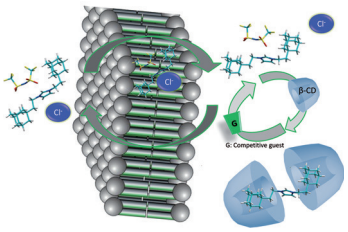
Auf diesen Seiten weisen wir auf wichtige aktuelle Beiträge in unseren Schwesterzeitschriften hin. Wenn Sie die Seiten online lesen, dann können Sie die Artikel mit einem Klick direkt aufrufen, ansonsten sind sie durch Eingabe der DOIs über Wiley Online Library leicht online zugänglich.

Supramolecular Chemistry

J. Gravel, J. Kempf, A. Schmitzer*

Host–Guest Strategy to Reversibly Control a Chloride Carrier Process with Cyclodextrins

Host reverse host: A reversible modular chloride transport process in phospholipid bilayers involving a mobile transmembrane transporter and cyclodextrins has been developed. It was demonstrated that formation of a supramolecular complex results in the inhibition of the chloride transport and that the chloride transport process can be entirely restored in the presence of competitive adamantyl-functionalized guests.



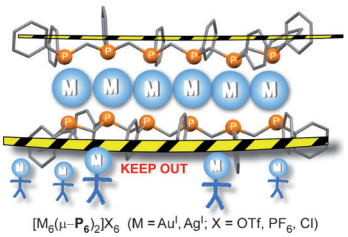
Chem. Eur. J.
DOI: **10.1002/chem.201503714**

Chain Structures

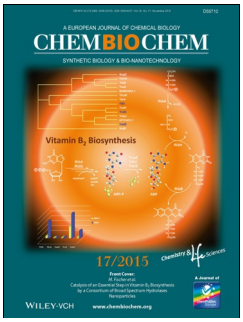
T. Tanase,* M. Chikanishi, K. Morita, K. Nakamae, B. Kure, T. Nakajima*

Gold and Silver Chains Supported by Linear Hexaphosphine Ligands

Need help finding a gold/silver chain? A new linear hexaphosphine, *rac-cis,cis,trans*-bis{[(diphenylphos-phinomethyl)phenylphosphinomethyl]phenylphosphino}methane ($\mathbf{P_6}$), was synthesized and proven as quite effective to organize hexanuclear metal chains of closed-shell Au^I and Ag^I ions.



Chem. Asian J.
DOI: **10.1002/asia.201500876**

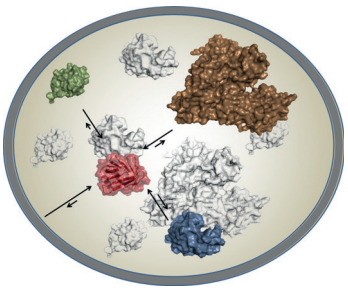


Macromolecular Crowding

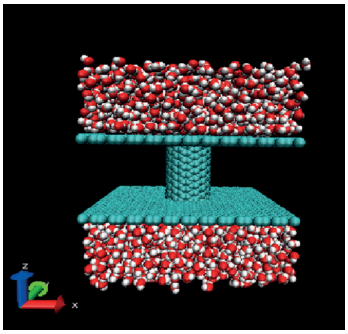
A. Ceccon, M. Busato, S. Pérez Santero, M. D'Onofrio, F. Musiani, A. Giorgetti,* M. Assfalg*

Transient Interactions of a Cytosolic Protein with Macromolecular and Vesicular Cosolutes: Unspecific and Specific Effects

Leave me alone! Proteins in native environments are never isolated. We show here, by biochemical and computational methods, that the test protein human ileal bile acid binding protein engages in both unspecific and specific ultraweak interactions with model intracellular components.



ChemBioChem
DOI: **10.1002/cbic.201500451**

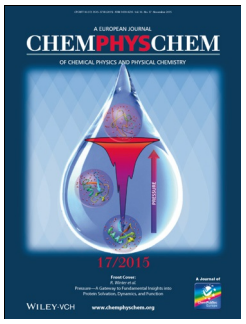


Molecular Dynamics

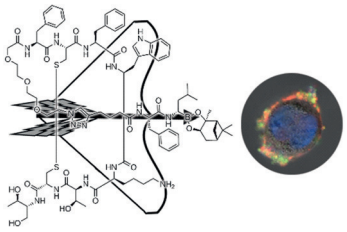
J. Su,* K. Yang

On the Origin of Water Flow through Carbon Nanotubes

Molecular dynamics: Water flow through carbon nanotubes of different sizes can be predicted by a simple equation.



