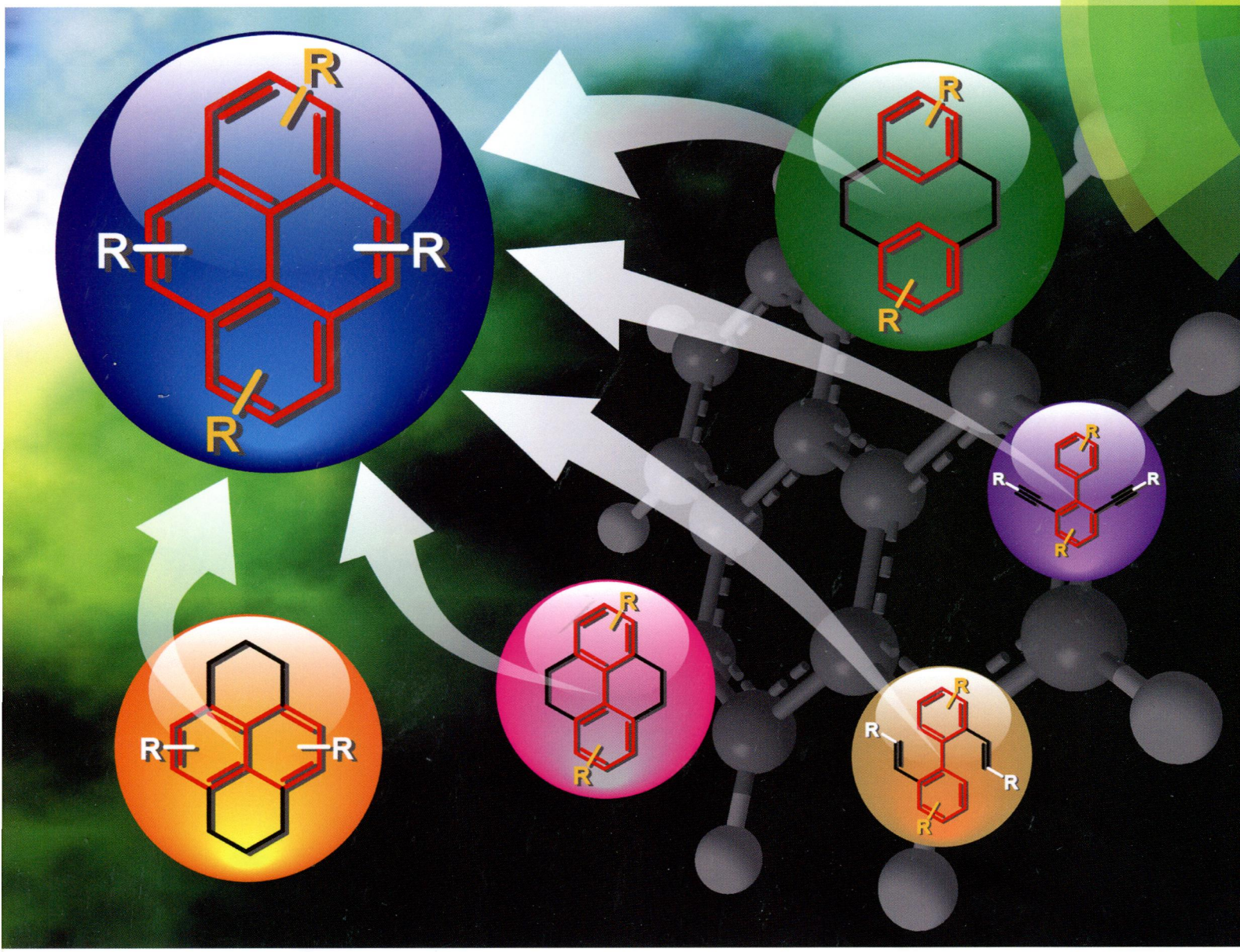

ISSN 1477-0520

ROYAL SOCIETY OF CHEMISTRY

REVIEW ARTICLE
Anthony P. Davis *et al.*
Synthesis of substituted pyrenes by indirect methods

Organic & Biomolecular Chemistry

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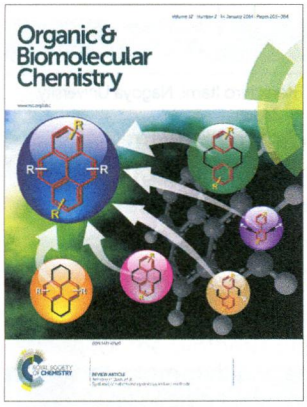

Cover

See Anthony P. Davis *et al.*, pp. 212–232.

