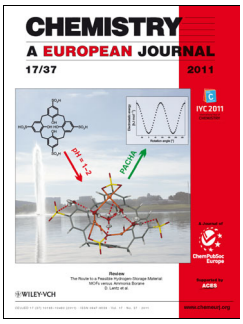
On these pages, we feature a selection of the excellent work that has recently been published in our sister journals. If you are reading these pages on a computer, click on any of the items to read the full article. Otherwise please see the DOIs for easy online access through Wiley Online Library.

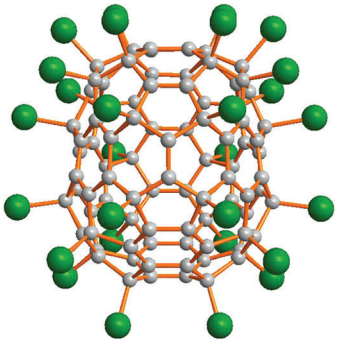


Fullerenes

S. I. Troyanov,* S. Yang, C. Chen, E. Kemnitz

Six IPR Isomers of C_{90} Fullerene Captured as Chlorides: Carbon Cage Connectivities and Chlorination Patterns

Caught by chlorination! C_{90} from three HPLC fractions was chlorinated with VCl_4 or $SbCl_5$ and resulted in the formation of seven $C_{90}Cl_{22-32}$ compounds. Chlorination patterns of $C_{90}Cl_n$ molecules (see the structure of $C_{90}(35)Cl_{28}$; grey C, green Cl) are discussed in terms of the formation of aromatic systems and isolated double bonds on the C_{90} fullerene cages.



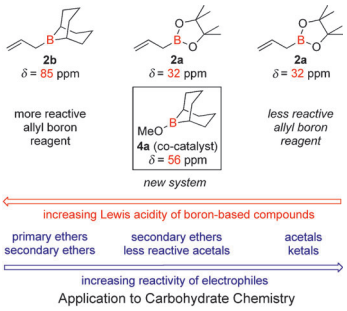
Chem. Eur. J.
DOI: **10.1002/chem.201100908**

Boron-ate Complexes

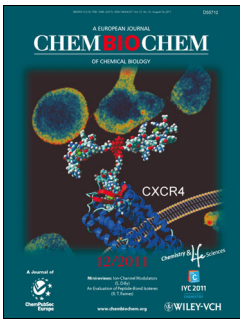
H. T. Dao, U. Schneider, S. Kobayashi*

"Design" of Boron-Based Compounds as Pro-Nucleophiles and Co-Catalysts for Indium(I)-Catalyzed Allyl Transfer to Various Csp^3-Type Electrophiles

Getting your carbs! We have developed In^I-catalyzed allylations of challenging acetals and ethers by using allyl boronate **2a** as a pro-nucleophile and borinic ester **4a** as a co-catalyst. This conceptually new approach correlates the Lewis acidity of "electrophilic" boron-based compounds with their "nucleophilic" reactivity in Csp^3–Csp^3 couplings. Our concept is applicable to the selective synthesis of carbohydrate derivatives.



Chem. Asian J.
DOI: **10.1002/asia.201100096**

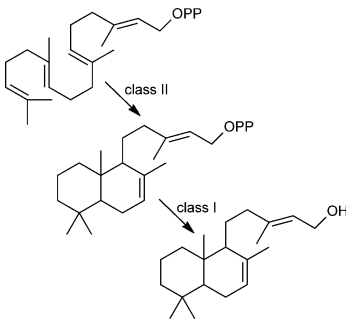


Terpenoids

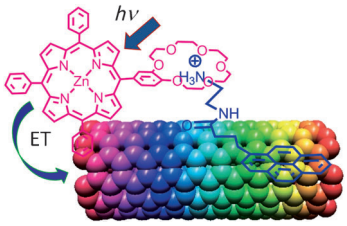
S. Mafu, M. L. Hillwig, R. J. Peters*

A Novel Labda-7,13*E*-dien-15-ol-Producing Bifunctional Diterpene Synthase from *Selaginella moellendorffii*

Two-in-one enzyme: A bifunctional diterpene synthase from the lycophyte *Selaginella moellendorffii* has been characterized. The structure of its product, labda-7,13*E*-dien-15-ol, demonstrates that this enzyme catalyzes a novel class II diterpene cyclization reaction, and clarifies the biosynthetic origins of the family of derived natural products.



ChemBioChem
DOI: **10.1002/cbic.201100336**



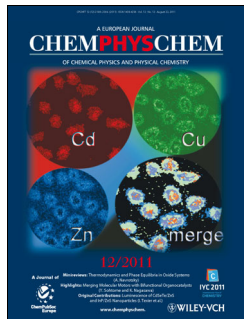
Light Harvesting

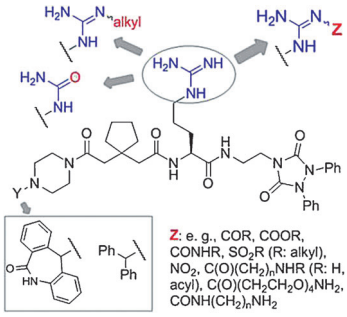
A. S. D. Sandanayaka, N. K. Subbaiyan, S. K. Das, R. Chitta, E. Maligaspe, T. Hasobe, O. Ito,* F. D'Souza*

Diameter-Sorted SWCNT–Porphyrin and SWCNT–Phthalocyanine Conjugates for Light-Energy Harvesting

Light-harvesting tetrapyrrole–nanotube donor–acceptor conjugates: Using a double-decker binding strategy involving π–π stacking and cation–dipole interactions, donor–acceptor hybrids comprised of diameter-sorted nanotubes and tetrapyroles are described (see picture). Photochemical and photoelectrochemical studies collectively demonstrate their ability to convert light energy to electricity.

