



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 InterScience.

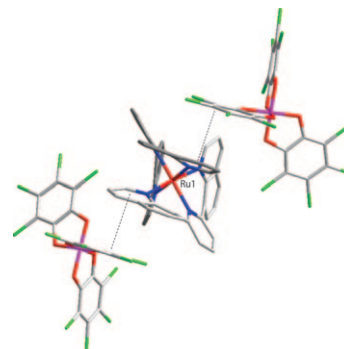


Chirality

S. Sharma, F. Lombeck, L. Eriksson, O. Johansson*

Resolution of Conformationally Chiral mer -[Ru(dqp)₂]²⁺ and Crystallographic Analysis of [δ,δ-Ru(dqp)₂][Δ-TRISPHAT]₂ (dqp = 2,6-Di(quinolin-8-yl)pyridine; TRISPHAT = Tris(tetrachlorocatecholate)phosphate)

Resolving the problem! The conformationally chiral bistridentate [Ru-(dqp)₂]²⁺ complex (dqp = 2,6-di(quinolin-8-yl)pyridine) was resolved by selective precipitation using [Δ-TRISPHAT]⁻ (tris(tetrachlorocatecholate)phosphate) as chiral auxiliary. The X-ray crystal structure of one diastereomer has been solved (see picture). No evidence for racemization was observed either at elevated temperature or with visible light.



Chem. Eur. J.
DOI: 10.1002/chem.201000570

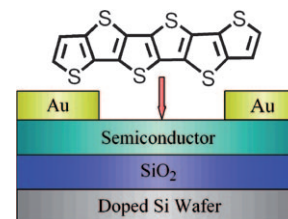


Thin-Film Transistors

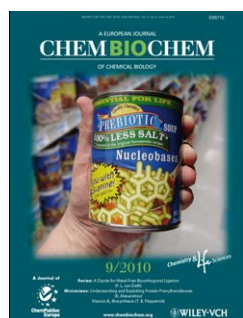
Y. Liu, X. Sun, C.-a. Di, Y. Liu,* C. Du, K. Lu, S. Ye, G. Yu

Hexathienoacene: Synthesis, Characterization, and Thin-Film Transistors

A new linear six thiophene-fused system of hexathienoacene (HTA) has been synthesized, which has also been compared with pentathienoacene (PTA) in terms of optical, electrochemical properties, and charge-transfer properties of organic semiconductors. The experimental data are all in line with the theoretical studies. The highest mobility of 0.06 cm²V⁻¹s⁻¹ with a current on/off ratio of 10⁵ on *n*-octadecyltrichlorosilane (OTS)-treated SiO₂/Si substrates have been achieved.



Chem. Asian J.
DOI: 10.1002/asia.201000001

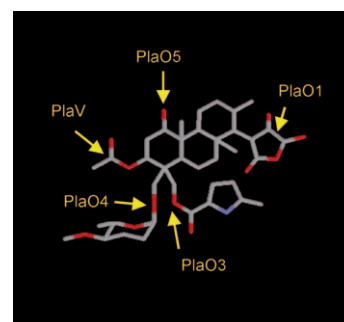


Natural Products

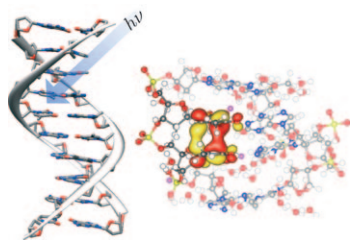
M. Daum, H.-J. Schnell, S. Herrmann, A. Günther, R. Murillo, R. Müller, P. Bisel, M. Müller, A. Bechthold*

Functions of Genes and Enzymes Involved in Phenalinolactone Biosynthesis

New insights into phenalinolactone biosynthesis: The biosynthesis of phenalinolactone requires the activity of several tailoring enzymes. Our studies now open the door to understanding the entire biosynthesis of a highly decorated terpenoid.



ChemBioChem
DOI: 10.1002/cbic.201000117



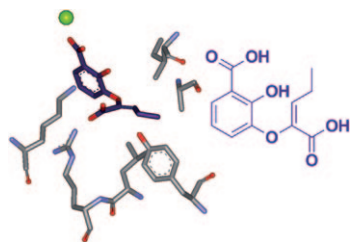
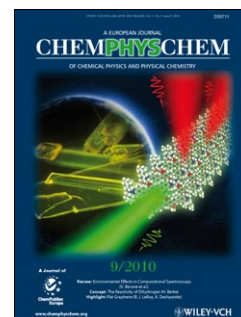
ChemPhysChem
DOI: 10.1002/cphc.201000081

DNA Photodamage

S. Rössle, J. Friedrichs, I. Frank*

The Formation of DNA Photodamage: The Role of Exciton Localization

The amazing photostability of DNA: The location of the exciton contributes strongly to the low quantum yield of the formation of the cyclobutane pyrimidine dimer (CPD damage). Density functional calculations of DNA oligomers (see picture) demonstrate how exciton localization on a pair of pyrimidine bases is connected to their relative orientation at the time of excitation.



