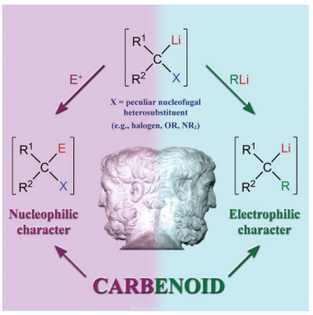
On these pages, we feature a selection of the excellent work that has recently been published in our sister journals. If you are reading these pages on a computer, click on any of the items to read the full article. Otherwise please see the DOIs for easy online access through Wiley InterScience.

Lithium Carbenoids

V. Capriati,* S. Florio*

Anatomy of Long-Lasting Love Affairs with Lithium Carbenoids: Past and Present Status and Future Prospects

Face-to-face, rising to the challenge! The two Janus-like souls of lithium carbenoids (see Figure) are not a weak but, instead, a strong point of their reactivity. A proper knowledge of their structural features, aggregation, and solvation can not only shed light on the reasons for their thermal and configurational lability/stability, but can also allow a fine tuning of their reactivity toward more stereoselective and targeted transformations.



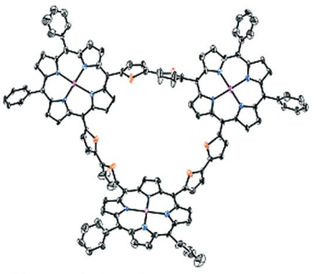
Chem. Eur. J.
DOI: **10.1002/chem.200902870**

Multiporphyrin Arrays

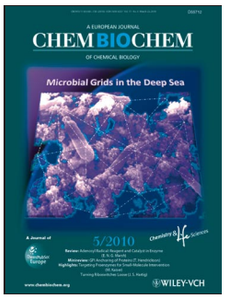
K. Osawa, J. Song, K. Furukawa, H. Shinokubo,* N. Aratani,* A. Osuka*

Bithiophene–Porphyrin Hybrid Nanorings

***Meso*-to-*meso* bithiophene-bridged** cyclic porphyrin 3-mer, 4-mer, and 5-mer were prepared by one-pot Suzuki–Miyaura coupling reaction. The UV/Vis absorption spectra of the protonated bithiophene–porphyrin hybrid rings indicate the strong intramolecular electronic interactions between porphyrin and bithiophene units. Furthermore, Zn^{II} complexes (see picture for example: Zn pink, N blue, S orange) were shown to serve as multicharge storage systems.



Chem. Asian J.
DOI: **10.1002/asia.200900619**

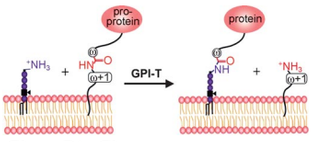


Membrane Proteins

Y. Varma, T. Hendrickson*

Methods to Study GPI Anchoring of Proteins

Dropping anchor: Glycosylphosphatidylinositol (GPI) membrane-anchored proteins noncovalently associate with the plasma membrane and can have an impact on oncogenesis and some infectious diseases. The GPI anchor biosynthetic machinery and GPI-T, the transamidase that attaches them to proteins, are complicated, membrane-associated enzymes that are only beginning to be understood.



ChemBioChem
DOI: **10.1002/cbic.200900704**

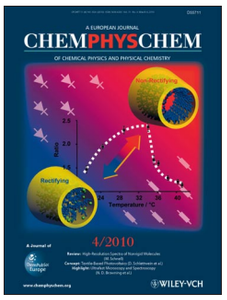
ChemPhysChem
DOI: **10.1002/cphc.200900688**

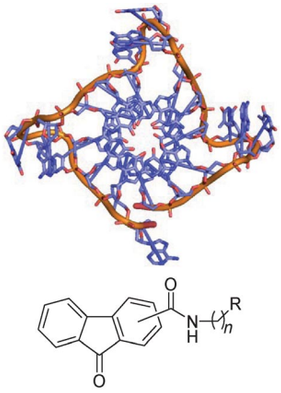
Liquid Mirrors

A. M. Ritcey,* E. Borra

Magnetically Deformable Liquid Mirrors from Surface Films of Silver Nanoparticles

A unique optical element: A magnetically deformable mirror composed of a reflective monolayer of silver nanoparticles deposited at the surface of a ferrofluid is presented (see picture). Recent advances in the optimization of the chemical components of the mirror to achieve better reflectivity, deformability and long-term stability are described. The mirror has clearly passed the proof-of-concept stage, but challenges still remain.