ChemPhysChem
DOI: **10.1002/cphc.201100377**





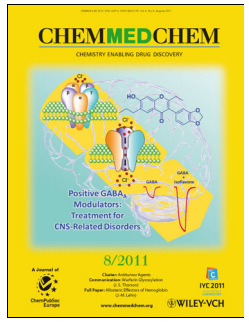
Drug Design

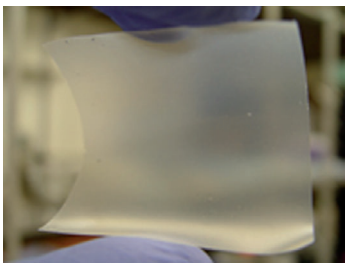
N. Pluym, A. Brennauer, M. Keller, R. Ziemek, N. Pop, G. Bernhardt, A. Buschauer*

Application of the Guanidine–Acylguanidine Bioisosteric Approach to Argininamide-Type NPY Y_2 Receptor Antagonists

Bioisosteric replacement of the strongly basic guandino group in argininamides derived from BIIE0246 with guanidines bearing electron-withdrawing groups (Z), in particular N^G-(ω-aminoalkylcarbamoyl), resulted in potent and selective Y_2R antagonists (K_i and K_B values in the low nanomolar range). The results support the hypothesis that the guanidine–acylguanidine exchange is a broadly applicable bioisosteric approach to GPCR ligands with decreased basicity.

ChemMedChem
DOI: **10.1002/cmdc.201100241**





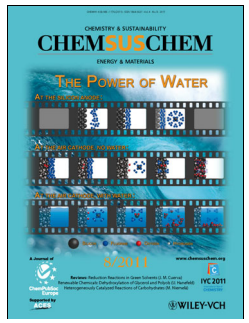
Fuel Cells

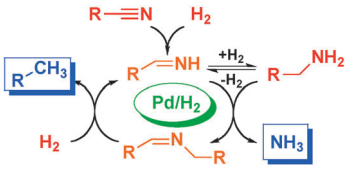
Y. Luo, J. Guo, C. Wang,* D. Chu

An Acrylate-Polymer-Based Electrolyte Membrane for Alkaline Fuel Cell Applications

Monomers rule: A novel bottom-up synthesis of an alkaline polymer electrolyte by applying mini-emulsion copolymerization is demonstrated. This synthesis approach can be used to control and tune conductivity and mechanical properties of the electrolyte. The processed electrolyte membrane exhibits superior power performance in alkaline fuel cells, which demonstrates the great potential of these membranes to be used in next generation energy conversion systems.

ChemSusChem
DOI: **10.1002/cssc.201100287**





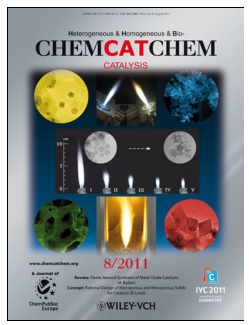
Multicascade Reaction

A. J. Yap, B. Chan, A. K. L. Yuen, A. J. Ward, A. F. Masters, T. Maschmeyer*

A Palladium-Catalyzed Multicascade Reaction: Facile Low-Temperature Hydrogenolysis of Activated Nitriles and Related Functional Groups

Control your children without being harsh: Herein we present a simple system for the otherwise difficult hydrogenolysis of nitriles, imines, and amines. This system can achieve high yields without using harsh conditions. Investigations into the mechanics of this system aid our understanding of what has been thought to be a simple process.

ChemCatChem
DOI: **10.1002/cctc.201100076**

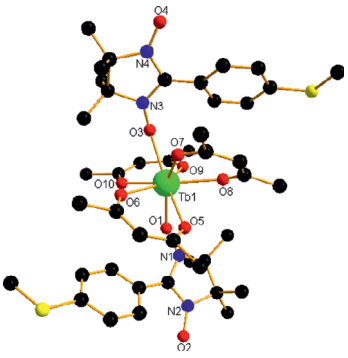


Tb^{III}–Radical Magnetic Complexes

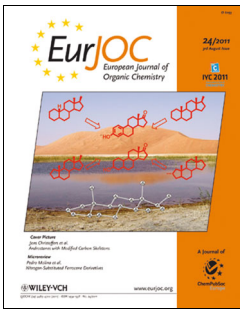
X. Wang,* X. Bao, P. Xu, L. Li

From Discrete Molecule to One-Dimension Chain: Two New Nitronyl Nitroxide–Lanthanide Complexes Exhibiting Slow Magnetic Relaxation

Two new Tb^{III}–radical complexes with tri-spin mononuclear and one-dimensional chain structures, respectively, have been prepared. Magnetic studies show that the two complexes display slow magnetic relaxation that resembles single-molecule and single-chain magnet behavior, respectively.



Eur. J. Inorg. Chem.
DOI: **10.1002/ejic.201100296**

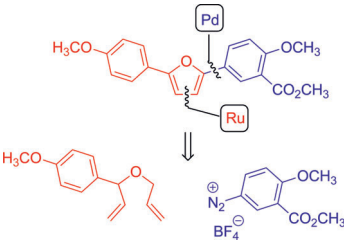


Furans

B. Schmidt,* D. Geißler

Ru- and Pd-Catalysed Synthesis of 2-Arylfurans by One-Flask Heck Arylation/Oxidation

he combination of Ru-catalysed RCM/isomerization and Pd-catalysed Heck arylation/oxidation offers a new route to 2,5-disubstituted furans.



Eur. J. Org. Chem.
DOI: **10.1002/ejoc.201100549**