Organic & Biomolecular Chemistry

An international journal of synthetic, physical and biomolecular organic chemistry

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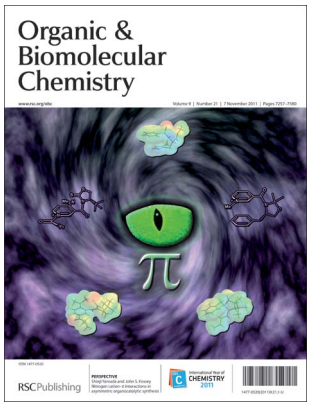
ISSN 1477-0520 CODEN OBCRAK 9(21) 7257–7580 (2011)



Cover
See Shinji Yamada and John S. Fossey, pp. 7275–7281.

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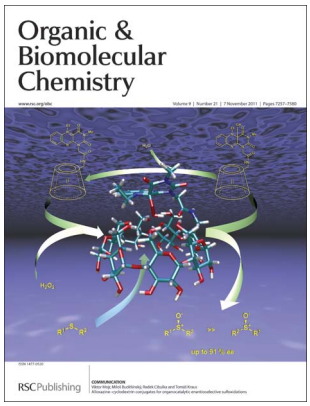

Inside cover
See Viktor Mojr *et al.*, pp. 7318–7326.

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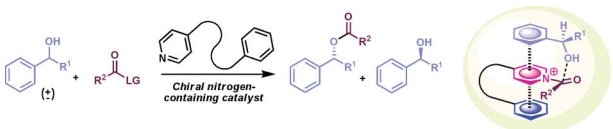
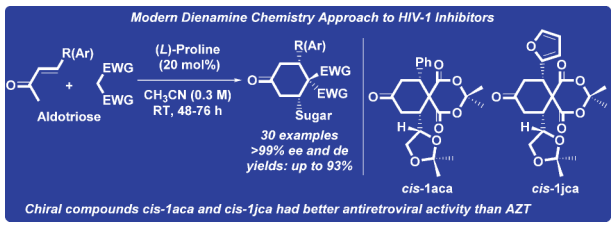
PERSPECTIVE



COMMUNICATIONS



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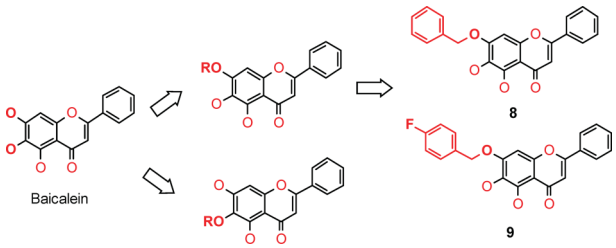

