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die Artikel mit einem Klick direkt aufrufen, ansonsten sind sie durch Eingabe der DOIs über Wiley Online Library leicht online zugänglich.

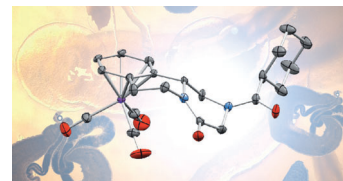


Medicinal Chemistry

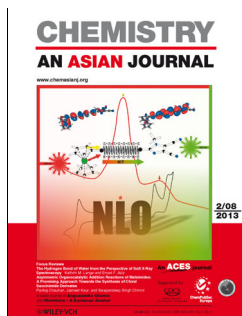
M. Patra, K. Ingram, V. Pierroz, S. Ferrari, B. Spingler, R. B. Gasser, J. Keiser,* G. Gasser*

$[(\eta^6\text{-Praziquantel})\text{Cr}(\text{CO})_3]$ Derivatives with Remarkable In Vitro Anti-Schistosomal Activity

The antischistosomal effect of two $[(\eta^6\text{-praziquantel})\text{Cr}(\text{CO})_3]$ derivatives **1** and **2** was investigated. The compounds (see figure: Cr purple, N blue, O red) are prepared in a one-step procedure from commercially available praziquantel. Both derivatives show a high in vitro activity against *Schistosoma mansoni*, a parasitic trematode, and had only a minor cytotoxic effect on selected mammalian cell lines.



Chem. Eur. J.
DOI: 10.1002/chem.201204291

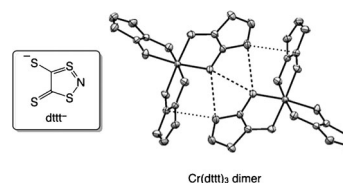


Complex Chemistry

T. Nakamura, K. Sasamori, T. Kodama, K. Kikuchi, W. Fujita*

Preparation, Crystal Structure, and Magnetic Properties of a New Dithiolene Ligand, 1,3,2-Dithiazole-4-thione-5-thiolate, and its Metal Complex

1, 3, 2, 4, 5, go! A new dithiolene ligand, 1,3,2-dithiazole-4-thione-5-thiolate (dttt^-), which is a stable and diamagnetic monoanion, was prepared. Its tris(dithiolene) complex $\text{Cr}(\text{dttt})_3 \cdot \text{CS}_2$ is octahedral and forms a dimer through intermolecular interatomic $\text{S} \cdots \text{S}$ and $\text{S} \cdots \text{C}$ contacts in its crystalline state. Magnetic measurements of the complex revealed paramagnetism with intradimer ferromagnetic and interdimer antiferromagnetic interactions.



Chem. Asian J.
DOI: 10.1002/asia.201200912

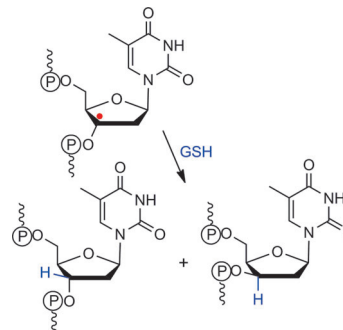


DNA Damage

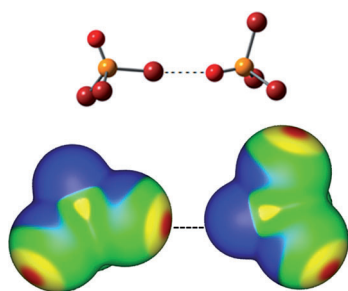
N. J. Amato, A. C. Bryant-Friedrich*

The Impact of Structure on Oxidatively Generated DNA Damage Products Resulting from the C3'-Thymidinyl Radical

What's the damage? Trapping the C3'-thymidinyl radical in biologically significant architectures delivers both the repaired oligomer and 1-(2'-deoxy- β -D-threo-pentofuranosyl)thymidine-containing substrates. The stereoselectivity of the reduction was found to be dependent upon the DNA structure.



ChemBioChem
DOI: 10.1002/cbic.201200723



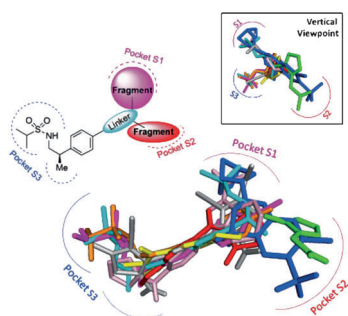
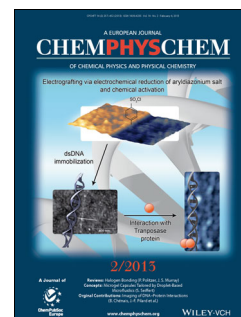
ChemPhysChem
DOI: 10.1002/cphc.201200799

Intermolecular Interactions

P. Politzer,* J. S. Murray

Halogen Bonding: An Interim Discussion

To bond or not to bond: The factors governing halogen-bonding interactions, which involve a region of positive electrostatic potential on a covalently bonded halogen and a negative site (see picture), such as the lone pair of a Lewis base, are described. Particularly important is the positive potential, labeled a σ hole, which is an extension of the covalent bond to the halogen.