ChemPhysChem
DOI: **10.1002/cphc.201500575**

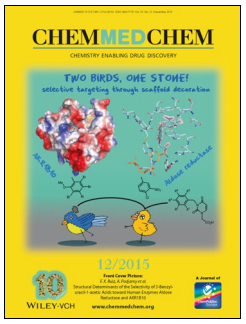


Drug Delivery

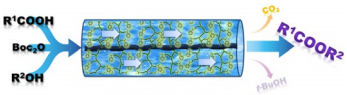
P. Beck,* H. Cui, J. D. Hegemann, M. A. Marahiel, A. Krüger, M. Groll*

Targeted Delivery of Proteasome Inhibitors to Somatostatin-Receptor-Expressing Cancer Cells by Octreotide Conjugation

Contract killers: Cell-specific delivery of proteasome inhibitors could become a promising enhancement for these chemotherapeutic agents in clinical use. In this study we show that proteasome inhibitors conjugated to a somatostatin-receptor-targeting moiety are up to 11-fold more effective in inducing cell death than a non-targeting surrogate.



ChemMedChem
DOI: **10.1002/cmdc.201500449**

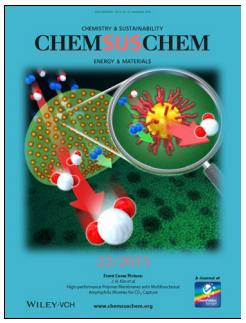


Flow Chemistry

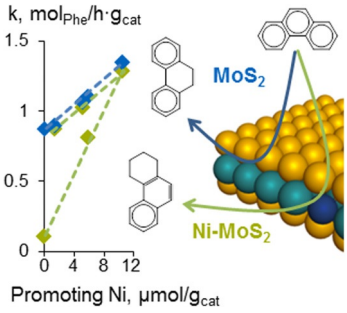
Y. Okuno, S. Isomura, A. Sugamata, K. Tamahori, A. Fukuhara, M. Kashiwagi, Y. Kitagawa, E. Kasai, K. Takeda*

Convenient and Simple Esterification in Continuous-Flow Systems using *g*-DMAP

Graft and flow: The utility and applicability of polyethylene-*g*-polyacrylic acid-immobilized dimethylaminopyridine (*g*-DMAP) as a catalyst in a continuous flow system is demonstrated using coupling reactions involving di-*tert*-butyl dicarbonate (Boc_2O) for decarboxylative esterification. The developed system not only reduces the production of by-products, but also dramatically decreases the reaction time.



ChemSusChem
DOI: **10.1002/cssc.201500919**

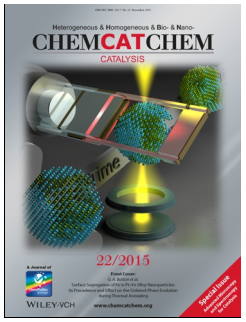


Hydrogenation

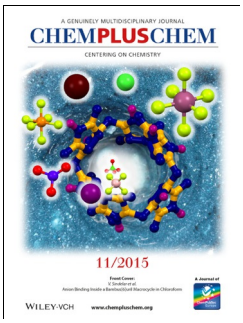
E. Schachtl, L. Zhong, E. Kondratieva, J. Hein, O. Y. Gutiérrez,* A. Jentys, J. A. Lercher*

Understanding Ni Promotion of MoS_2/γ-Al_2O_3 and its Implications for the Hydrogenation of Phenanthrene

Well, everybody knows that Ni is the word: In promoted MoS_2/γ-Al_2O_3, Ni substitutes Mo at the perimeter of the MoS_2 slabs, forming particles of Ni sulfides with varying sizes at the edges of MoS_2 or on the support. The proportions of these species depend on the Ni content. Ni-substituted sites perform faster and deeper hydrogenation of phenanthrene than non- promoted sites.