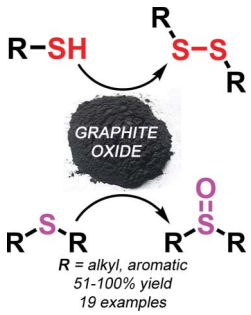

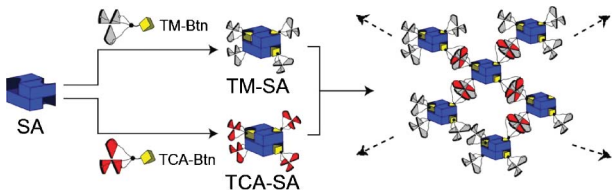

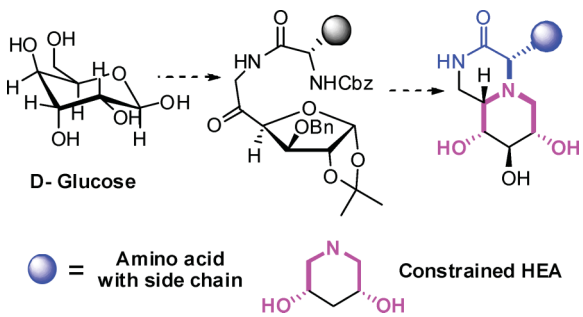

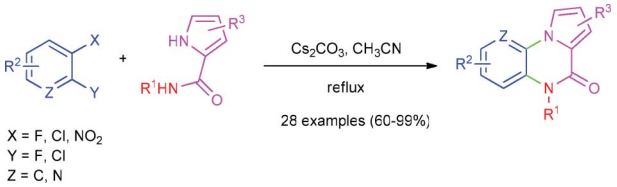

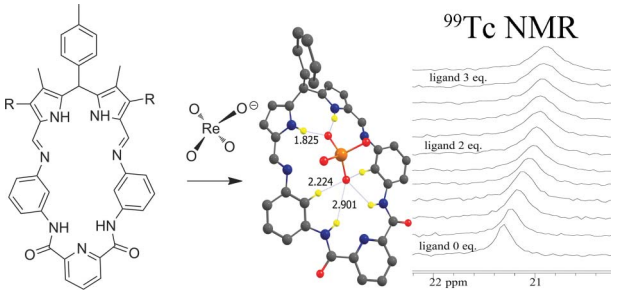

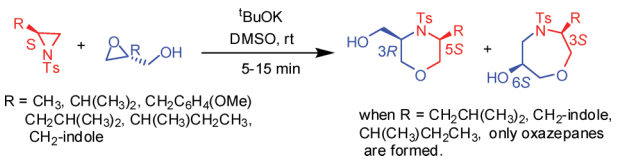

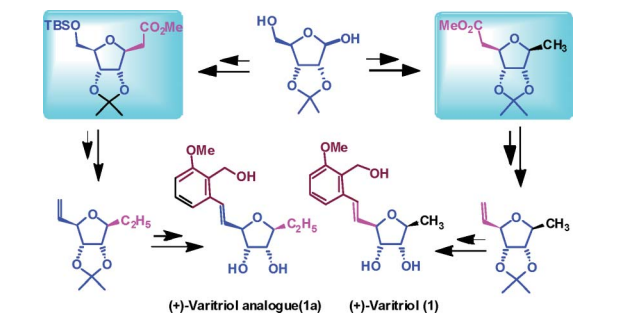

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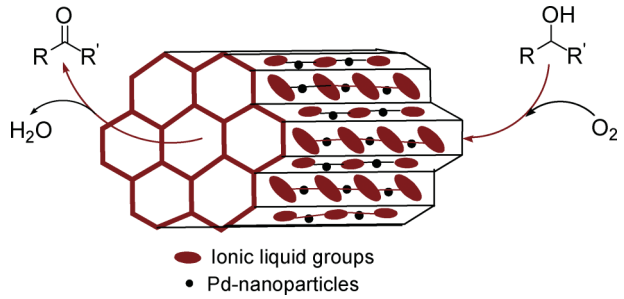
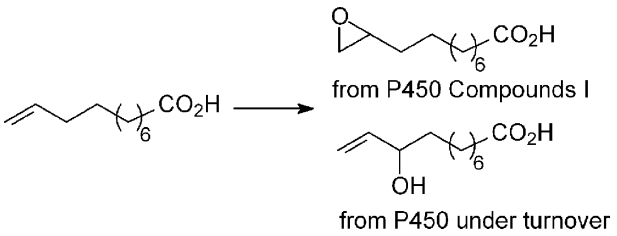


Palladium containing periodic mesoporous organosilica with imidazolium framework (Pd@PMO-IL): an efficient and recyclable catalyst for the aerobic oxidation of alcohols

Babak Karimi,* Dawood Elhamifar, James H. Clark and Andrew J. Hunt

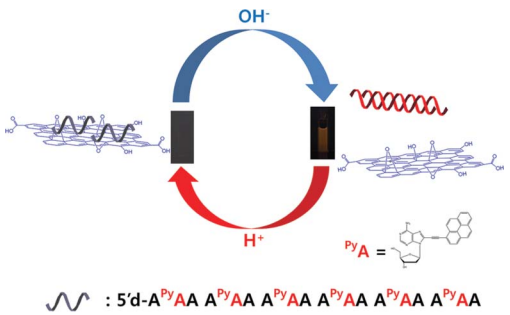
The application of a novel palladium containing ionic liquid based periodic mesoporous organosilica catalyst in the aerobic oxidation of primary and secondary alcohols under molecular oxygen and air atmospheres is investigated.



