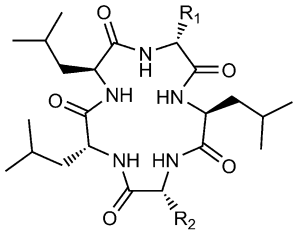
On these pages, we feature a selection of the excellent work that has recently been published in our sister journals. If you are reading these pages on a computer, click on any of the items to read the full article. Otherwise please see the DOIs for easy online access through Wiley Online Library.

Natural Products

H. B. Bode,* D. Reimer, S. W. Fuchs, F. Kirchner, C. Dauth, C. Kegler, W. Lorenzen, A. O. Brachmann, P. Grün

Determination of the Absolute Configuration of Peptide Natural Products by Using Stable Isotope Labeling and Mass Spectrometry

Game over—structure solved: A combination of labeling experiments with mass spectrometry results in the reliable determination of the sum formula, the nature of the building blocks, and for peptide natural products also the determination of the absolute configuration as exemplified for the novel natural products GameXPeptide A–D (see scheme).



GameXPeptide A R^1 = *i*Pr, R^2 = Bn
GameXPeptide B R^1 = *i*Bu, R^2 = Bn
GameXPeptide C R^1 = *i*Pr, R^2 = *i*Bu
GameXPeptide D R^1 = *i*Bu, R^2 = *i*Bu

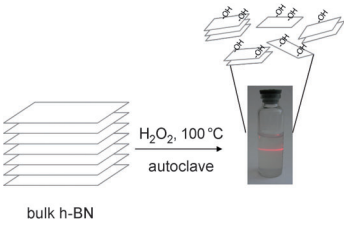
Chem. Eur. J.
DOI: **10.1002/chem.201103479**

Nanomaterials

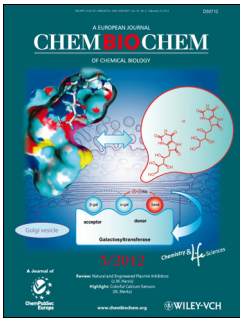
A. S. Nazarov, V. N. Demin,* E. D. Grayfer, A. I. Bulavchenko, A. T. Arymbaeva, H.-J. Shin, J.-Y. Choi, V. E. Fedorov*

Functionalization and Dispersion of Hexagonal Boron Nitride (h-BN) Nanosheets Treated with Inorganic Reagents

Divide and organize: Exfoliation and dispersion of hexagonal boron nitride (h-BN) was achieved through reaction with a range of inorganic reagents (see picture). The product exists in the form of stable colloids in water or *N*,*N*-dimethylformamide (DMF) as thin platelets of functionalized h-BN. Highlights of this method are high yields of soluble h-BN and increased concentrations of dispersions.



Chem. Asian J.
DOI: **10.1002/asia.201100710**

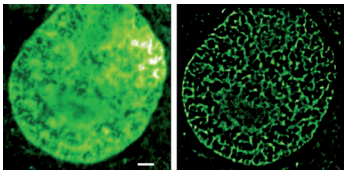


Super-Resolution Imaging

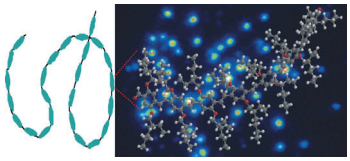
A. Benke, S. Manley*

Live-Cell dSTORM of Cellular DNA Based on Direct DNA Labeling

We have implemented the super-resolution method of direct stochastic optical reconstruction microscopy (dSTORM) to image nuclear and mitochondrial DNA in living cells. We also demonstrate time-lapse imaging, all using a dye that associates directly with cellular DNA: the commercially available dye Picogreen (see figure).



ChemBioChem
DOI: **10.1002/cbic.201100679**



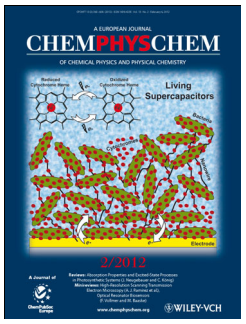
Conjugated Polymers

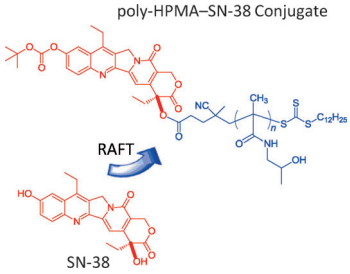
J. M. Lupton*

Chromophores in Conjugated Polymers—All Straight?

