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Vol. 55 • Issue 16 • 16 April 2014 • ISSN 0040-4039

Tetrahedron Letters

THE INTERNATIONAL JOURNAL FOR THE RAPID PUBLICATION OF ALL
PRELIMINARY COMMUNICATIONS IN ORGANIC CHEMISTRY

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Tetrahedron Letters Vol. 55, Issue 16, 2014

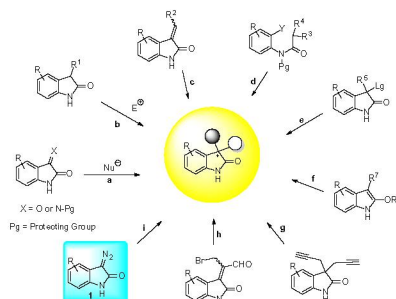
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Catalytic asymmetric synthesis of 3,3-disubstituted oxindoles: diazooxindole joins the field

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Zhong-Yan Cao, Yu-Hui Wang, Xing-Ping Zeng, Jian Zhou*

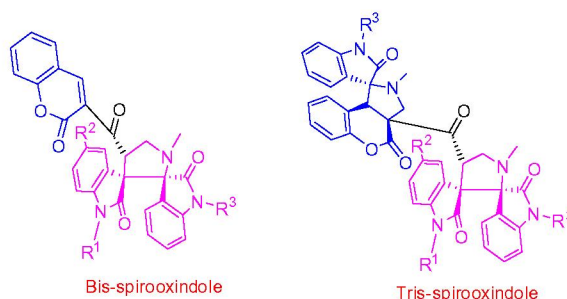


The catalytic asymmetric synthesis of 3,3-disubstituted oxindoles, a big family of privileged scaffolds in natural products and drugs, is of current interest. Recently, the catalytic asymmetric functionalization of diazooxindoles emerges as a potentially general and flexible strategy for this purpose, with several notable examples coming out in 2013. In this digest, synthetic applications of diazooxindoles have been summarized and discussed, which might be helpful for readers to understand the special properties of this type of donor/acceptor cyclic diazo reagent and to develop new catalytic asymmetric reactions.

Stoichiometry-controlled cycloaddition of azomethine ylide with dipolarophiles: chemoselective and regioselective synthesis of bis- and tris-spirooxindole derivatives

pp 2585–2588

Srinu Lanka, Sathiah Thennarasu*, Paramasivan T. Perumal*



1,4-Zwitterionic intermediates formed by cleavage of a cyclobutane ring and their cycloaddition reactions

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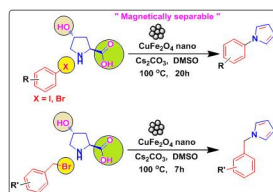
Jun-ichi Matsuo*



COMMUNICATIONS

An elegant protocol for the synthesis of N-substituted pyrroles through C–N cross coupling/aromatization process using CuFe_2O_4 nanoparticles as catalyst under ligand-free conditions pp 2596–2599

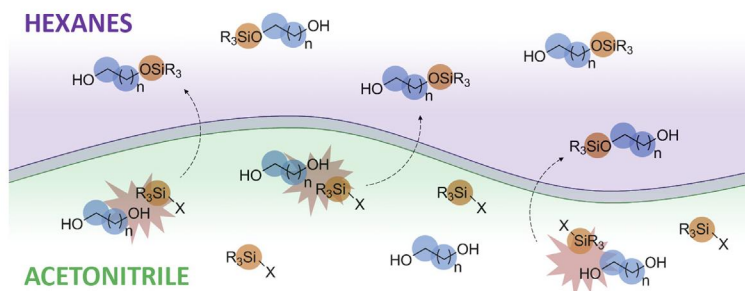
G. Satish, K. Harsha Vardhan Reddy, K. Ramesh, B. S. P. Anil Kumar, Y. V. D. Nageswar*



