



The following Communications have been judged by at least two referees to be “very important papers” and will be published online at www.angewandte.org soon:

A. Asati, S. Santra, C. Kaittanis, S. Nath, J. M. Perez*
Oxidase Activity of Polymer-Coated Cerium Oxide Nanoparticles

L. Xu, C. E. Doubleday*, K. N. Houk*
Dynamics of 1,3-Dipolar Cycloadditions of Diazonium Betaines with Acetylene and Ethylene: Bending Vibrations Facilitate Reaction

M. S. Nikolic, C. Olsson, A. Salcher, A. Kornowski, A. Rank, R. Schubert, A. Frömsdorf, H. Weller, S. Förster*
Micelle and Vesicle Formation of Amphiphilic Nanoparticles

R. M. van der Veen, C. J. Milne, A. El Nahhas, F. A. Lima, V.-T. Pham, J. Best, J. A. Weinstein, C. N. Borca, R. Abela, C. Bressler, M. Chergui*
Structural Determination of a Photochemically Active Diplatinum Molecule by Time-Resolved EXAFS Spectroscopy

G. Seidel, R. Mynott, A. Fürstner*
Elementary Steps of Gold Catalysis: NMR Spectroscopy Reveals the Highly Cationic Character of a Gold Carbenoid

B. L. Merner, L. N. Dawe, G. J. Bodwell*
1,1,8,8-Tetramethyl[8](2,11)teropyrenophane: Half of an Aromatic Belt and a Segment of an (8,8) Single-walled Carbon Nanotube

G. E. Sigmon, D. K. Unruh, J. Ling, B. Weaver, M. Ward, L. Pressprich, A. Simonetti, P. C. Burns*
Symmetry versus Minimal Pentagonal Adjacencies in Uranium-Based Polyoxometalate Fullerene Topologies

J. H. Ahn, B. Temel, E. Iglesia*
Selective Homologation Routes to 2,2,3-Trimethylbutane on Solid Acids



A. Heller



M. A. El-Sayed



L. Gooßen



C. M. Niemeyer



P. Spiteller



O. Trapp



R. Sarpong



J.-Q. Yu



A. Zakarian

News

Receives Prize Electrochemistry:
A. Heller Honored _____ 2074

Awarded Nanomaterials:
M. A. El-Sayed _____ 2074

Organic Chemistry:
L. Gooßen, R. Sarpong, O. Trapp,
J.-Q. Yu, and A. Zakarian _____ 2074

Biotechnology:
C. M. Niemeyer _____ 2075

Honored Chemical Ecology:
Prize to P. Spiteller _____ 2075

Author Profile



„My favorite piece of research is the recent progress in the generation of purely synthetic protocells. The secret of being a successful scientist is to recognize an innovative idea and to creatively track it.“

This and more about Michael Famulok can be found on page 2077.

Michael Famulok _____ 2077

Books

Organosulfur Chemistry in Asymmetric Synthesis

T. Toru, C. Bolm

reviewed by T. G. Back _____ 2078

The Origin of Chirality in the Molecules of Life

Albert Guijarro, Miguel Yus

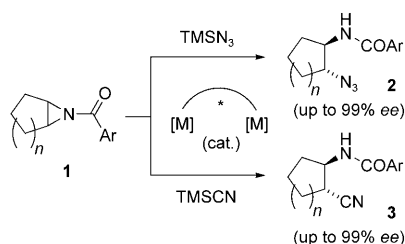
reviewed by P. Cintas _____ 2079

Highlights

Asymmetric Catalysis

C. Schneider* _____ 2082 – 2084

Catalytic, Enantioselective Ring Opening of Aziridines

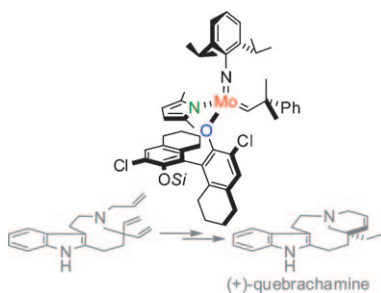


Cooperative metal centers in a bimetallic catalyst facilitate the highly enantioselective ring opening of *meso* aziridines **1** with silyl nucleophiles (see scheme; TMS = trimethylsilyl). The 1,2-azido-amides **2** and 1,2-amidonitriles **3** obtained in this way in high yields and with up to 99% *ee* are valuable precursors to enantiomerically pure 1,2-diamines and β -amino acids.

