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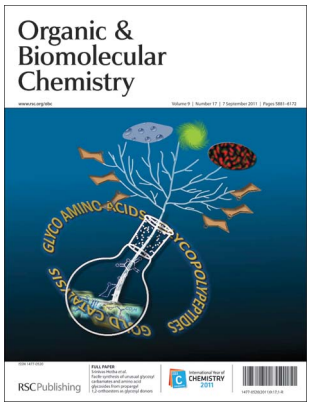

Cover

See Ashif Y. Shaikh *et al.*, pp. 5951–5959.

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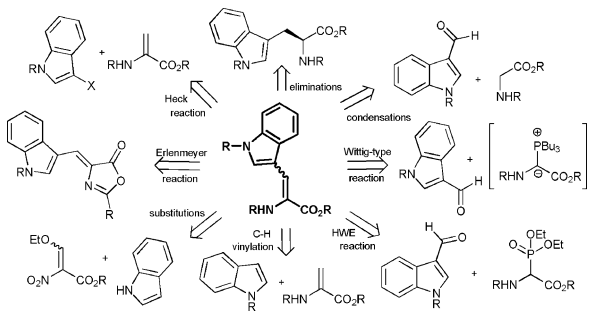
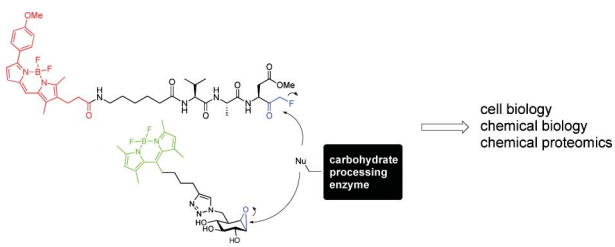
PERSPECTIVES





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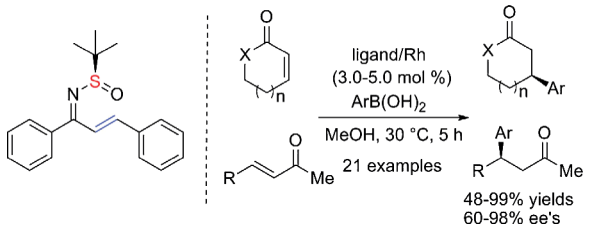