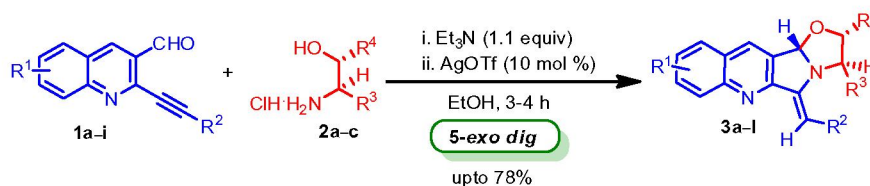
A simple and efficient, ligand-free C–N cross-coupling of aryl halides/benzyl bromides with *trans*-4-hydroxy-L-proline to produce an aromatized N-substituted pyrrole has been developed using a catalytic amount of magnetically separable CuFe_2O_4 nanoparticles as a recyclable catalyst with Cs_2CO_3 as a base in DMSO at 100 °C. In this novel protocol five membered unsaturated heterocyclic derivatives are subjected to oxidative aromatization to produce a variety of N-substituted pyrroles, in good to excellent yields, utilizing inexpensive, magnetically separable, and recyclable CuFe_2O_4 nanoparticles.

**Hexanes/acetonitrile: a binary solvent system for the efficient monosilylation of symmetric primary and secondary diols** pp 2600–2602

Burkhardt I. Wilke, Mark H. Dornan, Jon Yeung, Christopher N. Boddy, Atahualpa Pinto*

**Stereoselective tandem synthesis of oxazolo-fused pyrroloquinolines from *o*-alkynylaldehydes via Ag(I)-catalyzed regioselective 5-*exo-dig* ring closure** pp 2603–2608

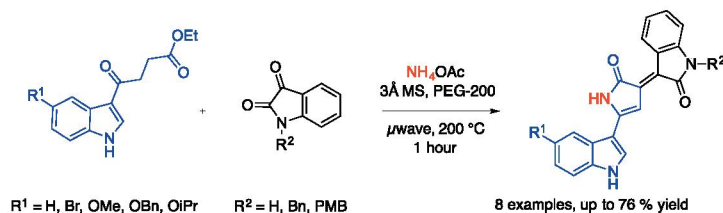
Rajeev Ranjan Jha, Trapti Aggarwal, Akhilesh Kumar Verma*



A tandem approach for the regio- and stereoselective synthesis of oxazolo-fused pyrroloquinolines **3a-I** via the reaction of *o*-alkynylaldehydes **1a-i** with chiral amino alcohols **2a-c** under mild reaction conditions is described. The possible participation of pyridine ring in the regioselective formation of 5-*exo-dig* cyclized products was supported by the control experiments. The structures and stereochemistry of the products were confirmed by the NOESY and X-ray crystallographic studies.

**Three-component synthesis of disubstituted 2H-pyrrol-2-ones: preparation of the violacein scaffold** pp 2609–2611

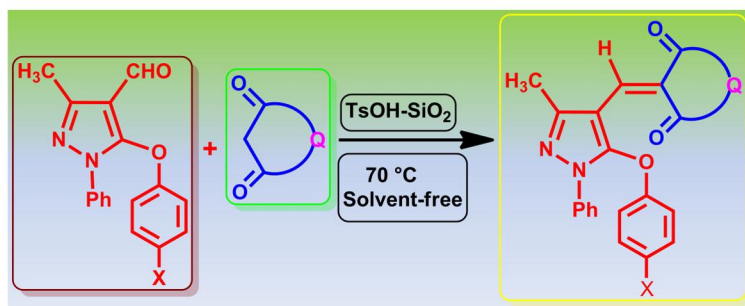
Emily C. McLaughlin*, Matthew W. Norman, Thant Ko Ko, Ingrid Stolt



TsOH-SiO₂ as an efficient and eco-friendly catalyst for Knoevenagel condensation

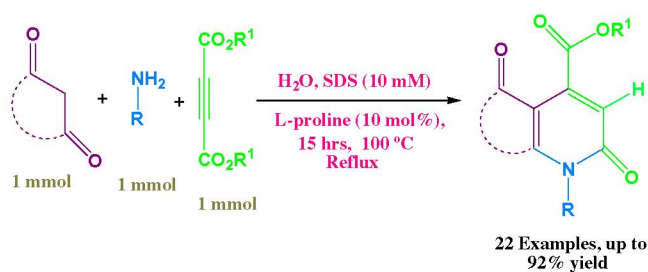
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Zeba N. Siddiqui*, Saima Tarannum