Asymmetric Catalysis

H. F. T. Klare,
M. Oestreich* _____ 2085 – 2089

Asymmetric Ring-Closing Metathesis with a Twist



A double flip! The catalyst shown, with a molybdenum stereocenter and monodentate ligands ($\text{Si} = \text{Si}^t\text{BuMe}_2$), promotes asymmetric ring-closing metathesis of a broad range of substrates. Its unprecedented activity originates from its structural fluxionality, which enables double inversion at the metal center in the course of a single catalytic cycle. The catalyst passed the test in a metathesis reaction en route to (+)-quebrachamine (see scheme).

For the USA and Canada:

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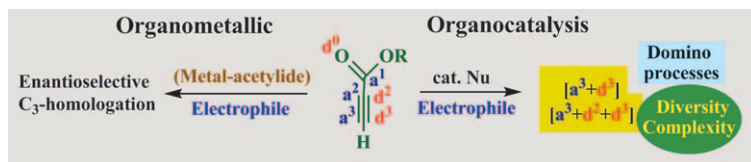
Meacham Ave., Elmont, NY 11003. Periodicals postage paid at Jamaica, NY 11431. US POSTMASTER: send address changes to *Angewandte Chemie*, Wiley-VCH, 111 River Street, Hoboken, NJ 07030. Annual subscription price for institutions: US\$ 7225/6568 (valid for print and

electronic / print or electronic delivery); for individuals who are personal members of a national chemical society prices are available on request. Postage and handling charges included. All prices are subject to local VAT/sales tax.

Minireviews

Synthetic Methods

D. Tejedor,* S. López-Tosco,
F. Cruz-Acosta, G. Méndez-Abt,
F. García-Tellado* — 2090–2098



Three that matter: Metal acetylides from alkyl propiolates allow C₃ homologations with transference of their versatile reactivity profile to products that can then react without further elaboration. Metal-

free acetylides, which are generated by the action of a good nucleophile on the alkyl propiolate, react with suitable electrophiles through different domino reactions to generate skeletal diversity.

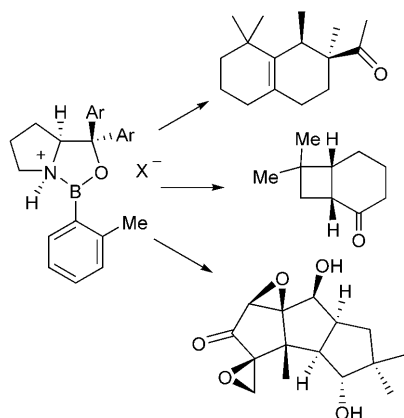
Acetylides from Alkyl Propiolates as Building Blocks for C₃ Homologation

Reviews

Synthetic Methods

E. J. Corey* — 2100–2117

Enantioselective Catalysis Based on Cationic Oxazaborolidines

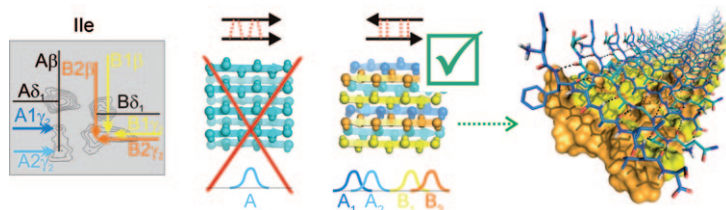


Chiral oxazaborolidines can be activated by N-protonation using strong protic acids or by N-coordination with AlBr₃ to form very strong chiral Lewis acids. The resulting chiral boron electrophiles (see structure) are powerful chiral catalysts that effectively promote [4+2], [3+2], and [2+2]-cycloaddition reactions with high enantioselectivity.

Communications

Fibril Structure

J. T. Nielsen, M. Bjerring, M. D. Jeppesen,
R. O. Pedersen, J. M. Pedersen, K. L. Hein,
T. Vosegaard, T. Skrydstrup, D. E. Otzen,
N. C. Nielsen* — 2118–2121



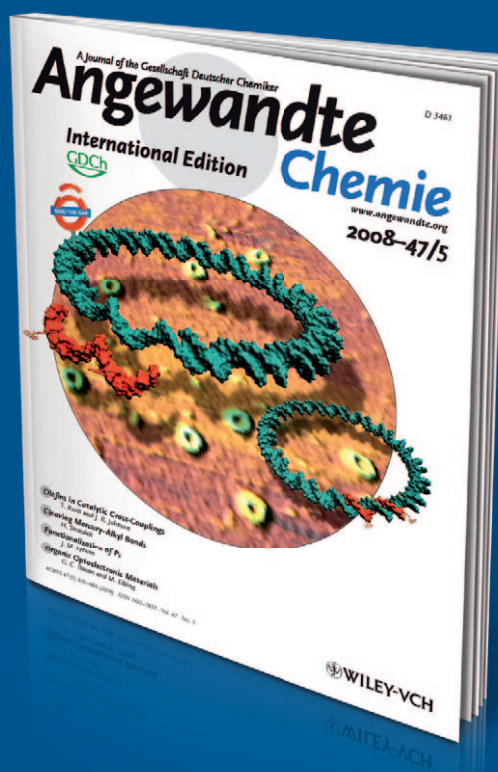
The fibril structure formed by the amyloidogenic fragment SNNFGAILSS of the human islet amyloid polypeptide (hIAPP) is determined with 0.52 Å resolution. Symmetry information contained in the