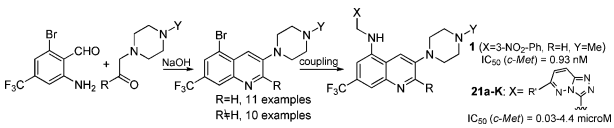

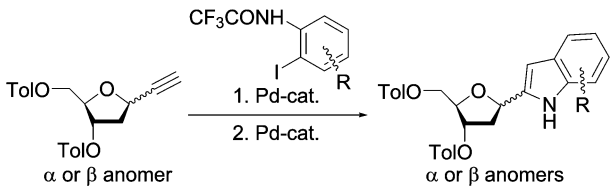

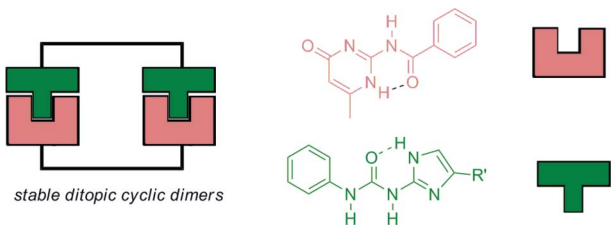

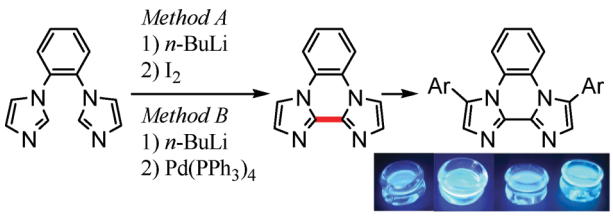

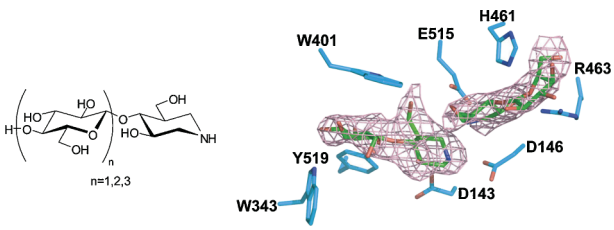

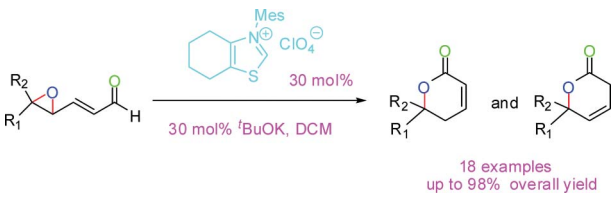

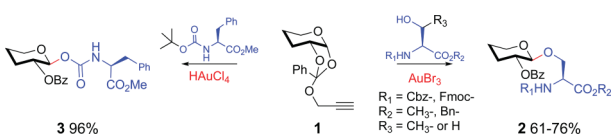

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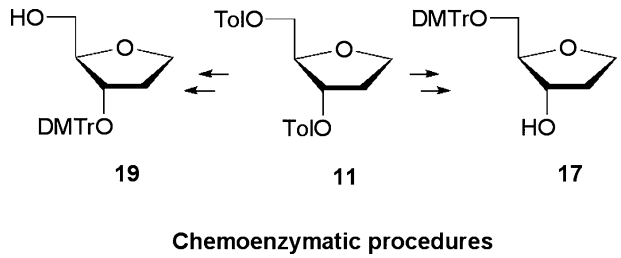
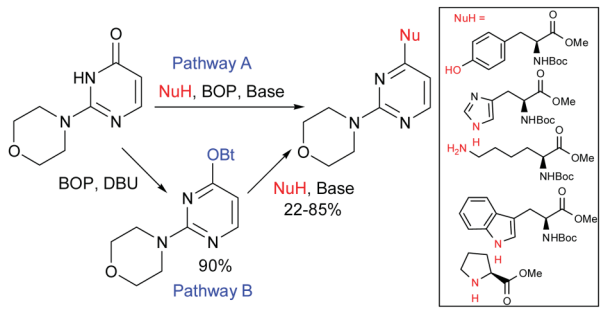


An expedient biocatalytic procedure for abasic site precursors useful in oligonucleotide synthesis

Saúl Martínez-Montero, Susana Fernández, Yogesh S. Sanghvi, Vicente Gotor* and Miguel Ferrero*

A fast, atom-efficient and convenient synthesis of 3-, and 5-*O*-DMTr-1,2-dideoxy-D-ribose **17** and **19** has been achieved, yielding a practical and scalable green method useful for industrial applications.

5967

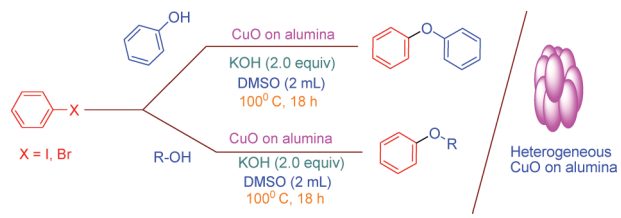


Coupling reaction between electron-rich pyrimidinones and α-amino acids promoted by phosphonium salts

Abdelatif ElMarrouni, Josep M. Fabrellas and Montserrat Heras*

First coupling reaction between an electron-rich 2-morpholino-4(3*H*)-pyrimidinone and nucleophilic side chains of several natural α-amino acids promoted by phosphonium salts has been achieved.

5978



Recyclable heterogeneous copper oxide on alumina catalyzed coupling of phenols and alcohols with aryl halides under ligand-free conditions

Kokkirala Swapna, Sabbavarapu Narayana Murthy, Mocharla Tarani Jyothi and Yadavalli Venkata Durga Nageswar*

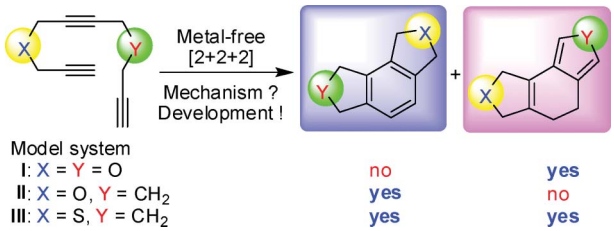
A simple and efficient alumina-supported CuO-catalyzed *O*-arylation of phenols and aliphatic alcohols with various aryl as well as heteroaryl halides under ligand-free conditions are reported. The explored catalyst is inexpensive, air-stable and recyclable.

