

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.

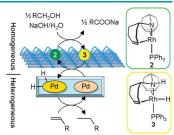


Hydrogen Transfer

M. Trincado, H. Grützmacher,* F. Vizza, C. Bianchini

Domino Rhodium/Palladium-Catalyzed Dehydrogenation Reactions of Alcohols to Acids by Hydrogen Transfer to Inactivated Alkenes

Acceptable suitors: An improved catalytic system for the dehydrogenative coupling of primary alcohols has been developed by using inactivated alkenes as suitable hydrogen acceptors. The synergic action of homogeneous Rh^I amide complexes and supported palladium nanoparticles (see picture) as the heterogeneous component of the catalytic system is indicated by a number of experiments.



Chem. Eur. J.

DOI: 10.1002/chem.200903069

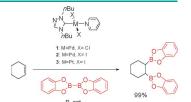


Diboration

C. Pubill-Ulldemolins, C. Bo, J. A. Mata, E. Fernández*

Perceptible Influence of Pd and Pt Heterocyclic Carbene-Pyridyl Complexes in Catalytic Diboration of Cyclic Alkenes

No strain, no gain: Bis(catecholato)diboron was added to cyclic alkenes with internal strain to selectively form bis(boryl)cyclo-alkanes quantitatively in the presence of [Pd(NHC)pyCl₂], [Pd(NHC)pyI₂], and [Pt(NHC)pyI₂] (NHC=N-heterocyclic carbene, py=pyridyl), which have been synthesized and characterized for the first time in this study.



Chem. Asian J.

DOI: 10.1002/asia.200900580

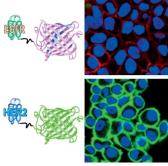


Imaging Agents

I. Lyakhov, R. Zielinski, M. Kuban, G. Kramer-Marek, R. Fisher, O. Chertov, L. Bindu, J. Capala*

HER2- and EGFR-Specific Affiprobes: Novel Recombinant Optical Probes for Cell Imaging

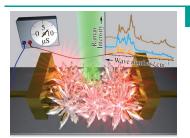
Busy bodies. We report the development of novel probes for in vitro imaging of HER2- and EGFR-positive cells and tissues. These recombinant proteins called affiprobes combine targeting moiety (affibody molecules) with fluorescent proteins (EGFP and mCherry) and can be used as an attractive, cost-effective alternative to fluorescently labeled antibodies.



ChemBioChem

DOI: 10.1002/cbic.200900532

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ChemPhysChem DOI: **10.1002/cphc.200900867**

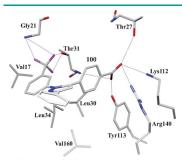
SERS Substrates

K. K. Strelau, T. Schüler, R. Möller, W. Fritzsche, J. Popp*

Novel Bottom-Up SERS Substrates for Quantitative and Parallelized Analytics

Silver bullet: The first SERS substrates using silver nanoparticles formed by the activity of an enzyme are presented. These particles allow an easy characterization of their SERS activity and help to overcome the bottleneck of the production of reproducible SERS substrates. Unlike other SERS substrates, these can be characterized by a simple electrical measurement (see picture).





ChemMedChem DOI: **10.1002/cmdc.200900493**

Drug Design

A. Rudnitskaya, D. A. Borkin, K. Huynh, B. Török,* K. Stieglitz*

Rational Design, Synthesis, and Potency of N-Substituted Indoles, Pyrroles, and Triarylpyrazoles as Potential Fructose 1,6-Bisphosphatase Inhibitors

Computer-based drug design was applied to systematically develop second-generation lead compounds for the improved inhibition of fructose 1,6-bisphosphatase. The selected compounds were synthesized, and their biological potency was determined by in vitro assays.



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ChemSusChem
DOI: 10.1002/cssc.200900280

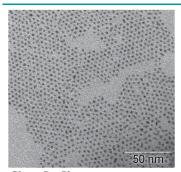
Nanoparticles

O. Myakonkaya, B. Deniau, J. Eastoe,* S. E. Rogers, A. Ghigo, M. Hollamby, A. Vesperinas, M. Sankar, S. H. Taylor, J. K. Bartley, G. J. Hutchings*

Recovery and Reuse of Nanoparticles by Tuning Solvent Quality

Nanoparticles Are Forever: An isothermal low-energy approach permits recovery of nanoparticles for reuse by tuning solvent quality. The recovered and redispersed nanoparticles retain their morphology and chemical reactivity for recycle and reuse. The method, shown here to be effective in the application of nanoparticles as catalysts, will have a wide and general applicability.





ChemCatChem
DOI: 10.1002/cctc.200900232

Heterogeneous Catalysis

D. Fenske,* P. Sonström, J. Stöver, X. Wang, H. Borchert, J. Parisi, J. Kolny-Olesiak, M. Bäumer, K. Al-Shamery*

Colloidally Prepared Pt Nanoparticles for Heterogeneous Gas-Phase Catalysis: Influence of Ligand Shell and Catalyst Loading on CO Oxidation Activity

Colloidal, ligand-capped Pt nanoparticles deposited on oxide supports are investigated for CO adsorption and oxidation. IR spectroscopic experiments reveal that small molecules can pass through the ligand shell and adsorb on the particle surface. The ability to penetrate the shell is dependent on the type of ligand used, which renders ligand-capped nanoparticles potentially interesting for reaction and selectivity control.



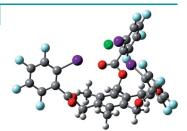


Anion Recognition

M. G. Sarwar, B. Dragisic, S. Sagoo, M. S. Taylor*

A Tridentate Halogen-Bonding Receptor for Tight Binding of Halide Anions

It's in the I's: Three suitably oriented electron-deficient iodoaryl groups form the basis for the first anion receptor (see structure; white H, gray C, red O, blue F, purple I, green Cl) that employs the halogen-bonding interaction alone to achieve high-affinity molecular recognition in dilute solution. The anion selectivity of this tridentate host differs from those of similar receptors based on hydrogen bonding.



Angew. Chem. Int. Ed. DOI: 10.1002/anie.200906488



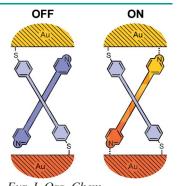
Molecular Electronics

S. Grunder, R. Huber, S. Wu, C. Schönenberger, M. Calame,* M. Mayor*

Oligoaryl Cruciform Structures as Model Compounds for Coordination-Induced Single-Molecule Switches

Two novel cruciform structures based on a crossed oligoaryl/oligo-

(phenylene-vinylene) system are synthesized and investigated as model compounds for a coordination-induced switching mechanism. The target structures are successfully integrated in a "wet" mechanically controllable break junction.



Eur. J. Org. Chem. DOI: **10.1002/ejoc.200901150**