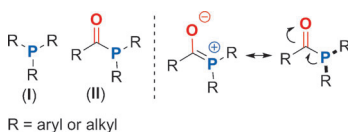
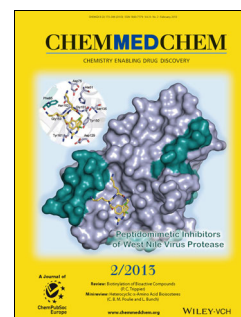
ChemMedChem
DOI: 10.1002/cmdc.201200554

Drug Design

H. Chen, C. Z. Wang, C. Ding, C. Wild, B. Copits, G. T. Swanson, K. M. Johnson, J. Zhou*

A Combined Bioinformatics and Chemoinformatics Approach for Developing Asymmetric Bivalent AMPA Receptor Positive Allosteric Modulators as Neuroprotective Agents

PAMs new in town! An effective, combined bioinformatics and chemoinformatics approach was applied to the design of novel asymmetric bivalent α -amino-3-hydroxy-5-methyl-4-isoxazolepropionic acid (AMPA) receptor positive allosteric modulators (PAMs) with marked potency in vitro and efficacy in vivo for preventing neuroapoptosis. The novel chemotype could provide pharmacological probes and potential therapeutic agents for glutamatergic hypofunction and its related neurological and psychiatric disorders.

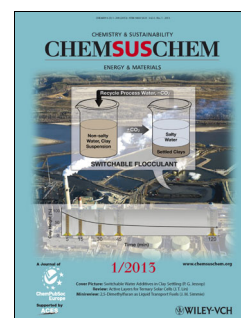


Hydrogenation Reactions

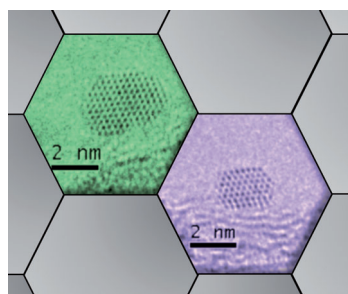
S. Gowrisankar, C. Federsel, H. Neumann, C. Ziebart, R. Jackstell, A. Spannenberg, M. Beller*

Synthesis of Stable Phosphonide Ligands and their Use in Ru-Catalyzed Hydrogenations of Bicarbonate and Related Substrates

Ruthenium and phosphor work wonders: Air-stable ruthenium phosphonide complexes are active catalysts in the hydrogenation of sodium bicarbonate, carbon dioxide, and carbonyl compounds. Hydrogenation proceeds with high catalyst turnover numbers in the absence of amines or other additives. The application range of these new ruthenium catalysts also includes the hydrogenation of cinnamaldehyde and benzaldehyde.



ChemSusChem
DOI: 10.1002/cssc.201200732



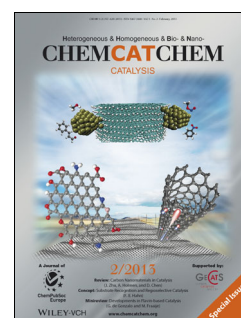
ChemCatChem
DOI: 10.1002/cctc.201200535

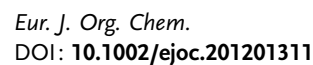
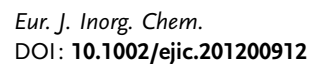
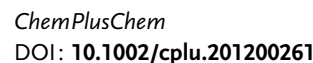
Gold Nanocatalysts

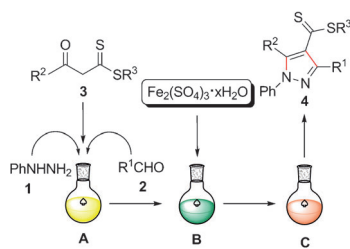
D. Wang,* A. Villa, D. Su, L. Prati, R. Schlögl

Carbon-Supported Gold Nanocatalysts: Shape Effect in the Selective Glycerol Oxidation

Order, order! More ordered graphitic layers on the supporting carbon nanofibers surface led to Au particles bonded through their {111} plane, exhibiting more facet area. This catalyst presented higher selectivity toward C–C bond cleavage in the liquid-phase oxidation of glycerol.







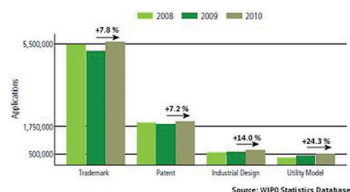
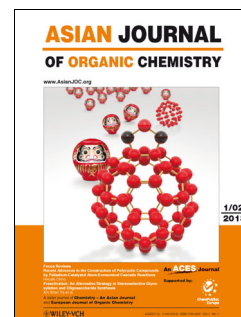
Asian J. Org. Chem.
DOI: 10.1002/ajoc.201200148

Pyrazoles

A. T. Khan,* A. Ghosh, S. Basha R, M. H. Mir

Synthesis of Trisubstituted 1 *H*-Pyrazole-4-carbodithioates in a One-Pot Three-Component Reaction Catalyzed by Ferric Sulfate

An efficient synthesis of substituted-1 *H*-pyrazole-4-carbodithioates is accomplished through the one-pot reaction of phenyl hydrazine, aldehydes, and alkyl-3-oxo-3-arylpropanedithioates by using ferric sulfate ($\text{Fe}_2(\text{SO}_4)_3 \cdot x\text{H}_2\text{O}$) at 80 °C. Mild reaction conditions, good yields, and shorter reaction times are some of the salient features of the present protocol. One of the products has a Cl...S interaction in its crystal structure.



ChemViews magazine
DOI: 10.1002/chemv.201200148

Intellectual Property

Global Intellectual Property Trends

The latest data show a return to growth for trademark and patent applications. Applications for the streamlined international patent application process, the Patent Cooperation Treaty (PCT), set a new record in 2011. ChemViews magazine looks at the trends in patent applications, the top governmental and academic applicants, and how the chemistry sub-disciplines compare.