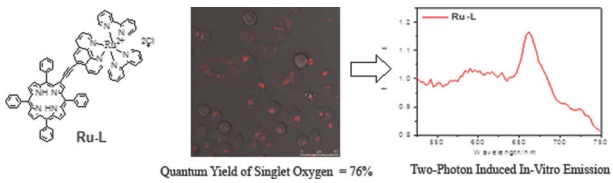
5989

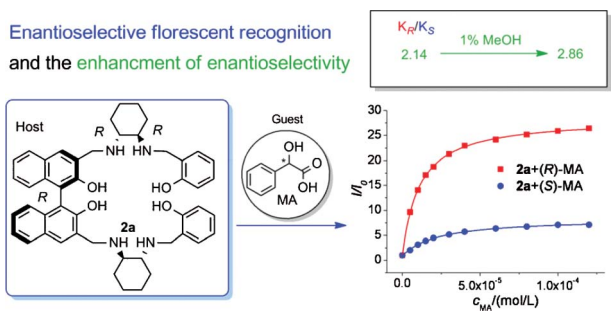
Nano-$CuFe_2O_4$ as a magnetically separable and reusable catalyst for the synthesis of diaryl/aryl alkyl sulfides *via* cross-coupling process under ligand-free conditions

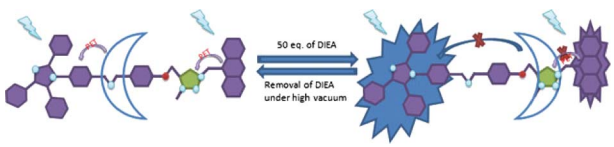
Kokkirala Swapna, Sabbavarapu Narayana Murthy, Mocharla Tarani Jyothi and Yadavalli Venkata Durga Nageswar*

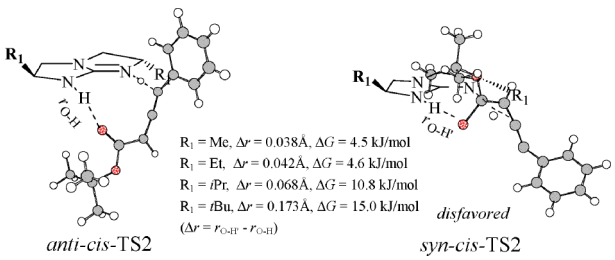
A simple and efficient nano $CuFe_2O_4$ catalyzed *S*-arylation of thiols and disulfides with various aryl, aliphatic as well as heteroaryl halides under ligand-free conditions are reported. The catalyst is air-stable, inexpensive, magnetically separable and recyclable up to four cycles.

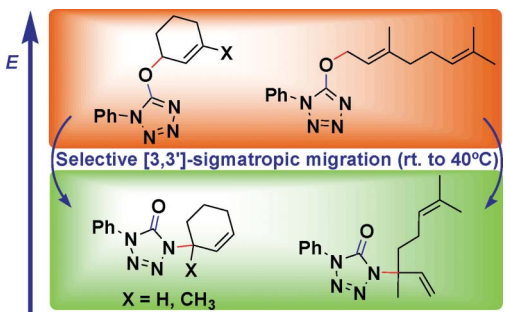


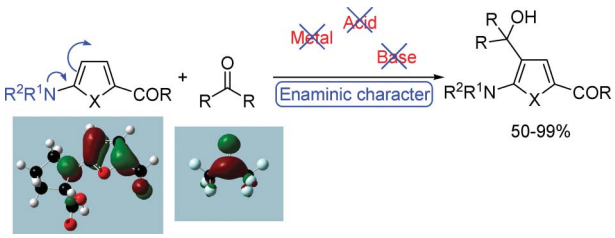












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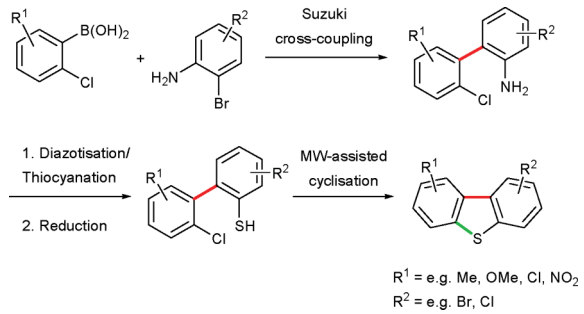
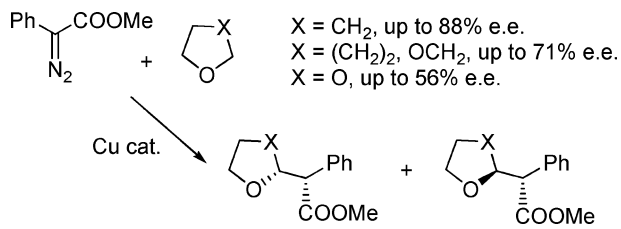


