Organic & Biomolecular Chemistry

An international journal of synthetic, physical and biomolecular organic chemistry

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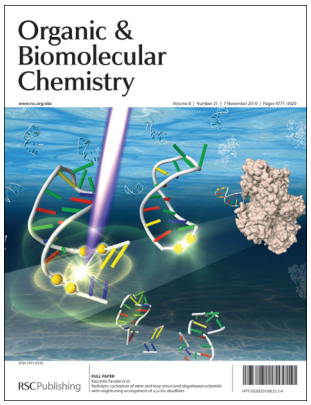

Cover
See Kazuhito Tanabe *et al.*, pp. 4837–4842.
X-Ray irradiation of an aqueous solution of modified oligodeoxynucleotides with a pair of disulfides at both ends causes efficient cyclization *via* an intramolecular exchange reaction.

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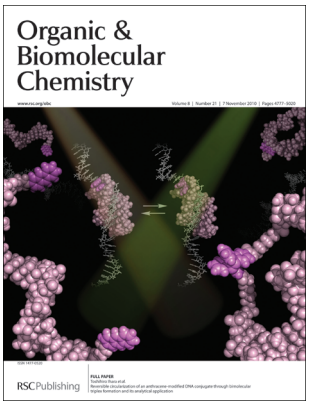

Inside cover
See Toshihiro Ihara *et al.*, pp. 4843–4848.
The oligonucleotide conjugate was reversibly circularized through photodimerization of the antracenes attached on both ends. This process would be potentially useful as a probe reaction with high specificity and sensitivity.

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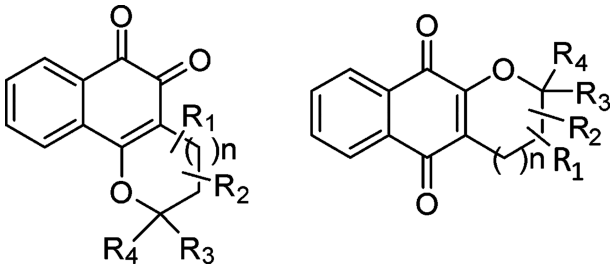
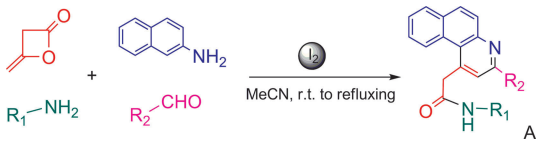
PERSPECTIVE



COMMUNICATIONS



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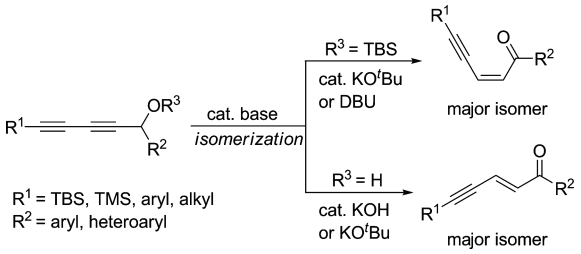
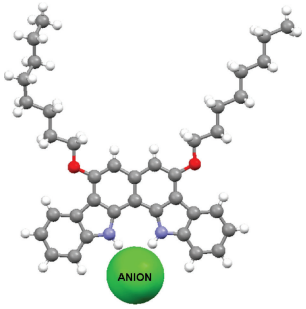
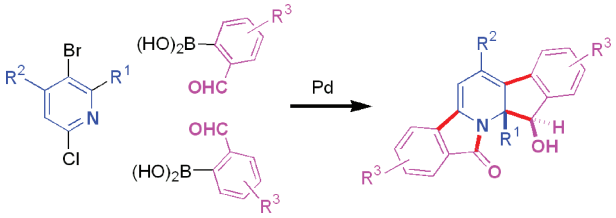
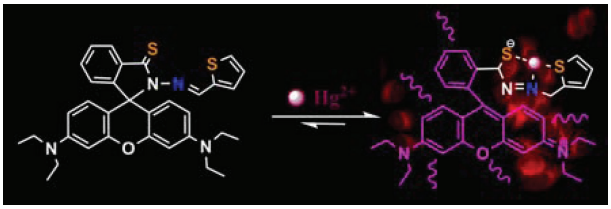
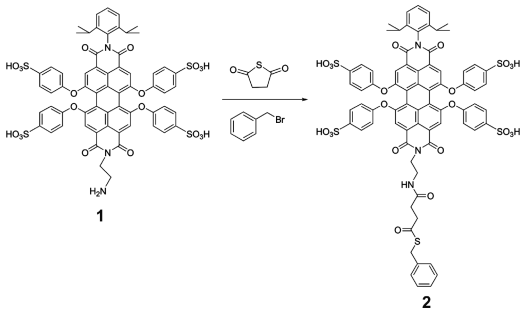






