



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.

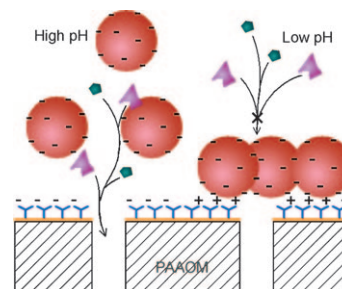


Porous Membranes

X. Zhu, Y. Liu, J. Huang, G. Li*

A pH-Responsive Gate Fabricated with Nanochannels and Nanoparticles

Open for business! A novel pH-responsive gate has been constructed of nanochannels, nanoparticles, and amphoteric compounds to form a complete gate (see figure; PAAOM = porous anodic aluminum oxide membrane). The advantage of this system is that more readily available and tunable compounds than smart polymers have been used.



Chem. Eur. J.
DOI: 10.1002/chem.200902783

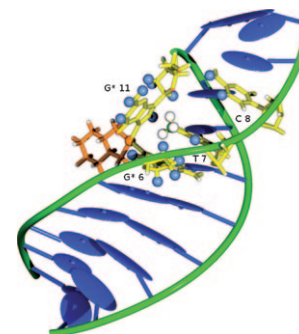


DNA Structures

K. Kubíček, J. Monnet, S. Scintilla, J. Kopečná, F. Arnesano, L. Trantírek, C. Chopard, G. Natile, J. Kozelka*

Unusual Interstrand Pt(*S,S*-diaminocyclohexane)-GG Crosslink Formed by Rearrangement of a Classical Intrastrand Crosslink Within a DNA Duplex

An unusual G₆G₁₁ interstrand crosslink is formed by spontaneous rearrangement of the canonical G₅G₆ intrastrand crosslink generated from the DNA duplex d(CCTTG₅G₆T₇C₈TC)-d(G₁₁AGACCAAGG) and Pt(*S,S*-diaminocyclohexane)²⁺ (the enantiomer of the antitumor drug oxaliplatin). The final product provides a rare example of intramolecular self-intercalation of DNA.



Chem. Asian J.
DOI: 10.1002/asia.200900655

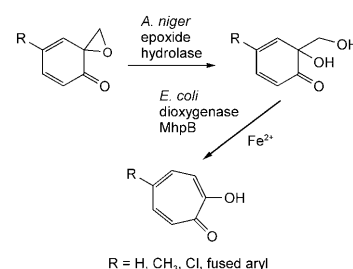


Biosynthesis

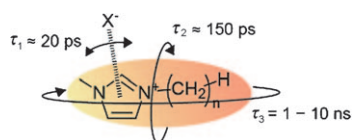
M. Xin, T. D. H. Bugg*

Biomimetic Formation of 2-Tropolones by Dioxygenase-Catalysed Ring Expansion of Substituted 2,4-Cyclohexadienones

At sixes and sevens: We have demonstrated experimentally the proposed ring expansion in the biosynthesis of substituted 2-tropolones. Treatment of four cyclohexa-2,4-dienones with the non-haem iron(II)-dependent extradiol catechol dioxygenase MhpB from *E. coli* resulted in the formation of 2-tropolones through a pinacol-type rearrangement. This ring expansion could also be effected nonenzymatically by treatment with 1,4,7-triazacyclononane and FeCl₂.



ChemBioChem
DOI: 10.1002/cbic.200900631



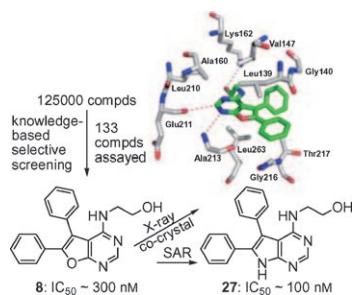
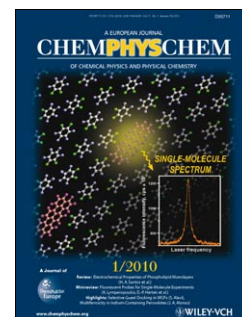
ChemPhysChem
DOI: 10.1002/cphc.200900642

Ionic Liquids

K. Nakamura,* T. Shikata

Systematic Dielectric and NMR Study of the Ionic Liquid 1-Alkyl-3-Methyl Imidazolium

Dynamics of ionic liquids: Broad band dielectric relaxation and NMR studies for a series of 1-alkyl-3-methylimidazolium cations and various counter anionic species provide the dynamical aspects for ionic liquid molecules (see figure).



