



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.

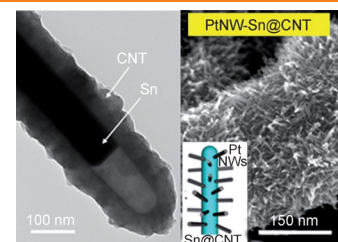


Nanomaterials

S. Sun, G. Zhang, D. Geng, Y. Chen, M. N. Banis, R. Li, M. Cai, X. Sun*

Direct Growth of Single-Crystal Pt Nanowires on Sn@CNT Nanocable: 3D Electrodes for Highly Active Electrocatalysts

Better than cable TV: Single-crystal Pt nanowires are directly grown on Sn@CNT nanocable supports (see figure), forming 3D electrodes, by means of a “green” aqueous solution method at room temperature. This novel PtNW–Sn@CNT 3D electrode exhibits a superior electrochemical performance than the state of the art commercial catalyst.



Chem. Eur. J.

DOI: 10.1002/chem.200902320

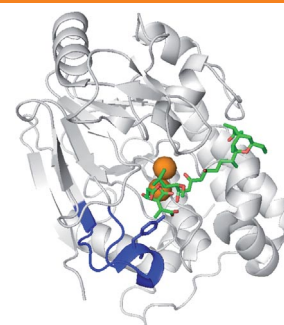


Binding Interactions

M. O. Sydnes, M. Isobe*

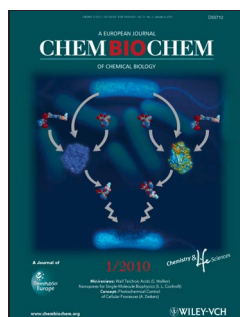
Tautomycin's Interactions with Protein Phosphatase 1

Recently the cocrystal structure of the natural product tautomycin (TTM) and protein phosphatase 1 (PP1) was reported. This Focus Review describes the work aimed at elucidating the binding interactions between TTM and PP1 prior to the X-ray cocrystal structure. Finally, the conclusions that prevailed prior to the latter result are compared with the lessons learnt from the X-ray structure.



Chem. Asian J.

DOI: 10.1002/asia.200900394

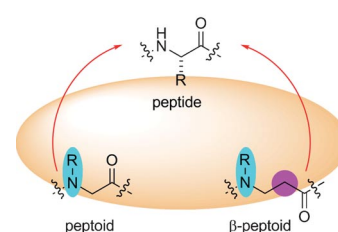


Peptidomimetics

C. A. Olsen*

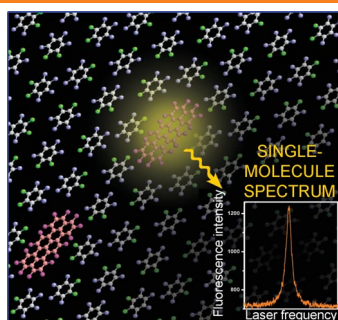
Peptoid–Peptide Hybrid Backbone Architectures

The right blend: Peptidomimetics with hybrid backbone architectures (i.e., those containing at least two different types of monomers) have received increased attention recently. This article provides an overview of the literature concerning hybrid peptidomimetics containing peptoid (N-alkylated glycine) or β -peptoid (N-alkylated β -alanine) residues in combination with α -amino acids, and shows that these types of structures have potential as ligands in a wide variety of biological systems.



ChemBioChem

DOI: 10.1002/cbic.200900618



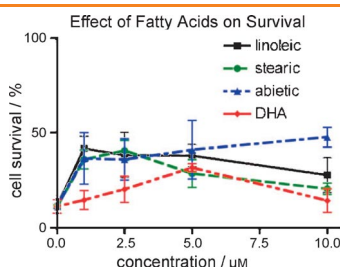
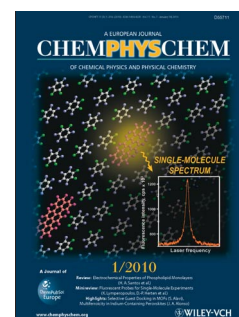
ChemPhysChem
DOI: 10.1002/cphc.200900651

Photonics

A. A. Gorshelev, A. V. Naumov,* I. Yu. Eremchev,
Yu. G. Vainer, L. Kador, J. Köhler

Ortho-Dichlorobenzene Doped with Terrylene—a Highly Photo-Stable Single-Molecule System Promising for Photonics Applications

A promising system: Crystalline *ortho*-dichlorobenzene doped with terrylene (see picture) reveals huge fluorescence emission rates, extraordinary spectral stability, absence of blinking, and a broad inhomogeneous distribution. It makes Tr/o-DCB promising for single-molecule spectroscopy (see inset) and different photonics applications.