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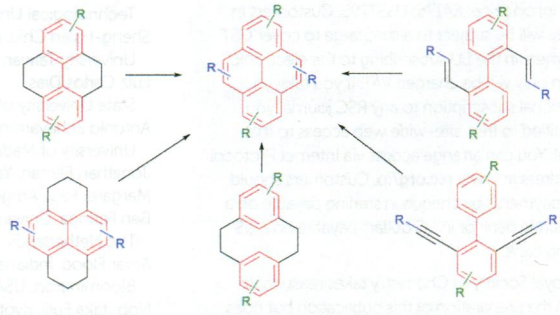
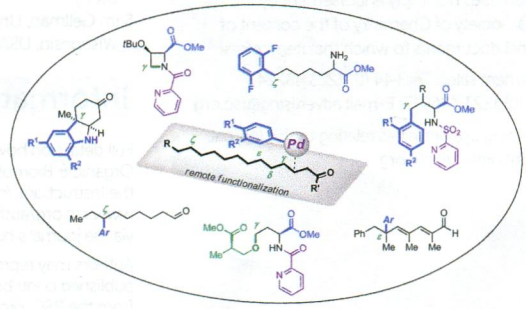
REVIEWS





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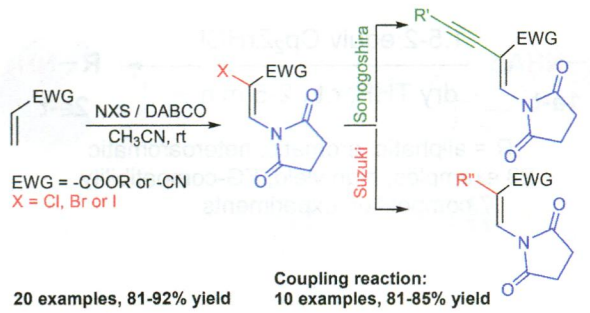
Metal free stereoselective synthesis of functionalized enamides

Ali Mohd Lone and Bilal Ahmad Bhat*

An efficient and expeditious DABCO-mediated synthesis of functionalized enamides from alkenes is delineated.



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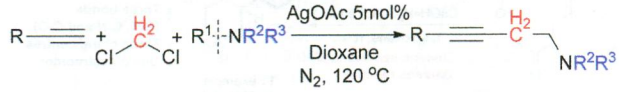
Efficient synthesis of propargylamines from terminal alkynes, dichloromethane and tertiary amines over silver catalysts

Xiuling Chen, Tieqiao Chen, Yongbo Zhou,* Chak-Tong Au, Li-Biao Han and Shuang-Feng Yin*

A simple, efficient and highly functional group compatible method for the synthesis of propargylamines from terminal alkynes, dichloromethane and tertiary amines using silver catalysts has been developed without the use of an external base, a co-catalyst or an additive.



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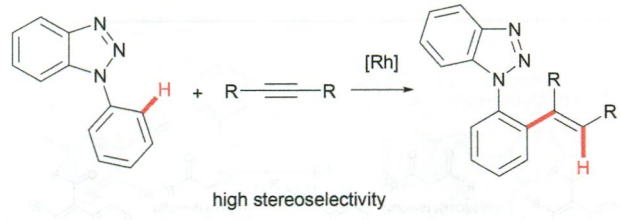
Rhodium-catalyzed intermolecular hydroarylation of internal alkynes with *N*-1-phenylbenzotriazoles

Wang Zhou,* Youqing Yang, Zhiwei Wang and Guo-Jun Deng

A rhodium-catalyzed intermolecular hydroarylation of internal alkynes with *N*-1-phenylbenzotriazoles *via* C–H bond activation is described.



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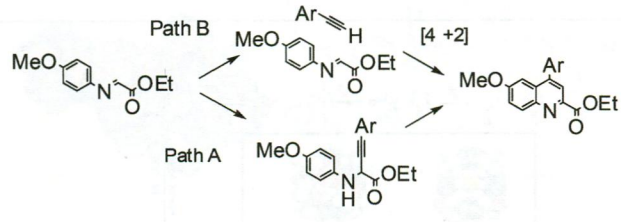
Synthesis and anti-toxoplasmosis activity of 4-arylquinoline-2-carboxylate derivatives

James McNulty,* Ramesh Vemula, Claudia Bordón, Robert Yolken and Lorraine Jones-Brando

Formation of biologically active isoquinoline-2-carboxylates proceeds by way of distinct Bronsted and Lewis acid mediated pathways.



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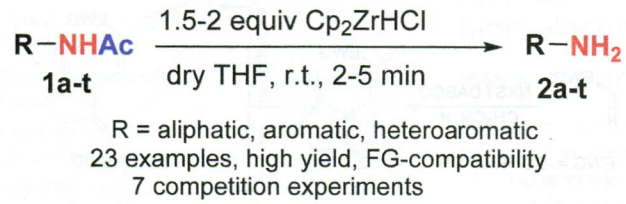

Chemoselective N-deacetylation under mild conditions

Prakash R. Sultane, Trimbak B. Mete and Ramakrishna G. Bhat*

A mild and efficient chemoselective N-deacetylation using the Schwartz reagent at room temperature in rapid time is described.