Oxidation of 10-undecenoic acid by cytochrome $P450_{BM-3}$ and its Compound I transient

Xiaohong Chen, Zhi Su, John H. Horner and Martin Newcomb*

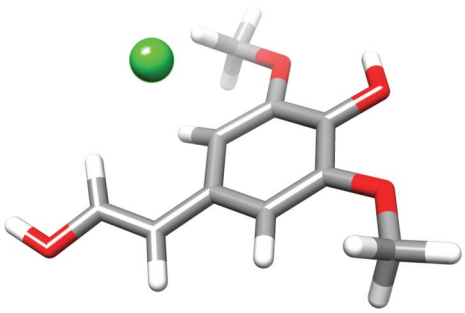
Products and kinetics from oxidations of 10-undecenoic acid by cytochrome P450 Compounds I and a P450 enzyme are reported.



pH-Responsive self-duplex of ^{Py}A-substituted oligodeoxyadenylate in graphene oxide solution as a molecular switch

Jeong Wu Yi, Jaesung Park, Kwang S. Kim and Byeang Hyean Kim*

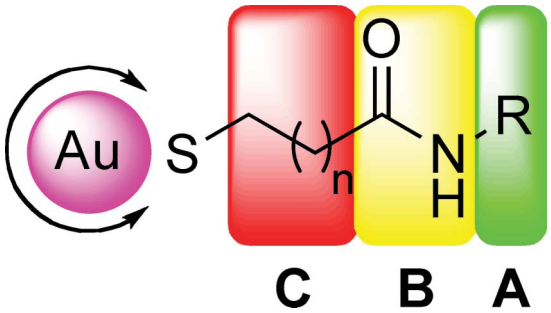
We demonstrated a highly discriminated and reliable molecular switch based on the interaction between the self-duplex of ^{Py}A-substituted oligodeoxyadenylate and graphene oxide.

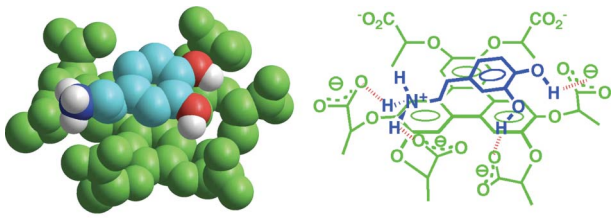


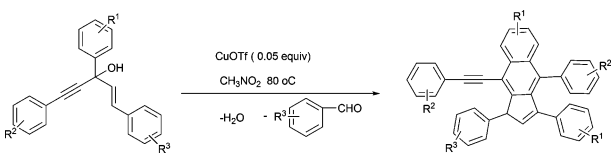
Controlling the action of chlorine radical: from lab to environment

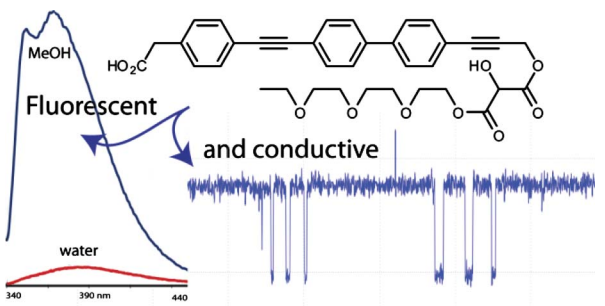
A. K. Croft,* H. M. Howard-Jones, C. E. Skates and C. C. Wood

