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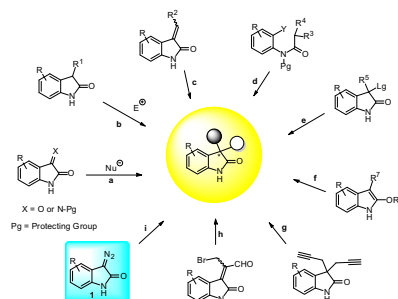
Contents

DIGEST PAPERS

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

pp 2571–2584

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

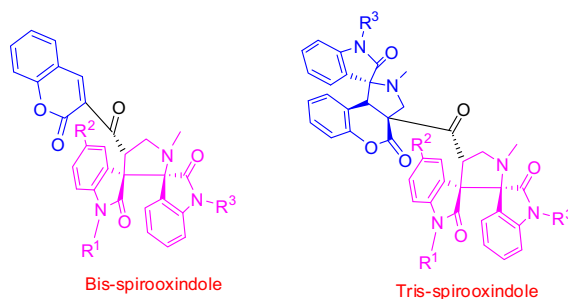


The catalytic asymmetric synthesis of 3,3-disubstituted oxindoles, a big family of privileged scaffolds in natural products and drugs, is of current interest. Recently, the catalytic asymmetric functionalization of diazooxindoles emerges as a potentially general and flexible strategy for this purpose, 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

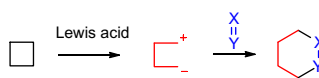
Srinu Lanka, Sathiah Thennarasu*, Paramasivan T. Perumal*



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

pp 2589–2595

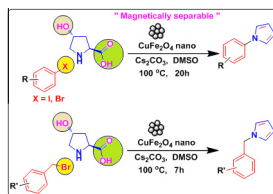
Jun-ichi Matsuo*



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

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

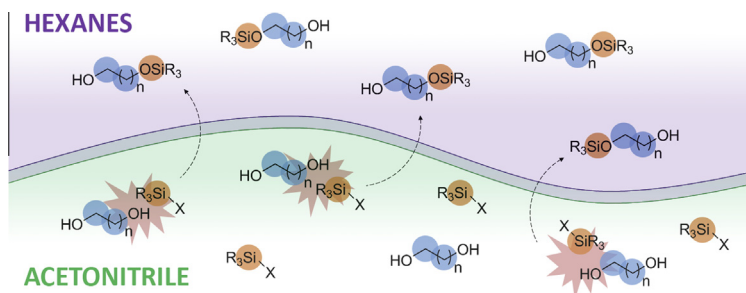


A simple and efficient, ligand-free C–N cross-coupling of aryl halides/benzyl bromides with *trans*-4-hydroxy-L-proline to produce an aromatized N-substituted pyrrole has been developed using a catalytic amount of magnetically separable CuFe_2O_4 nanoparticles as a recyclable catalyst with Cs_2CO_3 as 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

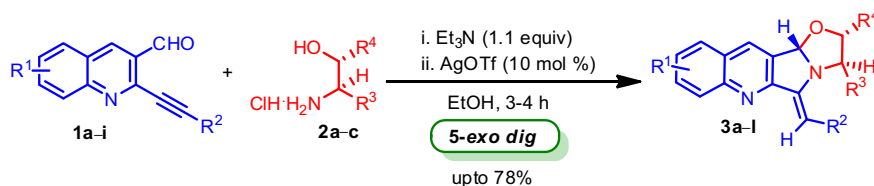
pp 2600–2602

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*

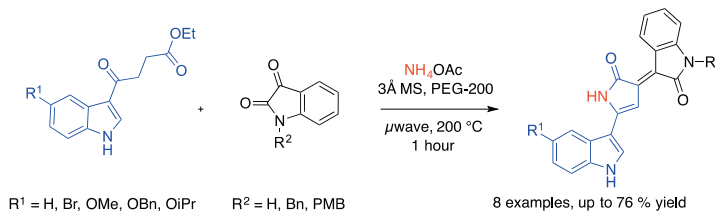

 $\text{R}^1 = \text{H, OMe}; \text{R}^2 = \text{aryl, alkyl}; \text{R}^3 = \text{COOMe, Ph}; \text{R}^4 = \text{H, Me}$

A tandem approach for the regio- and stereoselective synthesis of oxazolo-fused pyrroloquinolines **3a–l** 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



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