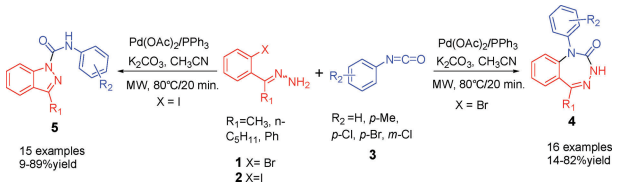




Site-specific incorporation of perylene into an N-terminally modified light-harvesting complex II

Kalina Peneva, Kristina Gundlach, Andreas Herrmann, Harald Paulsen and Klaus Müllen*

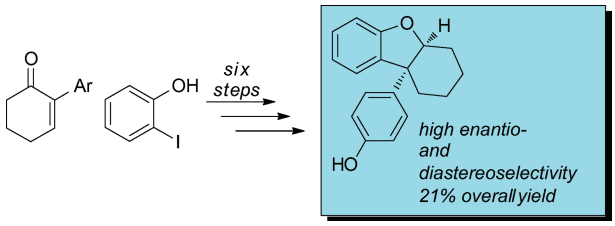
Employing the utility of the native chemical ligation, site-specific attachment of an ultrastable perylene dye to a derivative of the major light-harvesting complex (LHCII) was demonstrated.



Facile synthesis of 1,3,4-benzotriazepines and 1-arylamide-1*H*-indazoles *via* palladium-catalyzed cyclization of aryl isocyanates and aryl hydrazones under microwave irradiation

Chune Dong,* Lingli Xie, Xiaohong Mou, Yashan Zhong and Wei Su

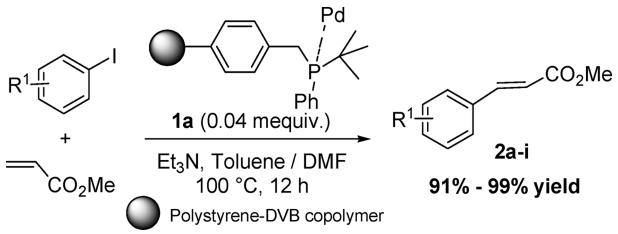
A strategy involving palladium-catalyzed cyclization of halophenyl hydrazones and aryl isocyanates provides convenient synthesis of 1,3,4-benzotriazepines (**4**) or 1-arylamide-1*H*-indazoles (**5**) in one step under microwave irradiation.



Asymmetric synthesis of a tricyclic benzofuran motif: a privileged core structure in biologically active molecules

Henrik Sundén and Roger Olsson*

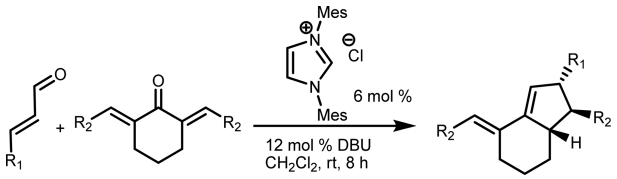
An efficient synthetic strategy for the asymmetric synthesis of a hexahydrodibenzofuran core structure, with a quaternary stereogenic center.

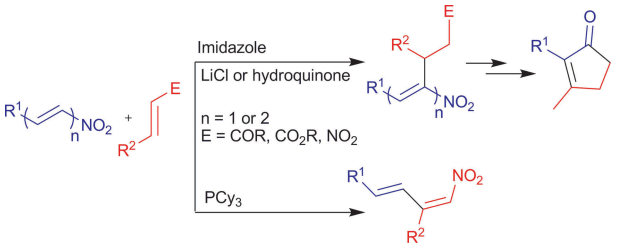


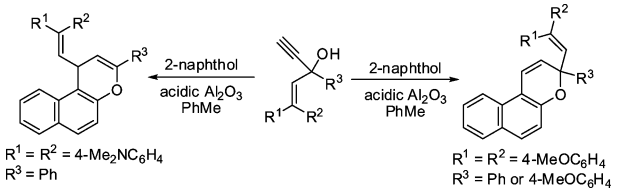
Reusable polystyrene-supported Pd catalyst for Mizoroki–Heck reactions with extremely low amounts of supported Pd