**L-Proline catalyzed expeditious multicomponent protocol for the synthesis of fused N-substituted-2-pyridone derivatives in aqueous medium**

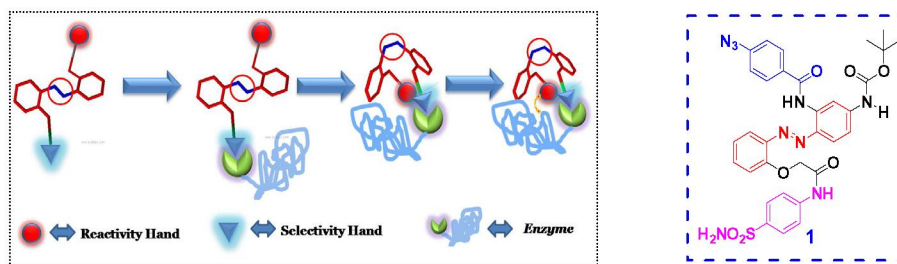
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Rajib Sarkar, Chhanda Mukhopadhyay*

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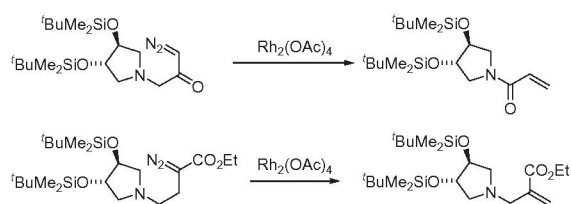
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Partha Sarathi Addy, Baisakhee Saha, Arpita Panja, Amit Kumar Das*, Amit Basak*

HCAII capture by the azobenzene template based compound **1**.**Unexpected rearrangements of rhodium carbenoids containing a pyrrolidin-1-yl group**

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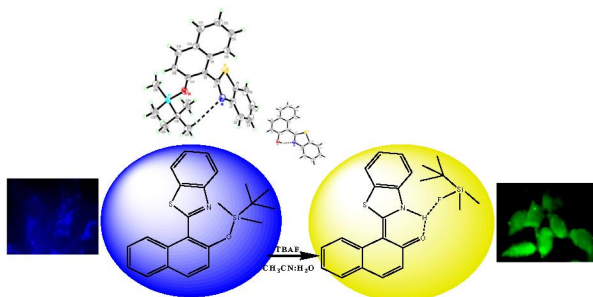
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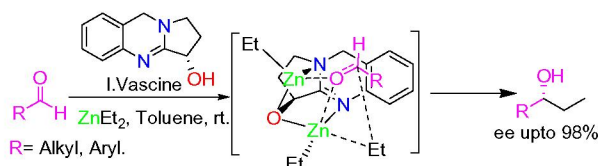
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Vasicine as tridentate ligand for enantioselective addition of diethylzinc to aldehydes

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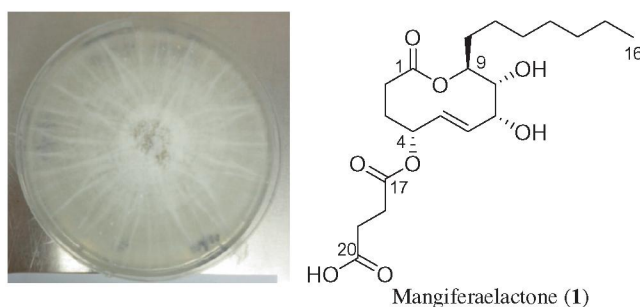
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Polyhydroxylated macrolide isolated from the endophytic fungus *Pestalotiopsis mangiferae*

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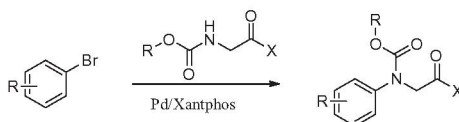
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N-arylation of carbamate-protected glycine derivatives via palladium catalysis