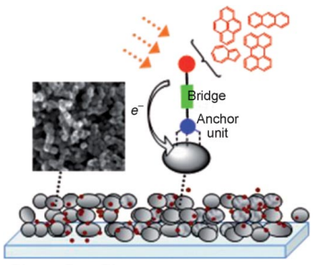
ChemMedChem
DOI: **10.1002/cmdc.200900541**

Drug Design

S. Alcaro,* A. Artese, J. N. Iley, S. Missailidis, F. Ortuso, L. Parrotta, R. Pasceri, F. Paduano, C. Sissi, F. Trapasso, M. G. Vigorita

Rational Design, Synthesis, Biophysical and Antiproliferative Evaluation of Fluorenone Derivatives with DNA G-Quadruplex Binding Properties

The chemical modification of fluorenone derivatives with morpholino side chains led to the rational design of ligands selective for the human telomeric DNA repeat sequence $d[AG_3(T_2AG_3)_3]$. Results of theoretical, biophysical, and in vitro experiments highlight two lead compounds for the development of a more potent and selective generation of G-quadruplex binders.



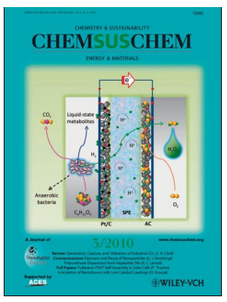
ChemSusChem
DOI: **10.1002/cssc.200900233**

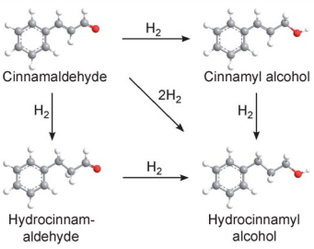
Solar Cells

Y. Zhang, E. Galoppini*

Organic Polyaromatic Hydrocarbons as Sensitizing Model Dyes for Semiconductor Nanoparticles

Live and Let Dye: This Review describes how model sensitizers prepared from organic polyaromatic hydrocarbons, particularly anchor–bridge–dye models, are used to elucidate fundamental aspects of heterogeneous charge transfer at the surface of a semiconductor for the development of dye-sensitized solar cells.





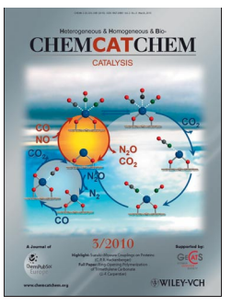
ChemCatChem
DOI: **10.1002/cctc.200900230**

Supported Catalysts

B. F. Machado, H. T. Gomes, P. Serp, P. Kalck, J. L. Faria*

Liquid-Phase Hydrogenation of Unsaturated Aldehydes: Enhancing Selectivity of Multiwalled Carbon Nanotube-Supported Catalysts by Thermal Activation

Surface-enhanced selectivity: Highly selective hydrogenation of cinnamaldehyde to cinnamyl alcohol, catalyzed by Pt and Ir supported on multiwalled carbon nanotubes, is achieved after a high temperature thermal treatment of the catalyst. Surface chemistry of the support, rather than the metal particle size, is the key factor.

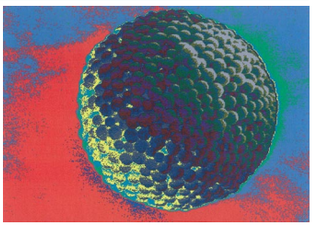


Liquid Chromatography

K. K. Unger,* R. Ditz, E. Machtejevas, R. Skudas

Liquid Chromatography—Its Development and Key Role in Life Science Applications

For large and small molecules: Liquid chromatography is one of the most versatile technologies in the life sciences. It can be used for femtomol level analytics as well as for the ton-scale purification of drugs, and it offers a solution to abundance problems in the investigation and purification of biological systems. The picture shows a porous microparticle for liquid chromatography made by controlled agglomeration of nonporous nanoparticles.



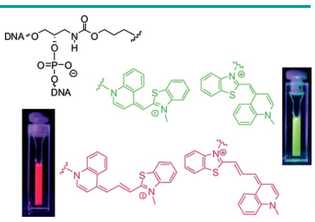
Angew. Chem. Int. Ed.
DOI: **10.1002/anie.200906976**

DNA Fluorescence

C. Holzhauser, S. Berndl, F. Menacher, M. Breunig, A. Göpferich, H.-A. Wagenknecht*

Synthesis and Optical Properties of Cyanine Dyes as Fluorescent DNA Base Substitutions for Live Cell Imaging

The optical properties of **TO** and **TO3** were studied in different DNA base environments and with different opposite bases. Both dyes as fluorescent DNA base substitutions show a brightness that is sufficient for bioanalytic and imaging applications. They can be combined to a FRET pair.



Eur. J. Org. Chem.
DOI: **10.1002/ejoc.200901423**

