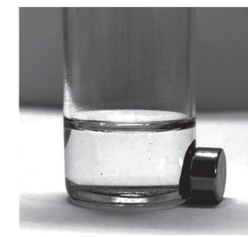
On these pages, we feature a selection of the excellent work that has recently been published in our sister journals. If you are reading these pages on a computer, click on any of the items to read the full article. Otherwise please see the DOIs for easy online access through Wiley Online Library.

Nanomaterials

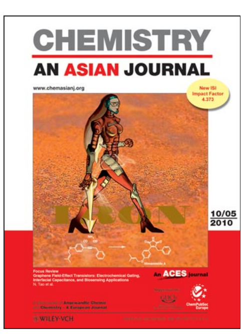
O. Myakonkaya, Z. Hu, M. F. Nazar, J. Eastoe*

Recycling Functional Colloids and Nanoparticles

Going green: The application of magnetic fields (see figure), pH and thermoresponsive materials, molecular antisolvents, or nanostructured colloidal solvents provide effective and efficient methodologies for recycling nanoparticles without significant costs, time demands, or energy consumption. Recent advances in strategies for recycling and reusing functional nanomaterials are described.



Chem. Eur. J.
DOI: **10.1002/chem.201000942**

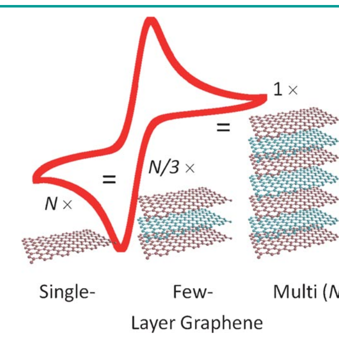


Graphene Sheets

M. S. Goh, M. Pumera*

The Electrochemical Response of Graphene Sheets is Independent of the Number of Layers from a Single Graphene Sheet to Multilayer Stacked Graphene Platelets

It's all the same! We compare electrochemical response of single-, few-, and multilayer graphene sheets and conclude that there is no significant difference between them. Therefore, there is no need for single-layer graphene sheets for electrochemical applications because multilayer graphene provides equal voltammetric performance.



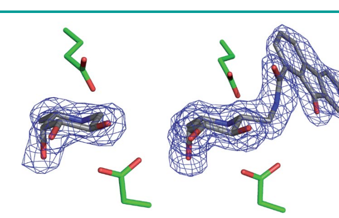
Chem. Asian J.
DOI: **10.1002/asia.201000437**

Glycobiology

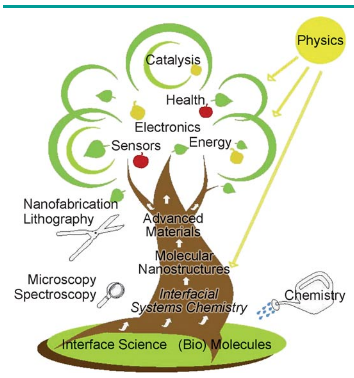
A. Lammerts van Bueren, S. D. Popat, C.-H. Lin, G. J. Davies*

Structural and Thermodynamic Analyses of α-L-Fucosidase Inhibitors

What contributes what? The inhibition of an α-L-fucosidase by two imino-sugar inhibitors is studied through the X-ray crystallography of enzyme–inhibitor complexes and thermodynamic dissection of binding over a range of pH values.



ChemBioChem
DOI: **10.1002/cbic.201000339**



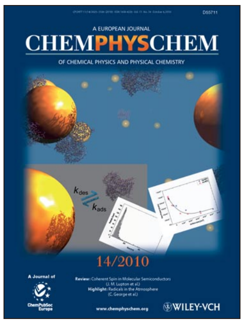
ChemPhysChem
DOI: **10.1002/cphc.201000488**

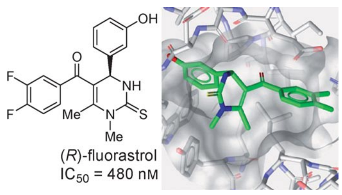
Interfacial Systems Chemistry

A. Gölzhäuser,* C. Wöll*

Interfacial Systems Chemistry: Out of the Vacuum—Through the Liquid—Into the Cell

Tree of knowledge: The picture illustrates interdisciplinary interactions in the field of interfacial systems chemistry (IFSC). For the IFSC tree to carry fruit, chemistry, physics, and engineering sciences have to cooperate closely and synthesize surface-active molecules that arrange at or form interfaces, as reviewed herein.