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Danielle Falcone, Ekundayo Osimboni, David J. Guerin*



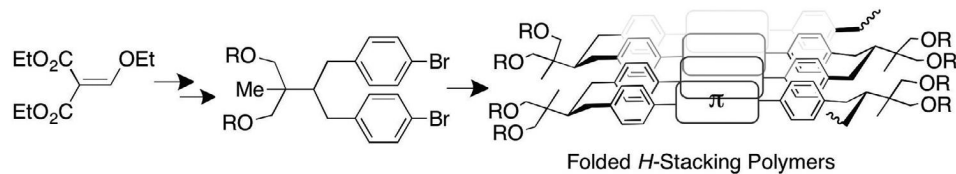
A synthesis of *N*-aryl and *N*-heteroaryl amino acid derivatives using palladium catalysis is described. Several carbamate-protected glycine derivatives react with aryl and heteroaryl halides using a palladium/Xantphos catalyst system to access the desired synthons.



Design and synthesis of 2-(1,3-dialkoxy-2-methylpropan-2-yl)-1,3-diarylpropanes as tethering units for folded *H*-stacking polymers

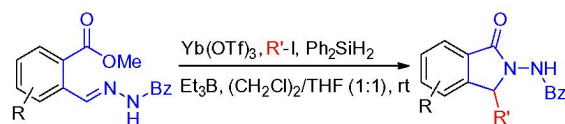
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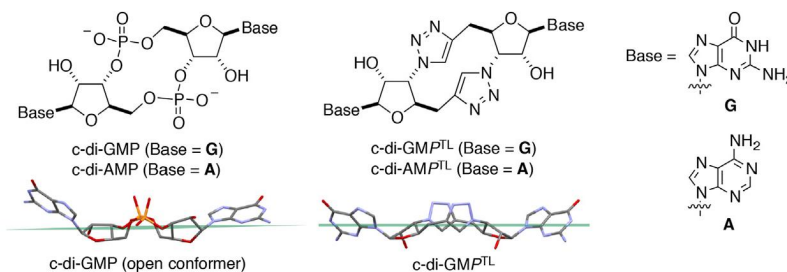
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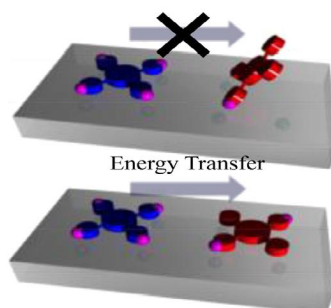
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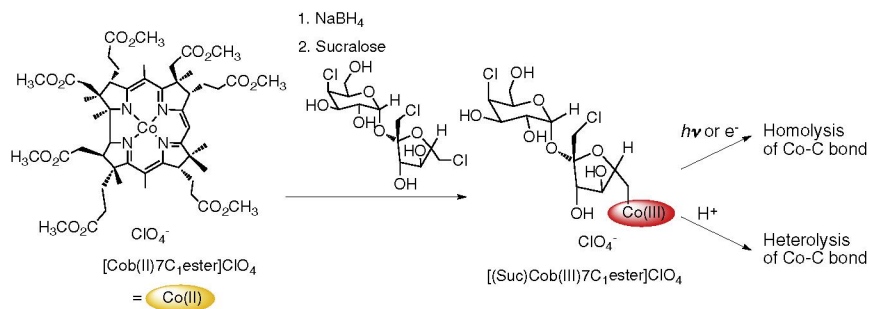
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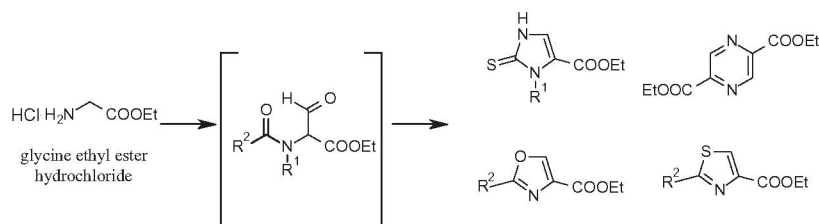
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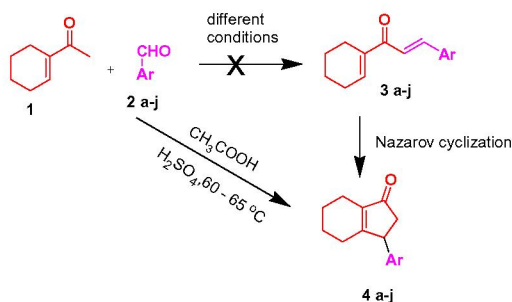
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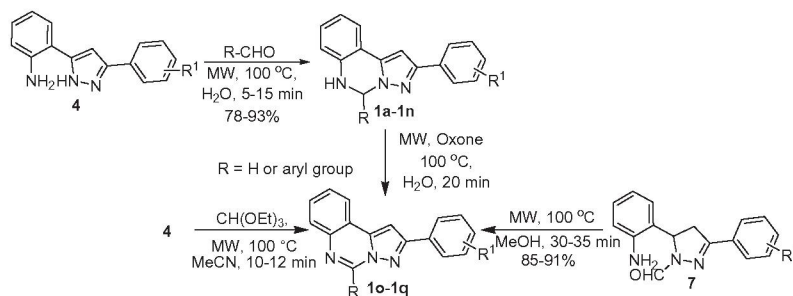
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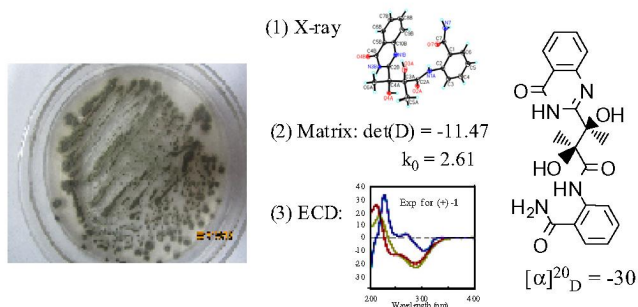
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Structure and absolute configuration of penicilliumine, a new alkaloid from *Penicillium commune* 366606