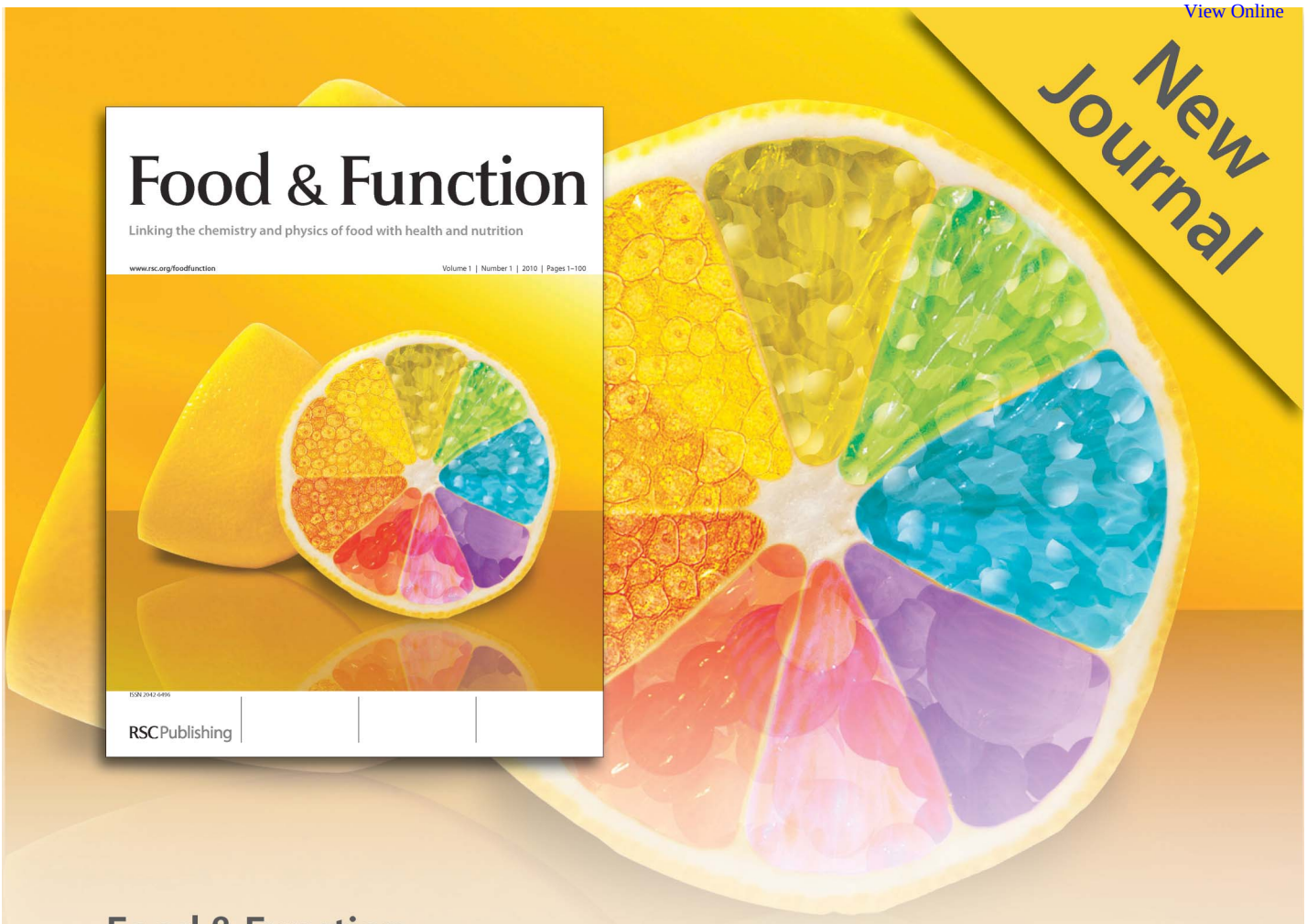
Stable chlorine atom complexes with lignin derivatives may mediate reaction of chlorine atom in the environment and in bleaching facilities.