ChemCatChem
DOI: **10.1002/cctc.201500706**

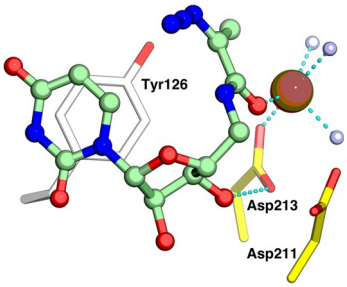


Glycosyltransferases

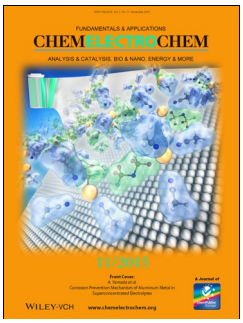
S. Wang, J. A. Cuesta-Seijo, A. Striebeck, D. Lafont, M. M. Palcic, S. Vidal*

Design of Glycosyltransferase Inhibitors: Serine Analogues as Pyrophosphate Surrogates?

Moving targets: Nucleotide diphosphate sugar analogues were synthesized through a combination of glycosylation, amide bond formation and azide–alkyne "click" chemistry. High micromolar inhibitors were obtained with a selection of five galactosyltransferases. The structures and inhibitory patterns of the analogues demonstrate the flexibility of the enzymes which complicates the rational design of glycosyltransferase inhibitors.



ChemPlusChem
DOI: **10.1002/cplu.201500282**

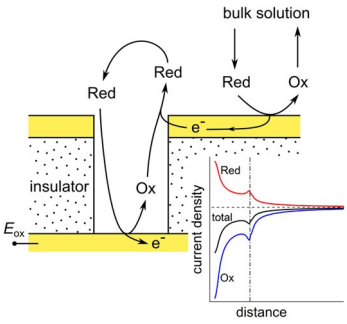


Electrode Arrays

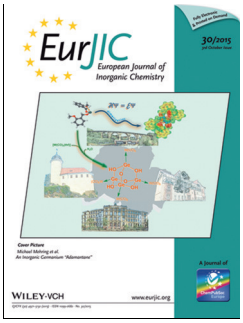
A. Oleinick, J. Yan, B. Mao, I. Svir,* C. Amatore*

Theory of Microwell Arrays Performing as Generators–Collectors Based on a Single Bipolar Plane Electrode

Unbiased and efficient: Plane-recessed disk-electrode arrays are extremely useful for sensing purposes, even when the top-plane electrode is not biased. This theoretical study provides insights into the bipolar performance of such systems and shows that rational design may allow their optimization for a broad range of experimental conditions.



ChemElectroChem
DOI: **10.1002/celc.201500321**

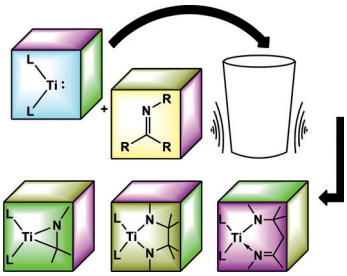


Titanacycles

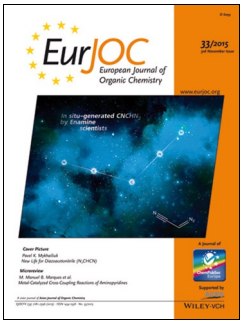
F. Loose, M. Schmidtmann, W. Saak, R. Beckhaus*

Imines in the Titanium Coordination Sphere: Highly Reactive Titanaaziridines and Larger Titanacycles Formed by Subsequent C–C Coupling Reactions

Shake well before use: Imines and low-valent titanium fragments react to form titanaaziridines, five-membered McMurry-like coupling products, and titanadiazacyclohexene as a Michael-coupling product.



Eur. J. Inorg. Chem.
DOI: **10.1002/ejic.201500805**

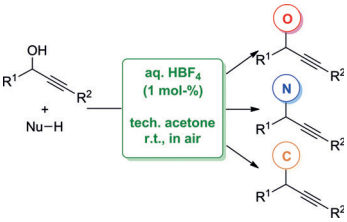


Brønsted Acid Catalysis

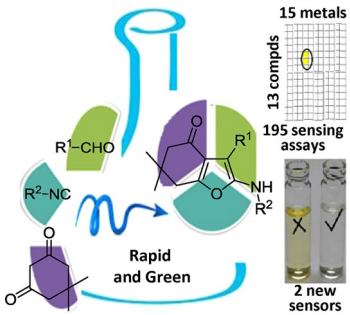
E. Barreiro, A. Sanz-Vidal, E. Tan, S.-H. Lau, T. D. Sheppard, S. Díez-González*

HBF_4-Catalysed Nucleophilic Substitutions of Propargylic Alcohols

The activity of HBF_4 (aq. solution) as a catalyst in propargylation reactions is presented. C–O, C–N and C–C bonds were formed in technical acetone and in air. Good to excellent yields were obtained using low acid loading (typically 1 mol-%) under mild reaction conditions.