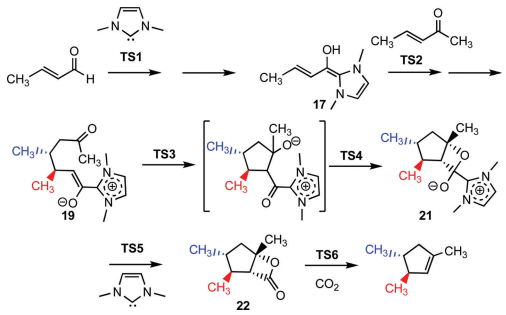
Carine Diebold, Stéphane Schweizer, Jean-Michel Becht* and Claude Le Drian*

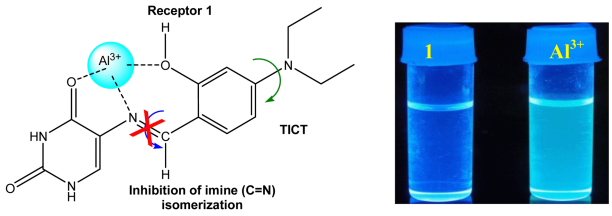
Heck reactions of aryl iodides using extremely low amounts of supported Pd (0.04 mequiv.) are reported. The catalyst can be reused successfully up to three times.







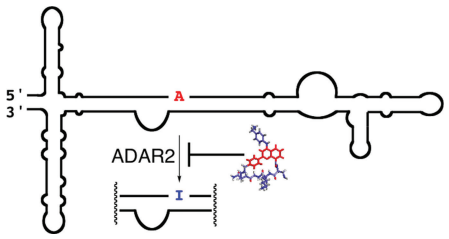




Pyrimidine based highly sensitive fluorescent receptor for Al^{3+} showing dual signalling mechanism

K. K. Upadhyay* and Ajit Kumar

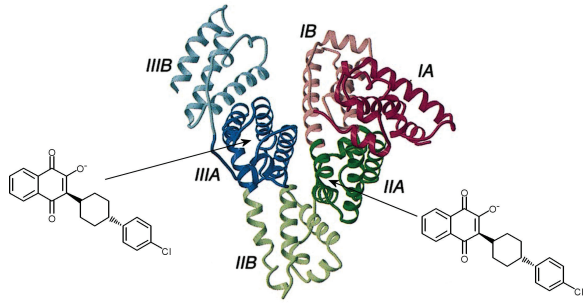
A pyrimidine based fluorescent probe (receptor **1**) detected Al^{3+} selectively in DMSO as well as in aqueous media with its lowest detection limit of the order of 10^{-10} M and 10^{-9} M respectively. Receptor **1** is the first ever example where a single molecular probe is able to show imine (C═N) isomerization inhibition along with twisted intramolecular charge transfer (TICT) in combinatorial fashion.



Selective inhibition of ADAR2-catalyzed editing of the serotonin 2c receptor pre-mRNA by a helix-threading peptide

Nicole T. Schirle, Rena A. Goodman, Malathy Krishnamurthy and Peter A. Beal*

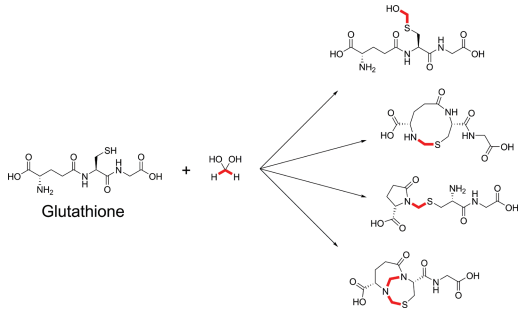
A first example of substrate-selective inhibition of editing by an RNA-binding small molecule, which sets the stage for the development of new reagents capable of controlling gene function through manipulation of mRNA editing



Combination of chiroptical, absorption and fluorescence spectroscopic methods reveals multiple, hydrophobicity-driven human serum albumin binding of the antimalarial atovaquone and related hydroxynaphthoquinone compounds

Ferenc Zsila* and Ilona Fitos

Induced circular dichroism spectra indicated the serum albumin binding of two atovaquone molecules with equally high affinity.



Studies on the reaction of glutathione and formaldehyde using NMR

Richard J. Hopkinson, Philippa S. Barlow, Christopher J. Schofield* and Timothy D. W. Claridge*

The reaction of glutathione and formaldehyde is shown to produce a number of products, including two new cyclic adducts.