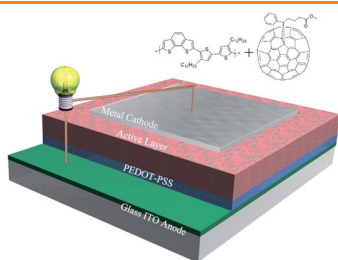
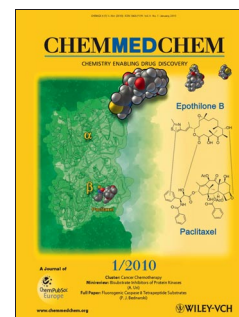
ChemMedChem
DOI: 10.1002/cmdc.200900418

Neuroprotection

A. C. Biraboneye, S. Madonna, P. Maher, J.-L. Kraus*

Neuroprotective Effects of *N*-Alkyl-1,2,4-oxadiazolidine-3,5-diones and Their Corresponding Synthetic Intermediates *N*-Alkylhydroxylamines and *N*-1-Alkyl-3-carbonyl-1-hydroxyureas against in vitro Cerebral Ischemia

Starting from the hypothesis that the acidic properties of 1,2,4-oxadiazolidine-3,5-diones are similar to that of carboxylic acid and could therefore have similar neuroprotective effects to those of stearic acid, the synthesis and biological activity of new *N*-alkyl-1,2,4-oxadiazolidine-3,5-dione derivatives and their synthetic intermediates were investigated.



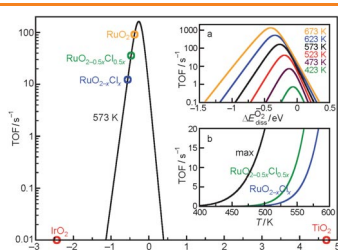
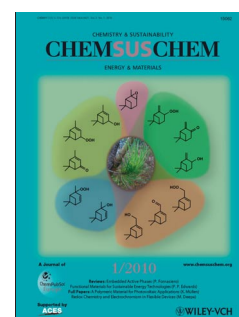
ChemSusChem
DOI: 10.1002/cssc.200900161

Photovoltaics

M. Liu, R. Rieger, C. Li, H. Menges, M. Kastler,
M. Baumgarten, K. Müllen*

A Polymer with a Benzo[2,1-b;3,4-b']dithiophene Moiety for Photovoltaic Applications

The photovoltaic performance of a new benzo[2,1-b;3,4-b']dithiophene-containing conjugated polymer is demonstrated. The pairing of this polymer as donor and [70]PCBM as acceptor results in a good performance in a bulk heterojunction solar cell, featuring a power conversion efficiency of 2.7% upon stepwise post-annealing.



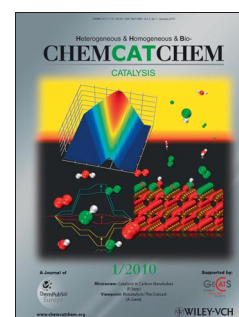
ChemCatChem
DOI: 10.1002/cctc.200900194

DFT

F. Studt, F. Abild-Pedersen, H. A. Hansen, I. C. Man,
J. Rossmeisl, T. Bligaard*

Volcano Relation for the Deacon Process over Transition-Metal Oxides

Lava applets: DFT calculations are used to establish a volcano relation for the Deacon Process over rutile transition-metal oxides. It is found that RuO₂ catalysts are close to the top of the volcano curve, but that there is still room for improvements in the catalytic activity. Importantly, the volcano curve can be based on just one descriptor, the dissociative oxygen chemisorption, which potentially allows for the fast computational screening for new catalysts.



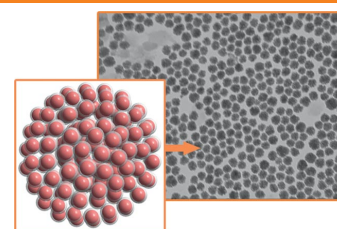


ZnO Colloidal Clusters

C. Li, Y. Zhao, L. Wang, G. Li, Z. Shi,* S. Feng

Polyol-Mediated Synthesis of Highly Water-Soluble ZnO Colloidal Nanocrystal Clusters

Highly water-soluble ZnO colloidal nanocrystal clusters (CNCs) with tunable size have been prepared successfully by using a high-temperature hydrolysis reaction. The as-prepared ZnO CNCs still exhibited strong UV emission in the photoluminescence (PL) spectrum due to the existence of secondary structures despite a particle size ranging from 60 to ca. 200 nm.



Eur. J. Inorg. Chem.

DOI: [10.1002/ejic.200900833](https://doi.org/10.1002/ejic.200900833)

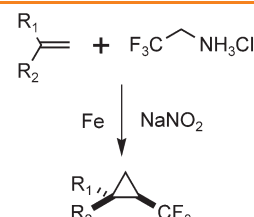


Iron Catalysis

B. Morandi, E. M. Carreira*

Iron-Catalyzed Cyclopropanation with Trifluoroethylamine Hydrochloride and Olefins in Aqueous Media: In Situ Generation of Trifluoromethyl Diazomethane

Let's avoid the risk! The title transformation has been developed for the synthesis of trifluoromethyl-substituted cyclopropane derivatives (see scheme). It avoids the preparation of trifluoromethyl diazomethane and merges a number of areas: water as a reaction medium, iron catalysis, and access to reactive intermediates under operationally safe conditions.



Angew. Chem. Int. Ed.

DOI: [10.1002/anie.200905573](https://doi.org/10.1002/anie.200905573)

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