Eur. J. Org. Chem.
DOI: **10.1002/ejoc.201501249**



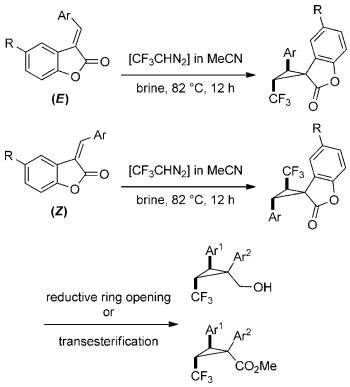
ChemistryOpen
DOI: **10.1002/open.201500067**

Chemosensors

M. Kumar, L. K. Kumawat, V. K. Gupta, A. Sharma*

2-(Alkylamino)-3-aryl-6,7-dihydrobenzofuran-4(5*H*)-ones: Improved Synthesis and their Photophysical Properties

Easy on the eyes: A solvent-less, diversity enabling, high yielding, energy efficient one-step protocol has been devised to access 2-(alkylamino)-3-aryl-6,7-dihydrobenzofuran-4(5*H*)-one. Extensive photophysical studies to evaluate the absorption and fluorescence behavior of the synthesized derivatives revealed that two indole-containing furanones have potential as aluminum(III) chemosensors.



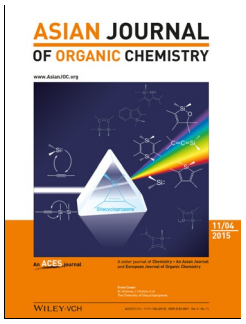
Asian J. Org. Chem.
DOI: **10.1002/ajoc.201500409**

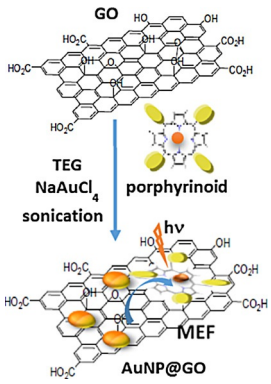
Cyclopropanation

C.-L. Zhu, J.-A. Ma,* D. Cahard*

Trifluorodiazoethane (CF_3CHN_2) in the Uncatalyzed Cyclopropanation of 3-Arylmethylenebenzofuran-2(3*H*)-ones

Pane point: The uncatalyzed cyclopropanation of 2,2,2-trifluorodiazoethane onto 3-arylmethylenebenzofuran-2(3*H*)-ones is reported. The reaction offers a simple access to trifluoromethylated spirocyclopropanes. The products are readily transformed into highly functionalized trifluoromethylated cyclopropanes.





ChemNanoMat
DOI: **10.1002/cnma.201500133**

Hybrid Materials

S. M. Andrade,* C. J. Bueno-Alejo, V. V. Serra, J. M. M. Rodrigues, M. G. P. M. S. Neves, A. S. Viana, S. M. B. Costa

Anchoring of Gold Nanoparticles on Graphene Oxide and Noncovalent Interactions with Porphyrinoids

Gold nanoparticles grown in situ on graphene oxide surfaces enhance the fluorescence of both porphyrinoids interacting noncovalently with hybrid nanostructures (see picture) and lead to a decrease in fluorescence lifetimes. By contrast, in the presence of graphene oxide alone, a strong quenching occurs for polylysine-derivatized porphyrin due to efficient electronic interactions, whereas no effect is attained in the case of the tetranionic phthalocyanine.

ChemViews magazine
DOI: **10.1002/chemv.201500086**

Industry

B. Boeck, S. Lier

New Production Concepts in the Chemical Industry

In "Behind the Science", *ChemViews Magazine* gives readers a peek behind the scenes of a research article. This time, Barbara Boeck, *Chemie Ingenieur Technik*, talks to Stefan Lier about his recent article on new concepts such as chemical production in standard shipping containers and their promise for decentralized and flexible production.