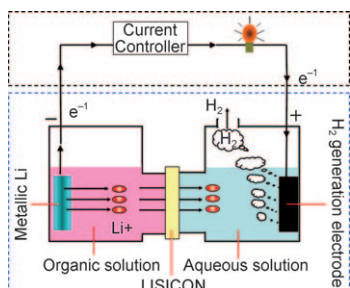
ChemMedChem
DOI: 10.1002/cmdc.201000137

Treating Tuberculosis

A. Manos-Turvey, E. M. M. Bulloch, P. J. Rutledge, E. N. Baker, J. S. Lott, R. J. Payne*

Inhibition Studies of *Mycobacterium tuberculosis* Salicylate Synthase (MbtI)

Salicylate synthase catalyzes the first committed step in the biosynthesis of mycobactin, an iron-chelating siderophore essential for the survival of *Mycobacterium tuberculosis*, the etiological agent of tuberculosis (TB). The first inhibitors of *M. tuberculosis* salicylate synthase (MbtI), designed to mimic the substrate (chorismate) and intermediate (isochorismate) of the enzyme, were prepared with a view to the development of new TB therapies.



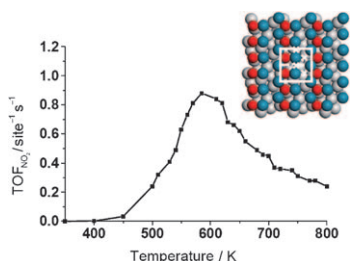
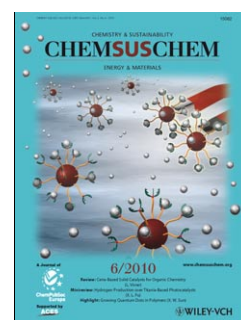
ChemSusChem
DOI: 10.1002/cssc.201000049

Fuel Cells

Y. Wang, H. Li, P. He, H. Zhou*

Controllable Hydrogen Generation from Water

The Lith'ing Daylights: The direct chemical reaction between lithium and water is employed as a controllable electrochemical reaction in a lithium–water cell to generate H₂ gas. The hydrogen generation can be easily controlled by adjusting the current density of the external circuit or discharge time. Lithium-metal production using solar energy and controllable hydrogen generation from such electrochemical cells may provide a new avenue for sustainable hydrogen generation.



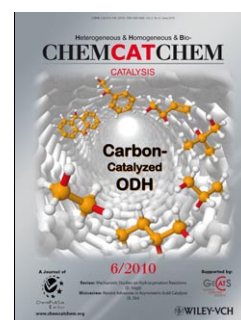
ChemCatChem
DOI: 10.1002/cctc.201000006

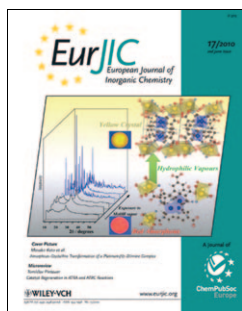
Kinetic Simulations

J. Jelic, K. Reuter,* R. Meyer*

The Role of Surface Oxides in NO_x Storage Reduction Catalysts

Monte Carlo or bust: First-principles kinetic Monte Carlo simulations are used to examine NO oxidation over Pd(101)/Pd(100). Under typical conditions for NO oxidation in a NO_x storage reduction system (600 K, 10⁵ Pa O₂, 100 Pa NO), turnover frequencies are comparable to those of Pt(111) surfaces, implying that the surface oxide is similar in reactivity to an oxygen-covered metal surface.



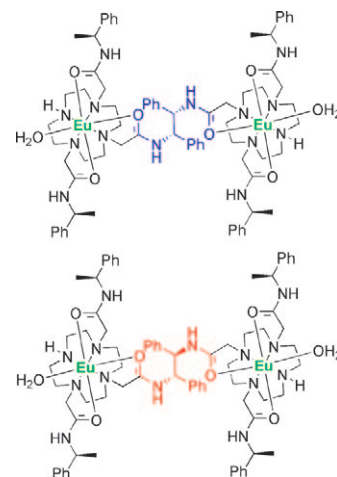


Dinuclear Lanthanide Complexes

B. S. Murray, D. Parker,* C. M. G. dos Santos, R. D. Peacock

Synthesis, Chirality and Complexation Phenomena of Two Diastereoisomeric Dinuclear Lanthanide(III) Complexes

Complexes of Ln^{III} ($\text{Ln} = \text{Eu}, \text{Tb}, \text{Yb}$) with diastereomeric ditopic ligands reveal differing anion binding profiles; circularly polarised luminescence studies of Eu systems show significant differences in the local helicity at the metal centre.



Eur. J. Inorg. Chem.
DOI: 10.1002/ejic.201000243

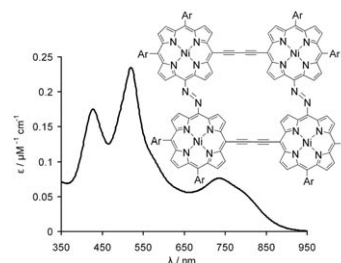


Azo/Butadiyne Porphyrin Tetramer

B. Bašić, J. C. McMurtrie, D. P. Arnold*

A Cyclic Porphyrin Tetramer Linked by Azo and Butadiyne Bridges

A porphyrin tetramer in which the porphyrin units are linked alternately by azo and butadiyne bridges has been prepared. The electronic absorption spectrum implies strong electronic interaction between the porphyrin units.



Eur. J. Org. Chem.
DOI: 10.1002/ejoc.201000388

New Journal

Heterogeneous, Homogeneous and BioCatalysis

www.chemcatchem.org

FREE ONLINE ACCESS
In 2010 for all users from institutions that have registered
Ask your librarian to register for complimentary online access TODAY
www.interscience.wiley.com/newjournals

A journal of

ChemPubSoc Europe

Founding Societies:

A journal of

WILEY-VCH