easily obtainable resonance assignments from solid-state NMR spectra (see picture), along with long-range constraints, can be applied to uniquely identify the supramolecular organization of fibrils.

Unique Identification of Supramolecular Structures in Amyloid Fibrils by Solid-State NMR Spectroscopy

Incredibly

incognito



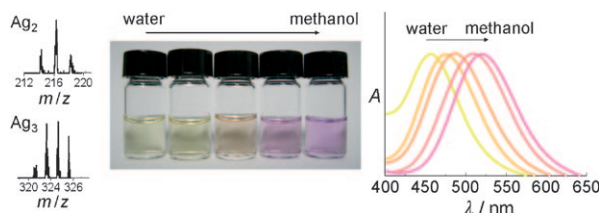
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Colorful clusters: Silver nanoclusters consisting of only a few atoms exhibit large chemical-environment-responsive shifts of their optical absorption and emission bands, that is, large solvatochromism (see picture). The photophys-

ical characteristics and electrochemiluminescence of the Ag clusters give them remarkable advantages over larger nanoparticles in applications such as molecular sensing.

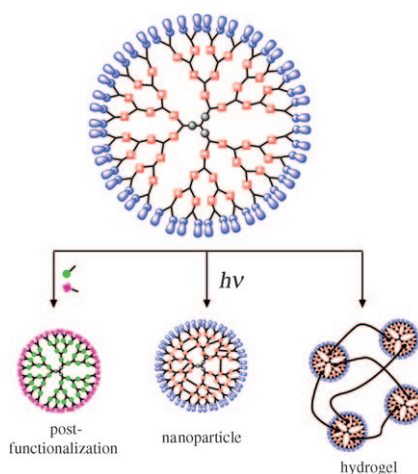
Metal Nanoclusters

I. Díez, M. Pusa, S. Kulmala, H. Jiang, A. Walther, A. S. Goldmann, A. H. E. Müller, O. Ikkala, R. H. A. Ras* 2122–2125

Color Tunability and Electrochemiluminescence of Silver Nanoclusters



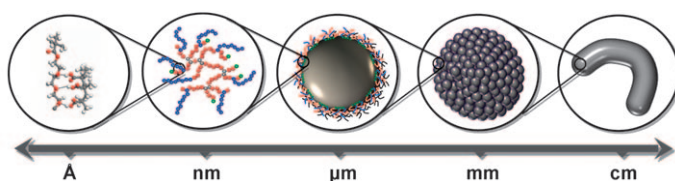
A fourth wheel: Two sets of bifunctional AB₂C dendrimers having internal acetylene/azides and external hydroxy groups were constructed utilizing benign synthetic protocols. An in situ postfunctionalization strategy was successfully carried out to illustrate the chemoselective nature of these dendrimers. The dendrimers were also transformed into dendritic nanoparticles or utilized as dendritic crosslinkers for the fabrication hydrogels.



Supramolecular Chemistry

P. Antoni, Y. Hed, A. Nordberg, D. Nyström, H. von Holst, A. Hult, M. Malkoch* 2126–2130

Bifunctional Dendrimers: From Robust Synthesis and Accelerated One-Pot Postfunctionalization Strategy to Potential Applications



Making and breaking: Stable, functional micrometer-sized emulsion droplets can be assembled into various complex macroscopic liquid structures (see picture). The hierarchical assembly process is mediated by interactions between poly-

meric surfactant molecules located on the droplet surfaces. These interdroplet interactions are reversible, therefore these “engineered emulsions” can be readily disassembled by using a simple pH switch.