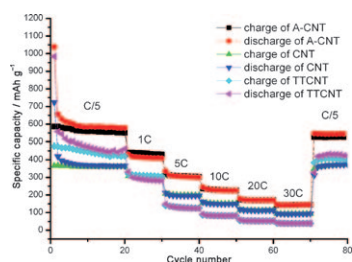
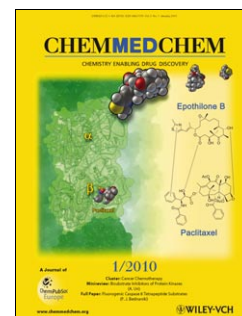
ChemMedChem
DOI: 10.1002/cmdc.200900339

Drug Discovery

M. S. Coumar, M.-T. Tsai, C.-Y. Chu, B.-J. Uang, W.-H. Lin, C.-Y. Chang, T.-Y. Chang, J.-S. Leou, C.-H. Teng, J.-S. Wu, M.-Y. Fang, C.-H. Chen, J. T.-A. Hsu, S.-Y. Wu, Y.-S. Chao, H.-P. Hsieh*

Identification, SAR Studies, and X-ray Co-crystallographic Analysis of a Novel Furanopyrimidine Aurora Kinase A Inhibitor

Aurora blocked: Herein we disclose a combination of knowledge-, chemistry-, and structure-based strategies for the identification and development of hits as Aurora kinase A inhibitors. The compounds identified in this study could be used as starting points for the development of future novel Aurora kinase inhibitors as anticancer agents.



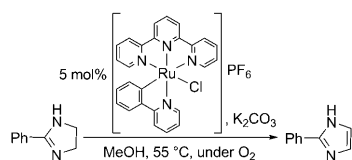
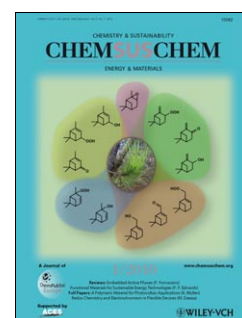
ChemSusChem
DOI: 10.1002/cssc.200900131

Carbon Nanotubes

Y.-J. Xu, X. Liu, G. Cui,* B. Zhu, G. Weinberg, R. Schlögl, J. Maier, D. S. Su*

A Comparative Study on the Lithium-Ion Storage Performances of Carbon Nanotubes and Tube-in-Tube Carbon Nanotubes

Tube or not tube? A comparative study of the electrochemical performance of carbon nanotubes and tube-in-tube carbon nanotubes demonstrates a dependence effect of lithium-ion storage behavior on the detailed nanostructure of carbon nanotubes.



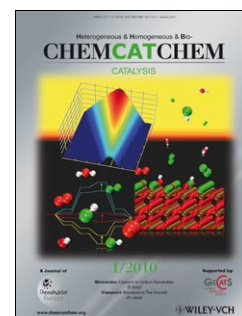
ChemCatChem
DOI: 10.1002/cctc.200900251

Homogeneous Catalysis

A. Taketoshi, A. Tsujimoto, S. Maeda, T. Koizumi, T. Kanbara*

Aerobic Oxidative Dehydrogenation of 2-Substituted Imidazolines Promoted by a Cyclometalated Ruthenium Catalyst

Complex answer to a simple question: The aerobic oxidative dehydrogenation of 2-substituted imidazolines to their corresponding imidazoles has been achieved. A cyclometalated homogeneous Ru^{III} complex, [RuCl(ppy)(tpy)][PF₆] (see scheme), worked as a catalyst under mild conditions without the need for a co-oxidant.



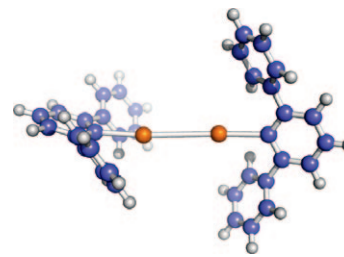


Subvalent Alkaline Earth Compounds

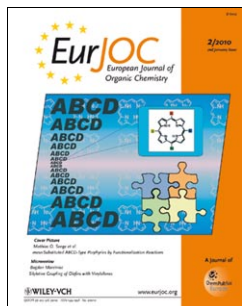
S. Kriek, L. Yu, M. Reiher, M. Westerhausen*

Subvalent Organometallic Compounds of the Alkaline Earth Metals in Low Oxidation States

Alkaline earth metals are regarded as redox-inert; only the oxidation state +2 seems to have significance. In the last few years, sophisticated procedures led to the isolation of compounds with low-valent alkaline earth metals, and several concepts of their stabilization are discussed. Metal–metal bond formation (blue: C, grey: H, orange: Ca) is one possibility to obtain subvalent compounds.



Eur. J. Inorg. Chem.
DOI: 10.1002/ejic.200900966

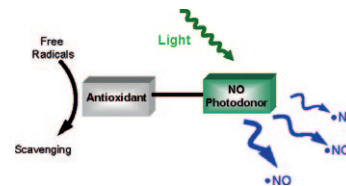


Bifunctional Antioxidants

E. Vittorino, S. Sortino*

A Phenolic Antioxidant Releasing Nitric Oxide on Demand

We have designed and synthesized, by a very simple procedure, a water-soluble molecular conjugate that combines radical scavenging properties to the delivery of nitric oxide in a way exclusively controlled by visible light external stimuli.



Eur. J. Org. Chem.
DOI: 10.1002/ejoc.200901207

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

Founding Societies:

A journal of