Versatile synthesis of functionalised dibenzothiophenes *via* Suzuki coupling and microwave-assisted ring closure

Sonsoles Rodriguez-Aristegui, Kate M. Clapham,* Lauren Barrett, Céline Cano, Marine Desage-El Murr, Roger J. Griffin, Ian R. Hardcastle, Sara L. Payne, Tommy Rennison, Caroline Richardson and Bernard T. Golding*

Suzuki coupling of 2,6-dibromoaniline with a phenylboronic acid aided by microwave irradiation gave amino-biphenyls; conversion of amino into thiol followed by base-induced intramolecular substitution, generated dibenzothiophenes.

6075

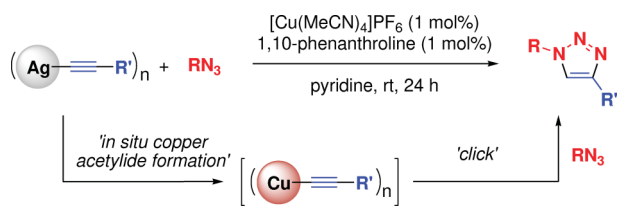


Enantioselective C–H carbene insertions with homogeneous and immobilized copper complexes

José M. Fraile,* Pilar López-Ram-de-Viu, José A. Mayoral, Marta Roldán and Jorge Santafé-Valero

Immobilization of chiral copper complexes allows the enantioselective carbene insertion into C–H bonds of poorly reactive cyclic ethers.

6082



Copper(I)-catalyzed cycloaddition of silver acetylides and azides: Incorporation of volatile acetylenes into the triazole core

Ilaria Proietti Silvestri, Fikre Andemarian, George N. Khairallah, Su Wan Yap, Tim Quach, Sammi Tsegay, Craig M. Williams, Richard A. J. O'Hair, Paul S. Donnelly and Spencer J. Williams*

Copper(I)-catalyzes the cycloaddition of silver acetylides and azides to afford 1,4-disubstituted triazoles *via in situ* transmetallation to copper acetylides.

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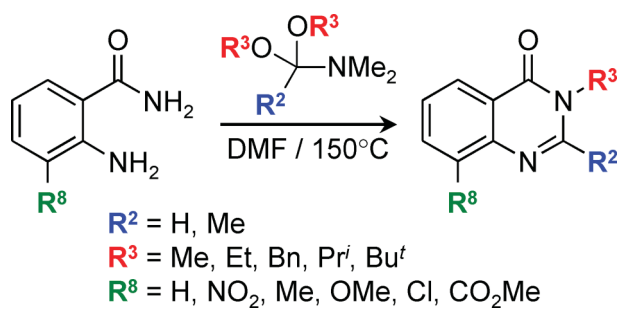
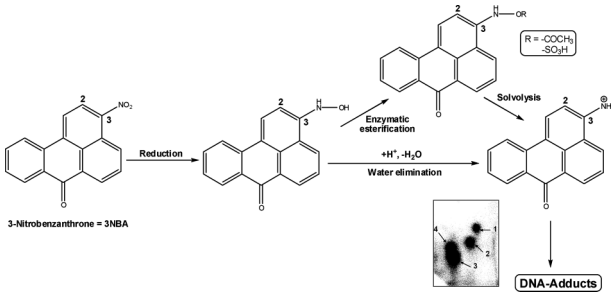
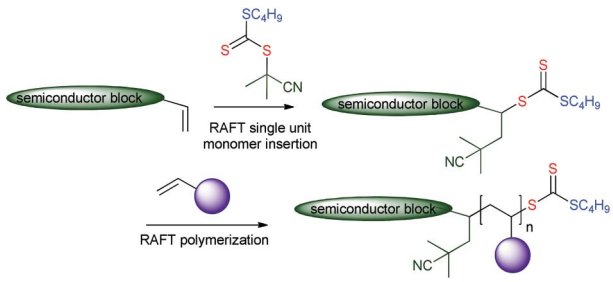