What shape is it? Single-molecule and ensemble time-resolved studies support the notion that the π-bond in large macromolecules, such as conjugated polymers, is remarkably persistent in space: even individual chromophores can be bent and twisted, so that caution is warranted when interpreting a wide range of polarization-based spectroscopies.

ChemPhysChem
DOI: **10.1002/cphc.201100770**





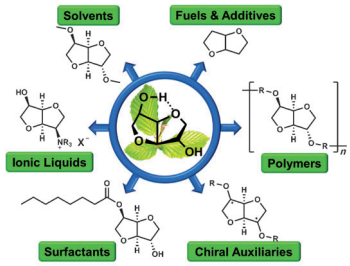
Drug Delivery

C. C. Williams, S. H. Thang, T. Hantke, U. Vogel, P. H. Seeberger, J. Tsanaktsidis,* B. Lepenies*

RAFT-Derived Polymer–Drug Conjugates: Poly(hydroxypropyl methacrylamide) (HPMA)–7-Ethyl-10-hydroxycamptothecin (SN-38) Conjugates

A life RAFT! A series of well-defined polymer–drug conjugates have been prepared to increase the bioavailability of the known cytotoxic drug 7-ethyl-10-hydroxycamptothecin (SN-38). Reversible addition–fragmentation chain transfer (RAFT) polymerisation was used to covalently and site-specifically append an *N*-(2-hydroxypropyl)methacrylamide (HPMA) polymer to SN-38. The poly-HPMA–SN-38 conjugates displayed excellent aqueous solubility, cytotoxic activity, and specificity for cancer cells.

ChemMedChem
DOI: **10.1002/cmdc.201100456**



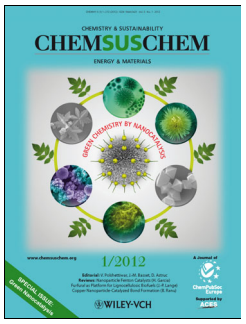
Renewable Chemicals

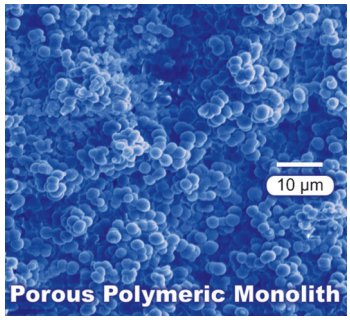
M. Rose, R. Palkovits*

Isosorbide as a Renewable Platform chemical for Versatile Applications—Quo Vadis?

Unwritten tales of isosorbide: Isosorbide is a versatile platform chemical that can be derived from cellulosic biomass as a sustainable resource. Numerous derivatives can be obtained by using various chemical, chemocatalytic, and biotechnological processes to enable the replacement of products in numerous applications that are currently based on fossil resources.

ChemSusChem
DOI: **10.1002/cssc.201100580**





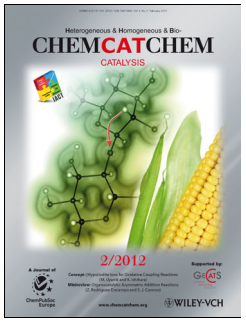
Immobilized Catalysts

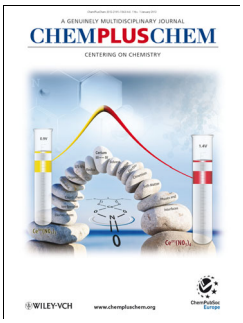
E. B. Anderson, M. R. Buchmeiser*

Catalysts Immobilized on Organic Polymeric Monolithic Supports: From Molecular Heterogeneous Catalysis to Biocatalysis

Affixation with the monolith: This review elucidates advances in supported catalysis for metathesis, Heck, Suzuki, Sonogashira–Hagihara, and biocatalytic reactions. Syntheses and post-functionalizations of organic polymeric monoliths to affix functional catalysts are described. The function of these porous structures in both heterogeneous catalysis and biocatalysis under continuous flow conditions is illustrated.