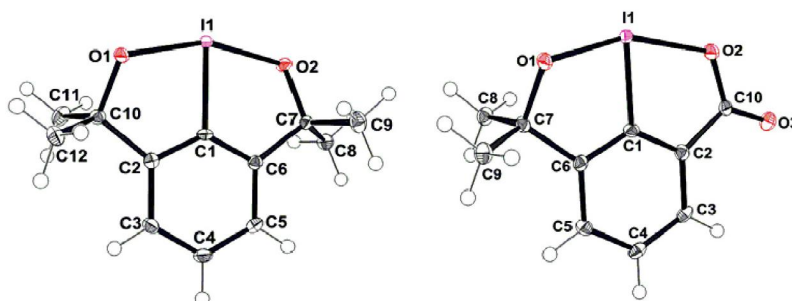
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Jiang-Bo He, Yan-Nan Ji, Dong-Bao Hu, Shen Zhang, Hui Yan, Xin-Chun Liu, Huai-Rong Luo, Hua-Jie Zhu*

**Synthesis, characterization, and initial reaction study of two new bicyclic hypervalent iodine(III) reagents**

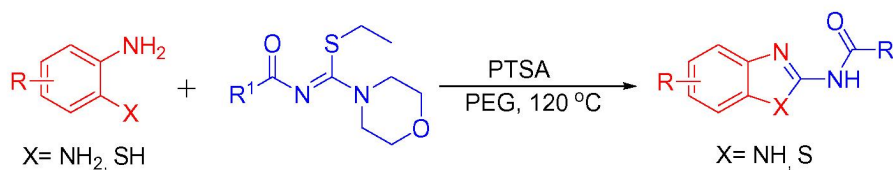
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Wen-Chao Gao*, Chi Zhang

**PTSA catalyzed straightforward protocol for the synthesis of 2-(*N*-acyl)aminobenzimidazoles and 2-(*N*-acyl)aminobenzothiazoles in PEG**

