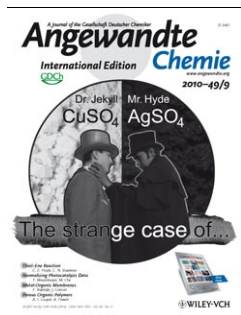




On these pages, we feature a selection of the excellent work that has recently been published in our sister journals. If you are reading these pages on a

computer, click on any of the items to read the full article. Otherwise please see the DOIs for easy online access through Wiley InterScience.

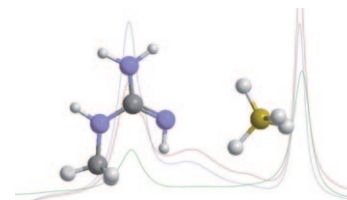


Hydrogen Storage

A. Doroodian, J. E. Dengler, A. Genest, N. Rösch, B. Rieger*

Methylguanidinium Borohydride: An Ionic-Liquid-Based Hydrogen-Storage Material

Promising: The ionic liquid methylguanidinium borohydride (see picture; blue N, yellow B, gray C, white H) is able to release 9 wt % hydrogen under thermal and catalytic conditions. The thermodynamic features and the products of the dehydrogenation are also investigated.



Angew. Chem. Int. Ed.
DOI: [10.1002/anie.200905359](https://doi.org/10.1002/anie.200905359)

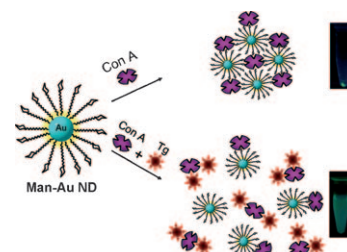


Gold Nanostructures

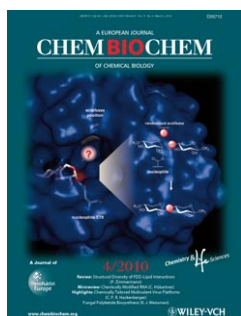
C.-C. Huang,* Y.-L. Hung, Y.-C. Shiang, T.-Y. Lin, Y.-S. Lin, C.-T. Chen,* H.-T. Chang*

Photoassisted Synthesis of Luminescent Mannose–Au Nanodots for the Detection of Thyroglobulin in Serum

Thyroglobulin assays: Photoassisted synthesis of water-soluble and highly luminescent mannose-modified gold nanodots (Man–Au NDs) by irradiation with an LED have been employed for the detection of cancer marker thyroglobulin (Tg) through an assay based on competition between Tg and Man–Au NDs for interaction with the concanavalin A (Con A).



Chem. Asian J.
DOI: [10.1002/asia.200900346](https://doi.org/10.1002/asia.200900346)

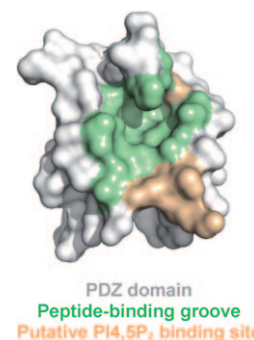


PDZ Domains

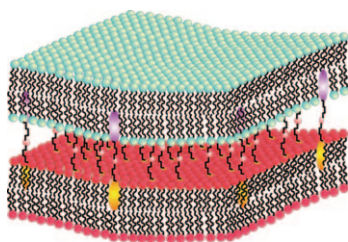
R. Gallardo, Y. Ivarsson, J. Schymkowitz, F. Rousseau, P. Zimmermann*

Structural Diversity of PDZ–Lipid Interactions

Partners in crime: PDZ domains are among the most abundant protein-interaction domains in multicellular organisms. This review provides an overview of the recent progress in research on the role of lipid interactions in the biology of PDZ scaffolds. We summarize the current understanding of PDZ–lipid interactions and the consequences for peptide interactions by emphasizing the structural and biochemical aspects.



ChemBioChem
DOI: [10.1002/cbic.200900616](https://doi.org/10.1002/cbic.200900616)



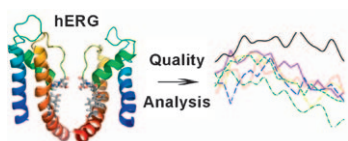
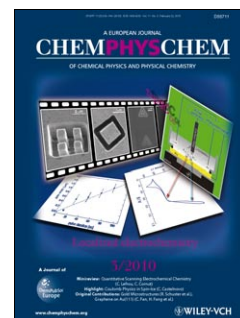
ChemPhysChem
DOI: 10.1002/cphc.200900798

Biomembranes

X. Han, A. S. Achalkumar, M. R. Cheetham, S. D. A. Connell, B. R. G. Johnson, R. J. Bushby, S. D. Evans*

A Self-assembly Route for Double Bilayer Lipid Membrane Formation

Biomembranes: A new method of forming double bilayer lipid membranes uses NHS/EDC chemistry to link adjacent bilayers, both of which remain fluid. This approach provides a novel platform for the study of biomembranes, in which the components of the upper membrane are shielded from the solid substrate by a second membrane (see figure); and for studying more complex membrane protein systems which span double lipid bilayers.