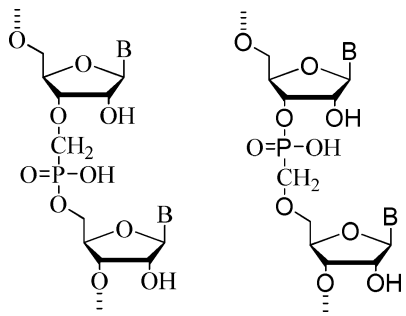
N^3-Alkylation during formation of quinazolin-4-ones from condensation of anthranilamides and orthoamides

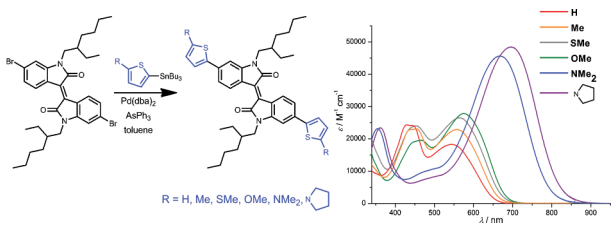
Amit Nathubhai, Richard Patterson, Timothy J. Woodman, Harriet E. C. Sharp, Miranda T. Y. Chui, Hugo H. K. Chung, Stephanie W. S. Lau, Jun Zheng, Matthew D. Lloyd, Andrew S. Thompson and Michael D. Threadgill*

Reaction of anthranilamides with orthoamides (R^3 = primary alkyl) gives N^3-alkylated quinazolin-4-ones; when R^3 = Pr^i, N^3-methylation competes, indicating that the intermediate alkoxyiminium cation has three potential electrophilic sites.









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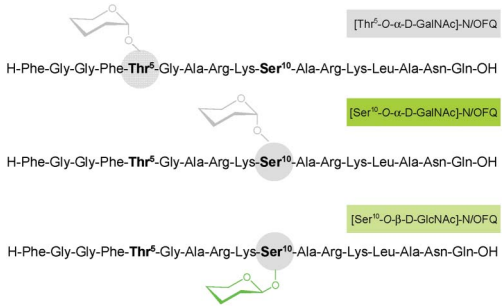

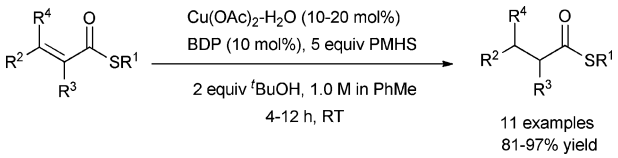

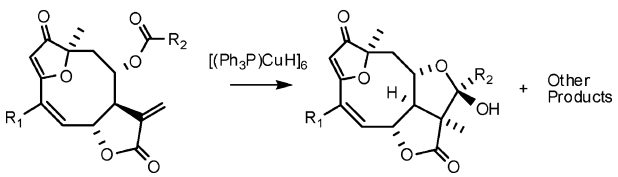

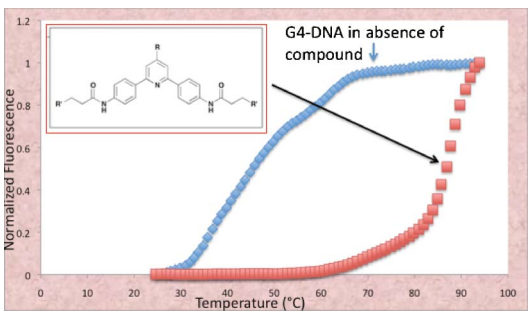

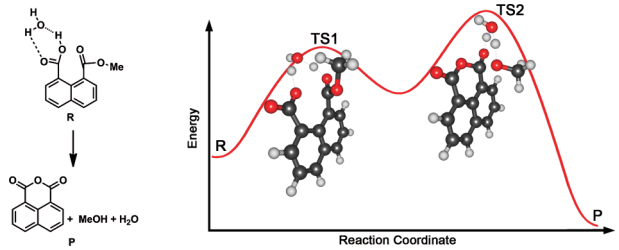

Mechanism of intramolecular catalysis in the hydrolysis of alkyl monoesters of 1,8-naphthalic acid

Bruno S. Souza, Santiago F. Yunes, Marcelo F. Lima, José C. Gesser, Marcus M. Sá, Haidi D. Fiedler and Faruk Nome*

Hydrolysis of alkyl 1,8-naphthalic acid monoesters is subject to highly efficient intramolecular nucleophilic catalysis by the neighboring COOH group.