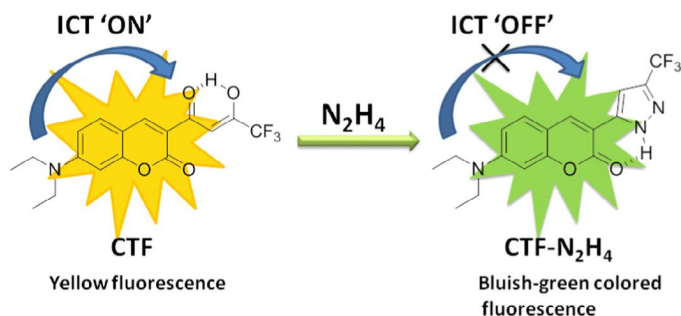
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Siddaiah Vidavalur*, Mahaboob Basha Gajula, Ramu Tadikonda, Mangarao Nakka, Sudhakar Dega, Santosh Kumar Yadav, Christopher Voosala

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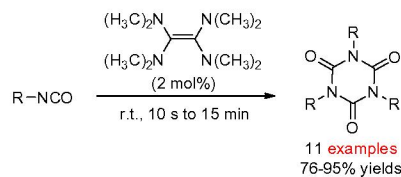
Shyamaprasad Goswami*, Sangita Das, Krishnendu Aich, Deblina Sarkar, Tapan Kumar Mondal



An expeditious method for the selective cyclotrimerization of isocyanates initiated by TDAE

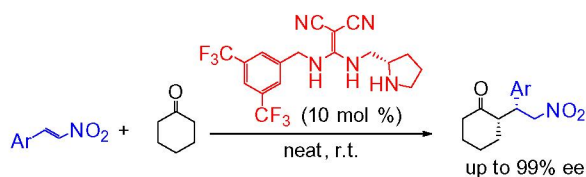
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Alain G. Giuglio-Tonolo, Cédric Spitz, Thierry Terme, Patrice Vanelle*

**Pyrrolidine-diaminomethylenemalononitrile organocatalyst for Michael additions of carbonyl compounds to nitroalkenes under solvent-free conditions**

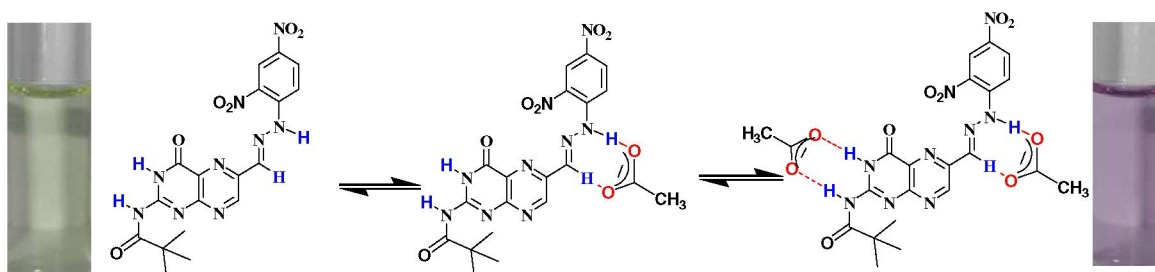
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Kosuke Nakashima, Shin-ichi Hirashima, Masahiro Kawada, Yuji Koseki, Norihiro Tada, Akichika Itoh, Tsuyoshi Miura*

**Pterin-based highly selective, ratiometric, and sensitive 'naked-eye' sensor for acetate**

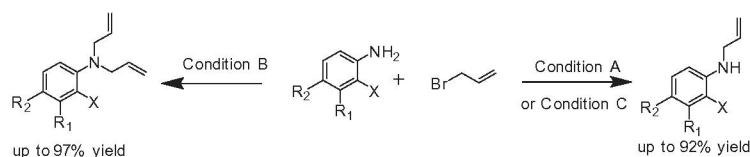
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Shyamaprosad Goswami*, Manas Kumar Das, Abhishek Manna

**Highly selective N-allylation of anilines under microwave irradiation**

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Meiyu Liu, Xie Wang, Xiaoliang Sun, Wei He*