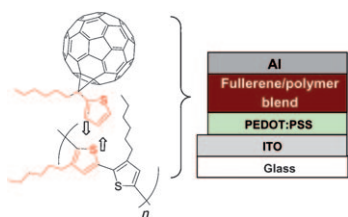
ChemMedChem
DOI: 10.1002/cmdc.200900461

Molecular Modeling

A. Stary,* S. J. Wacker, L. Boukharta, U. Zachariae, Y. Karimi-Nejad, J. Åqvist, G. Vriend, B. L. de Groot

Toward a Consensus Model of the hERG Potassium Channel

To achieve a consensus model of hERG we tested seven models based on different S5 alignments by using a combination of static assessment, MD simulations, and docking. Model 6 fulfills all quality criteria and is confirmed by recent mutagenesis experiments.



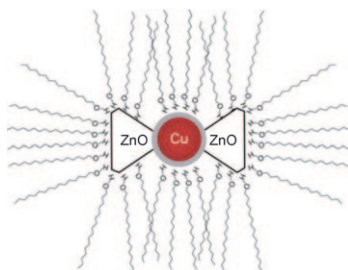
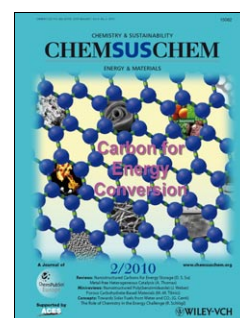
ChemSusChem
DOI: 10.1002/cssc.200900196

Solar Cells

P. A. Troshin,* E. A. Khakina, M. Egginger, A. E. Goryachev, S. I. Troyanov, A. Fuchsbaue, A. S. Peregudov, R. N. Lyubovskaya, V. F. Razumov, N. S. Sariciftci

Self-Assembly of Thiophene- and Furan-Appended Methanofullerenes with Poly(3-Hexylthiophene) in Organic Solar Cells

Fullerene derivatives with pendant thiophene or furan units self-assemble with poly(3-hexylthiophene) via π - π stacking and form ordered nanostructures, enabling their efficient operation in photo-voltaic devices. Such intermolecular stabilization might be considered as a promising way to improve the lifetime of organic photo-voltaics in the future.



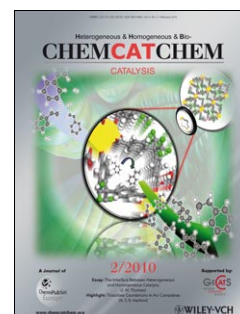
ChemCatChem
DOI: 10.1002/cctc.200900252

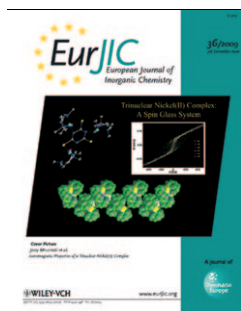
Methanol Synthesis

S. Schimpf, A. Rittermeier, X. Zhang, Z.-A. Li, M. Spasova, M. W. E. van den Berg, M. Farle, Y. Wang, R. A. Fischer, M. Muhler*

Stearate-Based Cu Colloids in Methanol Synthesis: Structural Changes Driven by Strong Metal-Support Interactions

Grand prisms: Zinc stearate-stabilized copper nanoparticles, synthesized by an efficient one-step process, are applied in the continuous liquid-phase synthesis of methanol. The active state is identified as triangular ZnO prisms with truncated edges attached to the spherical Cu particles, which act as a reservoir for ZnO_x species diffusing onto the Cu particles and promoting the catalytic activity.



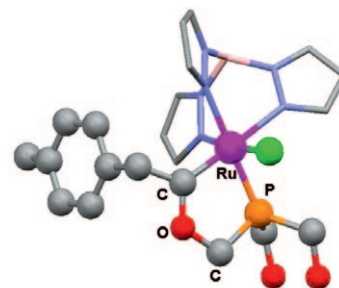


Ru Oxaphosphacyclic Carbenes

S. Bolaño,* J. Bravo,* J. Castro, M. Rodríguez-Rocha

Formation of Oxaphosphacarbenes by Reaction of [RuTpCl(PPh₃)(thp)] with Terminal Alkynes and a Propargylic Alcohol

Cationic and neutral five-membered cyclic ruthenium oxaphosphacarbenes were obtained by intramolecular nucleophilic addition of one hydroxymethyl group of the tris(hydroxymethyl)phosphane (thp) ligand to the α -carbon atom of vinylidene or allenylidene intermediates, which were generated by reaction of [TpRuCl(PPh₃)(PTA)] with terminal alkynes and with 1,1-diphenyl-2-propyn-1-ol.



Eur. J. Inorg. Chem.
DOI: 10.1002/ejic.200900988

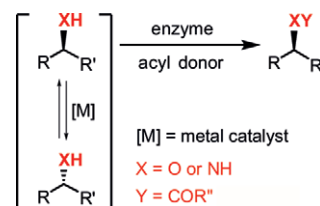


Dynamic Kinetic Resolution

J. H. Lee, K. Han, M.-J. Kim,* J. Park*

Chemoenzymatic Dynamic Kinetic Resolution of Alcohols and Amines

Dynamic kinetic resolution (DKR) is an attractive process for the production of optically active compounds from racemic mixtures. Combinations of the processes of metal-catalyzed racemization and enzymatic acylation in one-pot fashion have shown the potential of DKR of alcohols and amines. This Microreview summarizes developments in and the scope of chemoenzymatic DKR.



Eur. J. Org. Chem.
DOI: 10.1002/ejoc.200900935

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

Founding Societies:

GESELLSCHAFT DEUTSCHER CHEMIKER

A journal of