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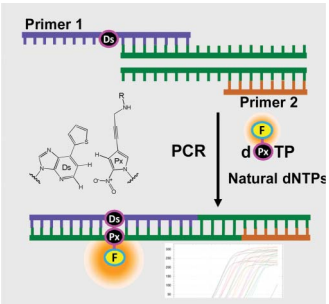
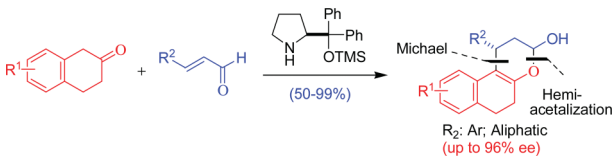


Monitoring the site-specific incorporation of dual fluorophore-quencher base analogues for target DNA detection by an unnatural base pair system

Rie Yamashige, Michiko Kimoto, Tsuneo Mitsui, Shigeyuki Yokoyama and Ichiro Hirao*

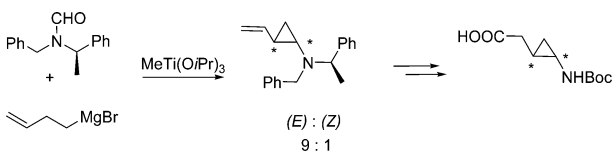
New fluorescent base analogues, intramolecular dual fluorophore-quencher unnatural bases, which function in replication as a third base pair with its pairing partner, enabling the site-specific enzymatic labeling of DNA molecules are reported.



Synthesis of 2,3,5,6-tetrahydro-1-alkyl/aryl-1*H*-benzo[*f*]chromen-3-ol derivatives from β-tetralones and α,β-unsaturated aldehydes

Jung-Hsuan Chen, Chihliang Chang, Hui-Ju Chang and Kwunmin Chen*

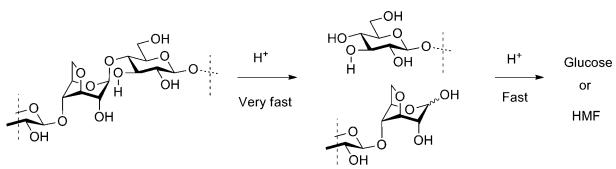
Treatment of β-tetralones with α,β-unsaturated aldehydes in the presence of diphenylprolinol silyl ether gave benzo[*f*]chromen-3-ol derivatives with high to excellent chemical yields (50–99%) and high enantioselectivities (up to 96% ee).



Stereoselective preparation of β,γ-methano-GABA derivatives

David J. Aitken,* Ludovic Drouin, Sarah Goretta, Régis Guillot, Jean Ollivier* and Marco Spiga

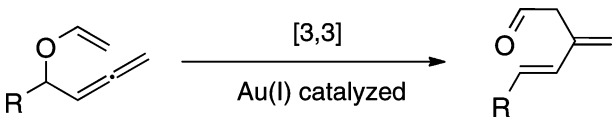
The Kulinkovich–de Meijere reaction provides non-racemic *trans* cyclopropylamines, which are converted into enantiomerically pure *N*-Boc protected β,γ-methano-GABA derivatives.

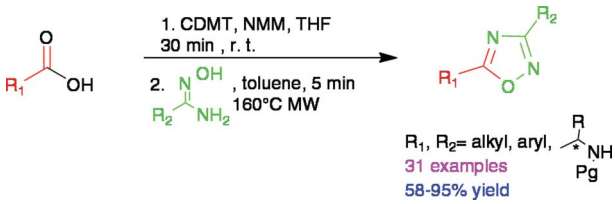


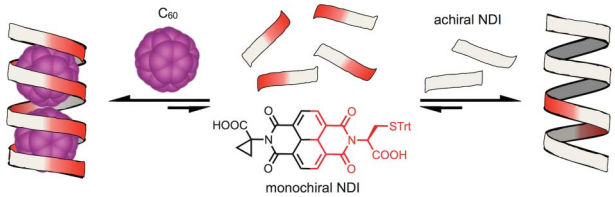
A study of anhydrocelluloses – Is a cellulose structure with residues in a $^1C_4$-conformation more prone to hydrolysis?