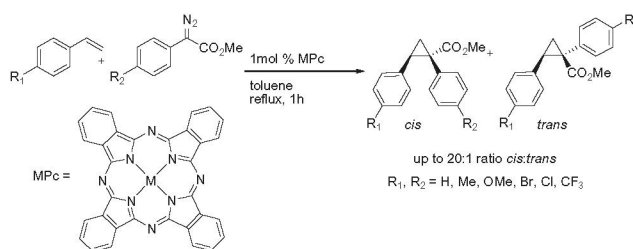
An easy and rapid procedure for the preparation of mono- or bis-allylated anilines from the reaction of allyl bromide with a wide range of anilines under microwave irradiation is described. This approach allows use of mild conditions and short reaction times to give high selectivities and excellent yields.



Metallophthalocyanine-catalyzed cyclopropanation

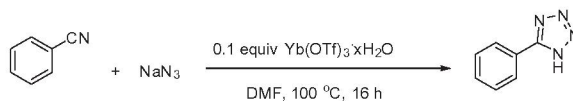
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Dominic L. Ventura*, Robert W. Kubiak II

**Synthesis of 5-substituted 1H-tetrazoles catalyzed by ytterbium triflate hydrate**

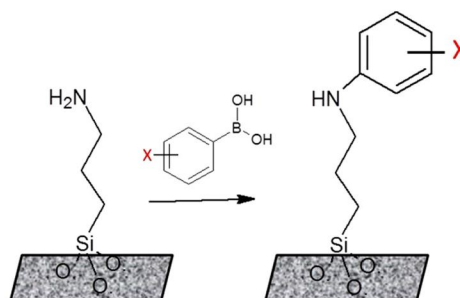
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Adiel Coca*, Evan Turek

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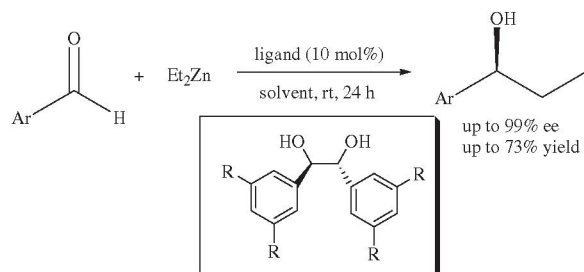
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George Appiah-Kubi, Kenneth Seaton, Aleksey Vasiliev*

**Enantioselective addition of diethylzinc to aromatic aldehydes catalyzed by C₂-symmetric chiral diols**

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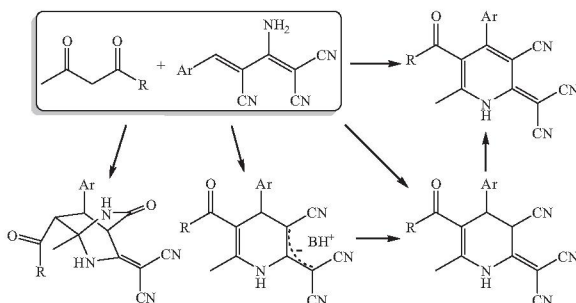
Yaşar Gök*, Levent Kekeç



One-pot synthesis of 2-(dicyanomethylene)-1,2-dihydropyridine derivatives

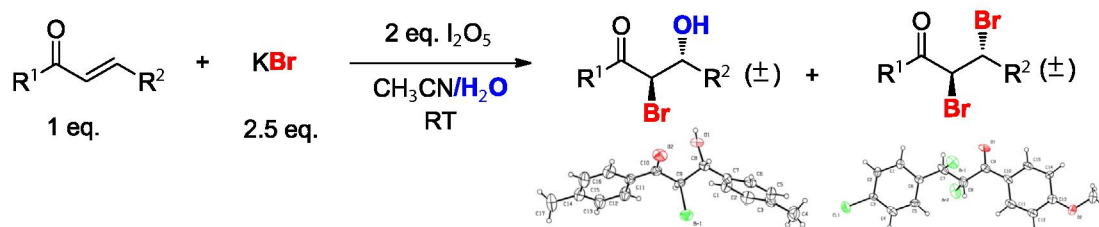
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Ivan N. Bardasov*, Anastasiya U. Alekseeva, Denis L. Mihailov, Oleg V. Ershov, Oleg E. Nasakin, Viktor A. Tafeenko