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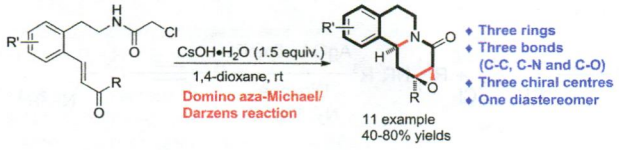

Diastereoselective synthesis of epoxide-fused benzoquinolizidine derivatives using intramolecular domino aza-Michael addition/ Darzens reaction

Jiajia Guo, Xiaoyang Sun and Shouyun Yu*

An efficient and diastereoselective strategy based on an intramolecular domino aza-Michael/Darzens reaction to synthesize epoxide-fused benzoquinolizidines has been described.

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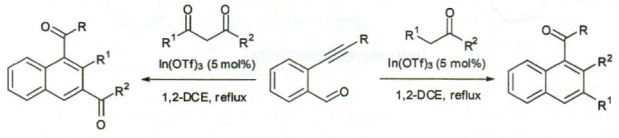

Indium(III) triflate-catalysed [4 + 2] benzannulation reactions of *o*-alkynylbenzaldehydes with enolisable carbonyl compounds: selective synthesis of naphthyl ketones

Karuppusamy Sakthivel and Kannupal Srinivasan*

The [4 + 2] benzannulation reaction of *o*-alkynylbenzaldehydes with enolisable carbonyl compounds in the presence of indium(III) triflate afforded naphthyl ketones selectively.

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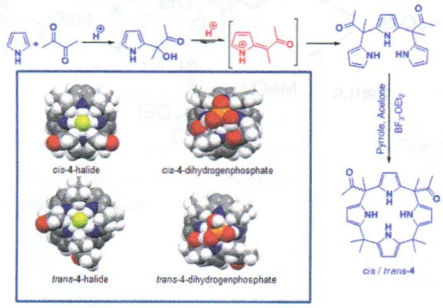
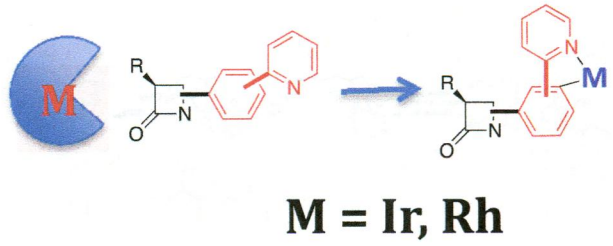
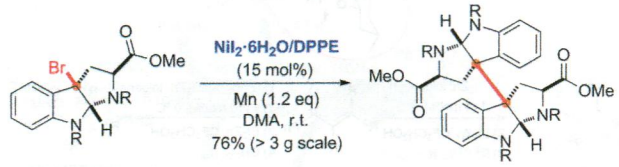


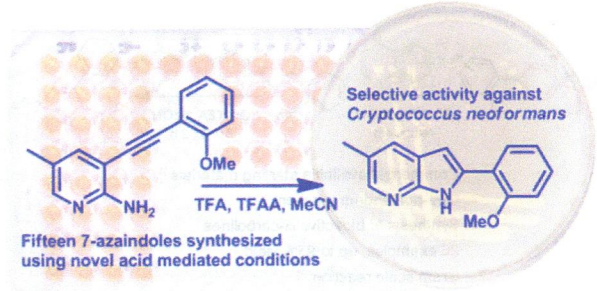
5,10-Diacylcalix[4]pyrroles: synthesis and anion binding studies

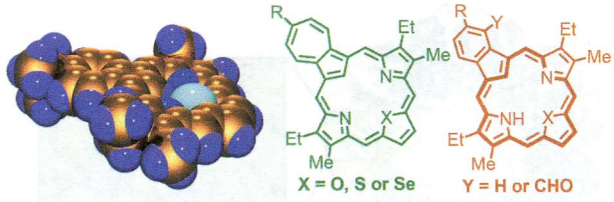
Sanjeev P. Mahanta and Pradeepta K. Panda*

5,10-Diacylcalix[4]pyrrole, a new positional isomer of the recently reported 5,15-diacylcalix[4]pyrrole, is synthesized as its two configurational isomers by acid catalysed condensation of *meso*-diacyltripyrrane with pyrrole.