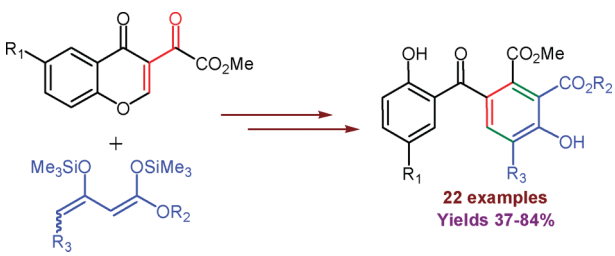
Vrushali Jadhav, Christian M. Pedersen* and Mikael Bols*

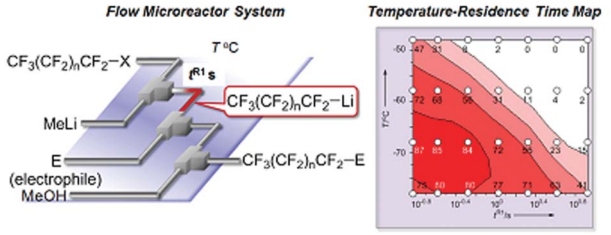
3,6-Anhydrocelluloses hydrolyse faster than unmodified cellulose due to the very reactive 3,6-anhydroglycosidic bonds they contain.







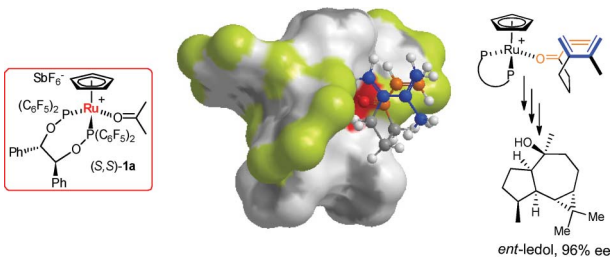




Perfluoroalkylation in flow microreactors: generation of perfluoroalkyllithiums in the presence and absence of electrophiles

Aiichiro Nagaki, Shinya Tokuoka, Shigeyuki Yamada, Yutaka Tomida, Kojun Oshiro, Hideki Amii and Jun-ichi Yoshida*

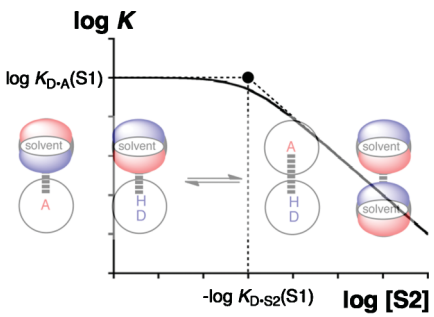
Perfluoroalkyllithiums were generated from perfluoroalkyl halides in the presence and absence of electrophiles using flow microreactor systems. The subsequent trapping method is effective for highly reactive electrophiles that are not compatible with the lithiation process.



Intramolecular Diels–Alder reactions using chiral ruthenium Lewis acids and application in the total synthesis of *ent*-ledol

Sirinporn Thamapipol and E. Peter Kündig*

The ruthenium Lewis acid catalysed asymmetric intramolecular Diels–Alder reaction is a key step in the synthesis of *ent*-ledol.



Molecular recognition probes of solvation thermodynamics in solvent mixtures

Valeria Amenta, Joanne L. Cook, Christopher A. Hunter,* Caroline M. R. Low and Jeremy G. Vinter

H-bonded complexes reveal the relationship between solute structure and selective solvation in mixed solvents: the more polar the solute, the more sensitive it is to the composition of the solvent.