**I₂O₅-mediated bromohydroxylation and dibromination of olefins using KBr in water**

pp 2734–2737

Yajun Wang, Jinxi Wang, Yun Xiong, Zhong-Quan Liu*

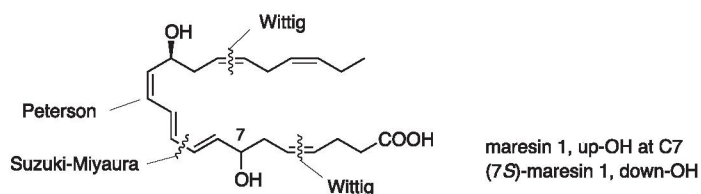


An efficient and green I₂O₅-mediated bromohydroxylation and dibromination of various olefins using KBr as the brominating reagent in aqueous medium at room temperature has been developed in this work

**Synthesis of maresin 1 and (7S)-isomer**

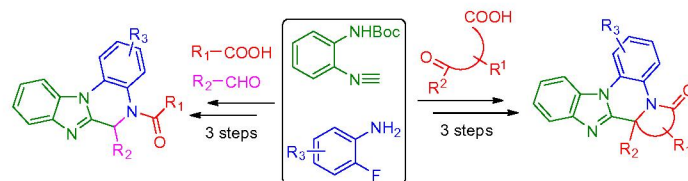
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Narihito Ogawa, Toshifumi Tojo, Yuichi Kobayashi*

**Synthesis of fused benzimidazole–quinoxalinones via UDC strategy and following the intermolecular nucleophilic substitution reaction**

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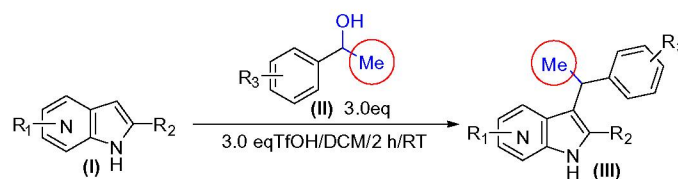
Zhong-Zhu Chen, Jin Zhang, Dian-Yong Tang, Zhi-Gang Xu*



A highly efficient TfOH-assisted alkylation of azaindoles with α -phenylethanols

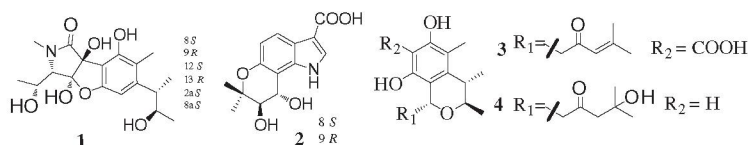
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Qiang Liu, Wei Fan, Hongqi Tian*

**Alkaloids and citrinins from marine-derived fungus *Nigrospora oryzae* SCSGAF 0111**

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Jie-Jie Dong, Jie Bao, Xiao-Yong Zhang, Xin-Ya Xu, Xu-Hua Nong, Shu-Hua Qi*



Nigrospolide A (**1**) possessing a rare 2,3-dihydro-benzofuran[2,3-c]pyrrolidone skeleton, and other three new compounds (**3–4**) were isolated from a marine fungus *Nigrospora oryzae*.



*Corresponding author

Supplementary data available via ScienceDirect

Abstracted/indexed in: AGRICOLA, Beilstein, BIOSIS Previews, CAB Abstracts, Chemical Abstracts, Chemical Engineering and Biotechnology Abstracts, Current Biotechnology Abstracts, Current Contents: Life Sciences, Current Contents: Physical, Chemical and Earth Sciences, Current Contents Search, Derwent Drug File, Ei Compendex, EMBASE/Excerpta Medica, Medline, PASCAL, Research Alert, Science Citation Index, SciSearch. Also covered in the abstract and citation database Scopus®. Full text available on ScienceDirect®



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ISSN 0040-4039