ChemCatChem
DOI: **10.1002/cctc.201100086**



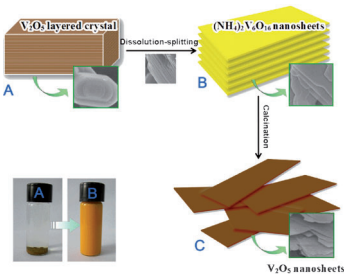


Lithium Ion Batteries

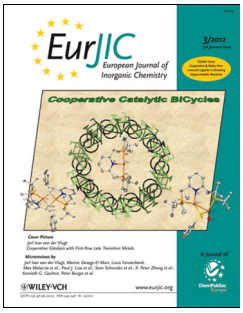
Z.-l. Wang, D. Xu, L.-m. Wang, X.-b. Zhang*

Facile and Low-Cost Synthesis of Large-Area Pure V_2O_5 Nanosheets for High-Capacity and High-Rate Lithium Storage over a Wide Temperature Range

Layer upon layer: Pure V_2O_5 nanosheets (see figure; C) have been successfully synthesized by a novel and facile dissolution–splitting method using low-cost raw materials (A). The as-prepared product exhibits enhanced lithium storage properties including good cycling and rate performance, 144 mAh g^{-1} at 10 C and 95 mAh g^{-1} at 20 C, as well as high reversible capacity, 290 mAh g^{-1}.



ChemPlusChem
DOI: **10.1002/cplu.201100051**

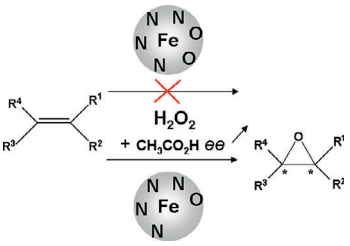


Domino Cross-Coupling

T. Ramana, T. Punniyamurthy*

Copper-Catalyzed Domino One-Pot Synthesis of 2-(Arylselanyl)arylcyanamides

Copper-catalyzed domino C–Se cross-coupling of (2-iodoaryl)selenoureas with aryl iodides has been developed to afford 2-(arylselanyl)arylcyanamides in high yield at moderate temperature.



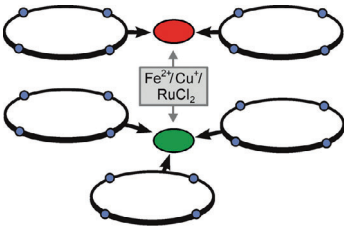
Eur. J. Inorg. Chem.
DOI: **10.1002/ejic.201100785**

Supramolecular Chemistry

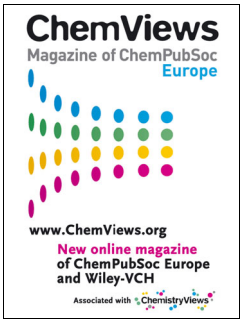
E. V. Dzyuba, B. Baytekin, D. Sattler, C. A. Schalley*

Phenanthroline- and Terpyridine-Substituted Tetralactam Macrocycles: A Facile Route to Rigid Di- and Trivalent Receptors and Interlocked Molecules

Hunter/Vögtle-type tetralactam macrocycles are equipped with metal coordination sites through Suzuki cross-coupling. The same bromo-substituted macrocycle can be used irrespective of the individual binding site, which provides versatile access to different complexes. The complexes represent multivalent hosts that are potentially useful for the formation of multiply interlocked molecules.



Eur. J. Org. Chem.
DOI: **10.1002/ejoc.201101231**



Synthesis of Pesto

Klaus Roth

Pesto – Mediterranean Biochemistry (Part 2)

In this last part we take a look at the synthesis of the perfect pesto. Close your eyes, inhale deeply the monoterpenes, and give isoprene units the opportunity to dance before your mind's eye. Surely there's no finer way to appreciate chemistry!

ChemViews magazine
DOI: **10.1002/chemv.201200002**