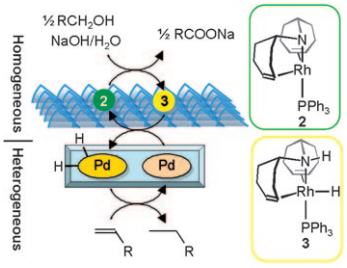
On these pages, we feature a selection of the excellent work that has recently been published in our sister journals. If you are reading these pages on a computer, click on any of the items to read the full article. Otherwise please see the DOIs for easy online access through Wiley InterScience.

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.



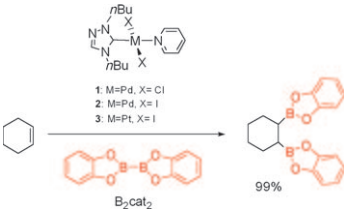
Chem. Eur. J.
DOI: **10.1002/chem.200903069**

Diboration

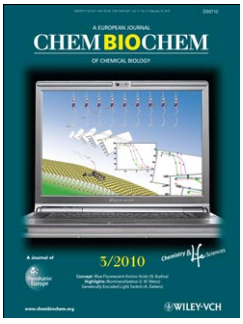
C. Pubill-Ulldemolins, C. Bo, J. A. Mata, E. Fernández*

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)cycloalkanes quantitatively in the presence of [Pd(NHC)pyCl$_2$], [Pd(NHC)pyI$_2$], and [Pt(NHC)pyI$_2$] (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**

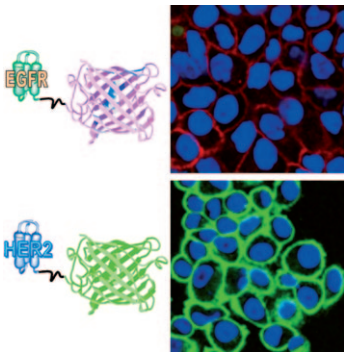


Imaging Agents

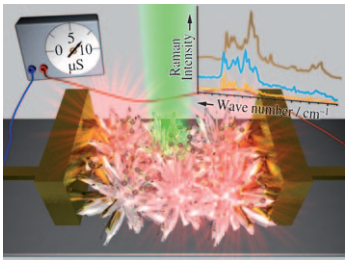
I. Lyakhov, R. Zielinski, M. Kuban, G. Kramer-Marek, R. Fisher, O. Chertov, L. Bindu, J. Capala*

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**



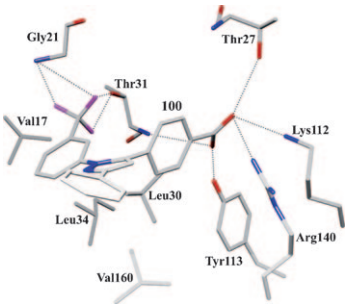
ChemPhysChem
DOI: **10.1002/cphc.200900867**

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).



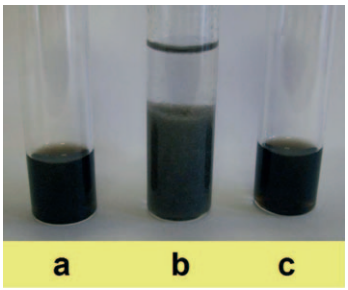
ChemMedChem
DOI: **10.1002/cmdc.200900493**

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.



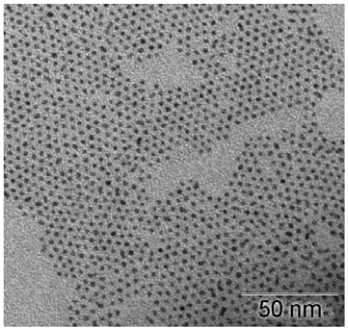
ChemSusChem
DOI: **10.1002/cssc.200900280**

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

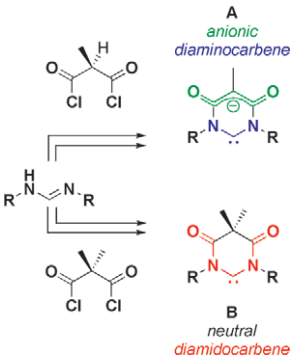
Colloidal, ligand-capped Pt nanoparticles deposited on oxide supports are investigated for CO adsorption and oxidation. IR spectroscopic experiments reveal that small molecules can pass through the ligand shell and adsorb on the particle surface. The ability to penetrate the shell is dependent on the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

A Diamidocarbene Ligand

V. César,* N. Lugan, G. Lavigne*

Reprogramming of a Malonic N-Heterocyclic Carbene: A Simple Backbone Modification with Dramatic Consequences on the Ligand's Donor Properties

The formal introduction of a second substituent on the malonate unit of the NHC ligand **A** blocks the electronic communication between backbone atoms, thereby inducing a reorganization of the electron distribution within the heterocycle. The resulting diamidocarbene **B** exhibits significantly reduced donor properties, but can still be complexed with transition metal ions as illustrated here for the case of rhodium.



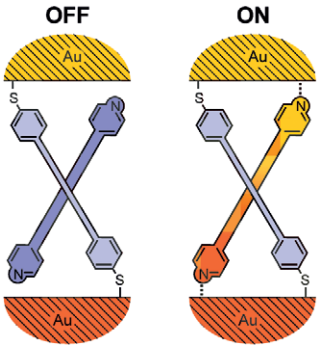
Eur. J. Inorg. Chem.
DOI: **10.1002/ejic.200901113**

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**