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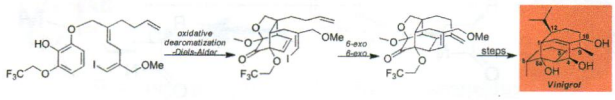

Evolution of an oxidative dearomatization enabled total synthesis of vinigrol

Qingliang Yang, Cristian Draghici, Jon T. Njardarson,* Fang Li, Brandon R. Smith and Pradipta Das

The evolution of the synthetic strategy resulting in a total synthesis of vinigrol is presented.

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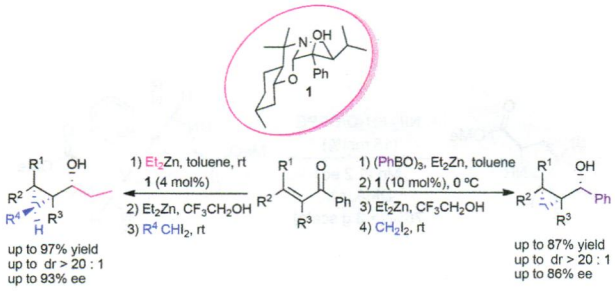

Tandem diastereo- and enantioselective preparation of aryl and alkyl cyclopropyl carbinols with three adjacent stereocenters using perhydrobenzoxazines and diethylzinc

Rebeca Infante, Javier Nieto* and Celia Andrés*

The enantio- and diastereoselective one-pot ethylation/cyclopropanation is efficiently promoted by a chiral perhydrobenzoxazine.

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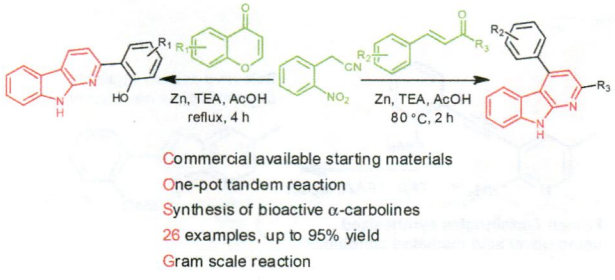

Rapid access to α-carbolines *via* a one-pot tandem reaction of α,β-unsaturated ketones with 2-nitrophenylacetonitrile and the anti-proliferative activities of the products

Xiaofei Zhang, Qian He, Haoyue Xiang, Shanshan Song, Zehong Miao* and Chunhao Yang*

A simple, rapid and practical method for the synthesis of 2 or 2,4-substituted α-carbolines *via* a one-pot tandem reaction was developed.

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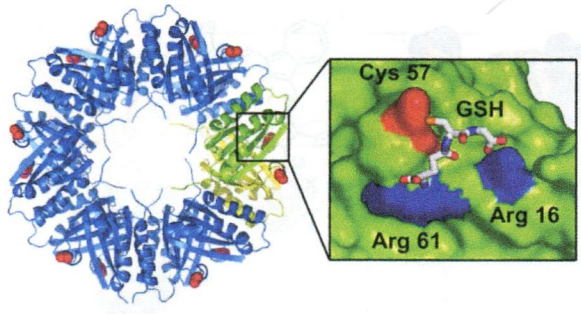

Construction of a highly stable artificial glutathione peroxidase on a protein nanoring

Lu Miao, Xiyu Zhang, Chengye Si, Yuzhou Gao, Linlu Zhao, Chunxi Hou, Oded Shoseyov, Quan Luo* and Junqiu Liu*

Multi-GPx activity centers are constructed on a SP1 nanoring. This artificial biomacromolecule displays high GPx-like activity and shows high thermostability that can resist extremely high temperatures in practical catalysis.

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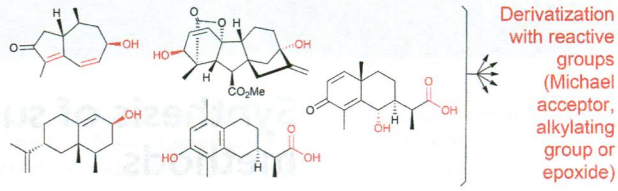
Synthesis of sesquiterpene-inspired derivatives designed for covalent binding and their inhibition of the NF-κB pathway

Vincent Duplan, Christelle Serba, Jose Garcia, Gaëlle Valot, Sofia Barluenga, Mélanie Hoerlé, Muriel Cuendet and Nicolas Winssinger*

Following the lead from Nature, a library containing mildly reactive functionalities was synthesized and screened.



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Regioselective one-pot protection, protection–glycosylation and protection–glycosylation–glycosylation of carbohydrates: a case study with D-glucose

Teng-Yi Huang, Medel Manuel L. Zulueta and Shang-Cheng Hung*

One-pot regioselective protection of a thioglucoside provided donors or acceptors *in situ* for further glycosylations generating disaccharide and trisaccharide skeletons.