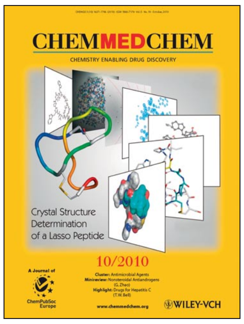
ChemMedChem
DOI: **10.1002/cmdc.201000252**

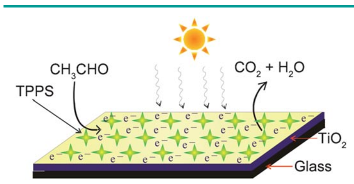
Kinesin Inhibitors

H. Prokopcová, D. Dallinger, G. Uray, H. Y. K. Kaan, V. Ulaganathan, F. Kozielski, C. Laggner,* C. O. Kappe*

Structure–Activity Relationships and Molecular Docking of Novel Dihydropyrimidine-Based Mitotic Eg5 Inhibitors

A welcome improvement: Fluorastrol is a novel Eg5-specific inhibitor that was identified by a combination of in vitro screening and docking techniques. The compound belongs to the so-called class II type dihydropyrimidines and binds preferentially in the *R* configuration to the Eg5 protein. The presence of fluorine atoms is believed to enforce multipolar interactions with the surrounding protein, making fluorastrol a better inhibitor than its parent compound.





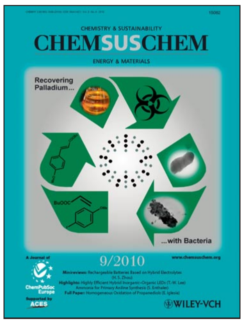
ChemSusChem
DOI: **10.1002/cssc.201000158**

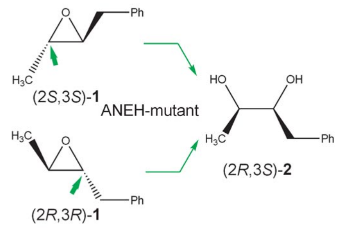
Photocatalysis

A. A. Ismail,* D. W. Bahnemann

Metal-Free Porphyrin-Sensitized Mesoporous Titania Films For Visible-Light Indoor Air Oxidation

The development of transparent cubic mesoporous TiO_2 films coated on common soda-lime glass is described. The adsorption of 3D *meso*-tetrakis(4-sulfonatophenyl) porphyrin (TPPS) onto these TiO_2 films improves the light-harvesting efficiency of these photocatalysts. Employing this 3D TPPS/TiO_2 photocatalyst, a quantum efficiency of 0.059% is obtained for the photodegradation of CH_3CHO in the gas phase under visible-light illumination.





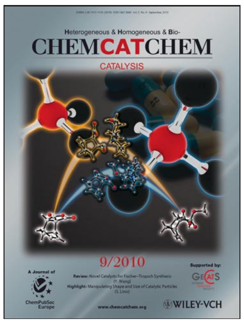
ChemCatChem
DOI: **10.1002/cctc.201000122**

Directed Evolution

H. Zheng, D. Kahakeaw, J. P. Acevedo, M. T. Reetz*

Directed Evolution of Enantioconvergency: The Case of an Epoxide Hydrolase-Catalyzed Reaction of a Racemic Epoxide

Highly evolved: The *Aspergillus niger* epoxide hydrolase (ANEH) has been subjected to laboratory evolution with the creation of mutants that transform the racemic epoxide to a single stereoisomer with greater than 90% conversion and 99% enantiomeric excess.

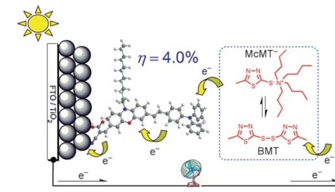


Organic Electrolytes

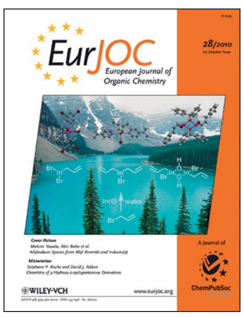
H. Tian, X. Jiang, Z. Yu, L. Kloo, A. Hagfeldt, L. Sun*

Efficient Organic-Dye-Sensitized Solar Cells Based on an Iodine-Free Electrolyte

Deiodized salt: An organic redox couple ($McMT^{-}$/BMT) was adopted for application in dye-sensitized solar cells. Based on a low-cost organic dye, TH305, an efficiency of 4.0% was achieved under simulated sunlight (100 $mW\,cm^{-2}$). Photoelectrochemical measurements provided insights into the difference between the organic redox couple and traditional iodine-based electrolytes.



Angew. Chem. Int. Ed.
DOI: **10.1002/anie.201003740**

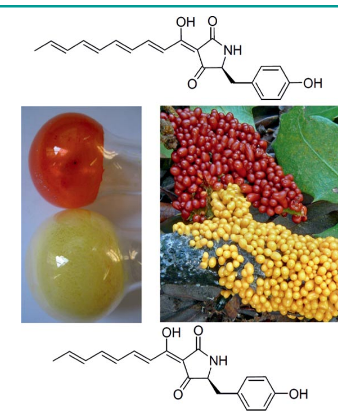


Natural Product Synthesis

N. Riache, C. Bailly, A. Deville, L. Dubost, B. Nay*

Total Synthesis of Tyrosine-Derived Tetramic Acid Pigments from a Slime Mould

The picture on the right shows the slime mould *Leocarpus fragilis* at two maturation stages characterized by different pigmentation. The left picture shows the red (top structure) and yellow (bottom structure) synthetic pigments in flasks. These pigments are poly-enoyl tetramic acids, the synthesis of which was undertaken using a one-pot process.



Eur. J. Org. Chem.
DOI: **10.1002/ejoc.201000597**