Emulsions

J. V. M. Weaver,* S. P. Rannard, A. I. Cooper 2131–2134

Polymer-Mediated Hierarchical and Reversible Emulsion Droplet Assembly



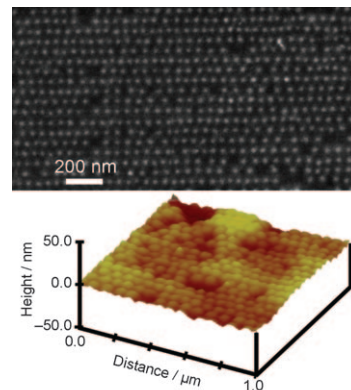
Nanoassembly

S. A. Morin, Y. H. La, C.-C. Liu,
J. A. Streifer, R. J. Hamers, P. F. Nealey,
S. Jin* — 2135–2139



Assembly of Nanocrystal Arrays by Block-Copolymer-Directed Nucleation

Growing in line: The surface chemistry of self-assembled nanostructured block copolymers is used to control the sites at which semiconducting metal sulfide nanocrystals nucleate and grow on a surface directly from aqueous solutions. This process is a new and general strategy for the bottom-up assembly of functional nanocrystalline materials for a variety of applications.



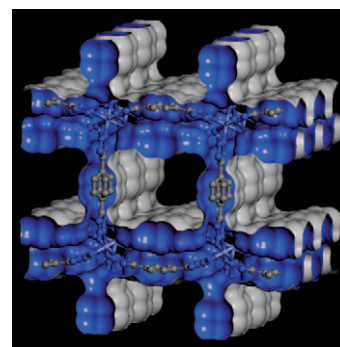
Organic–Inorganic Hybrid

W. Ouellette, A. V. Prosvirin, K. Whitenack,
K. R. Dunbar,* J. Zubietta* — 2140–2143



A Thermally and Hydrolytically Stable Microporous Framework Exhibiting Single-Chain Magnetism: Structure and Properties of $[\text{Co}_2(\text{H}_{0.67}\text{bdt})_3] \cdot 20\text{H}_2\text{O}$

Fixing a hole: Hydrothermal chemistry has been exploited in the preparation of a 3D framework material exhibiting 48 % accessible void volume and 1.5 % hydrogen uptake by weight at 120 kPa (see picture). The title compound also exhibits single-chain magnetic behavior and reversible changes in magnetic properties upon solvation and desolvation.

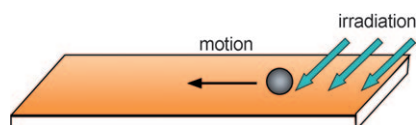


Mass Transport

A. Kausar, H. Nagano, T. Ogata,
T. Nonaka, S. Kurihara* — 2144–2147



Photocontrolled Translational Motion of a Microscale Solid Object on Azobenzene-Doped Liquid-Crystalline Films



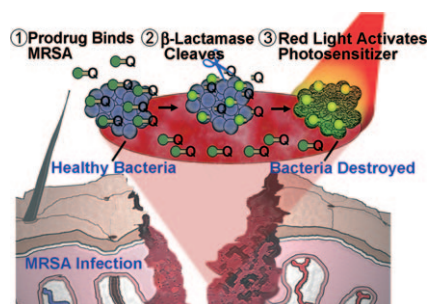
On the move: Irradiation of azobenzene-doped liquid crystalline films with UV/Vis light results in the photocontrolled translational motion of microscale solid object on the surface, which occurs through *cis-trans* isomerization of the azobenzene unit. Irradiation with an Ar^+ laser (488 nm) resulted in precise control of the translational motion so that the particle always moved away from the irradiation position (see picture).

Antimicrobial Photochemistry

X. Zheng, U. W. Sallum, S. Verma,
H. Athar, C. L. Evans,
T. Hasan* — 2148–2151

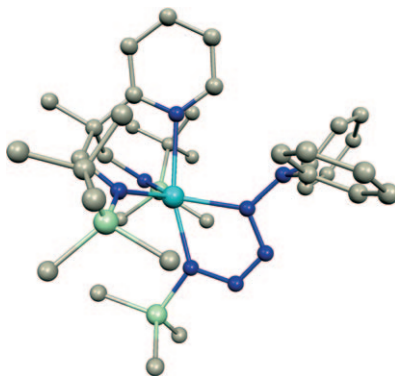


Exploiting a Bacterial Drug-Resistance Mechanism: A Light-Activated Construct for the Destruction of MRSA



A cunning and dangerous plan foiled! An enzyme-specific molecular construct exploits the overexpression of β -lactamase in several drug-resistant bacteria. Specific photodynamic toxicity was detected towards β -lactam-resistant methicillin-resistant *Staphylococcus aureus* (MRSA), whereby the usual mechanism for antibiotic resistance (cleavage of the β -lactam ring) releases the phototoxic component from the prodrug (see picture; Q = quencher).

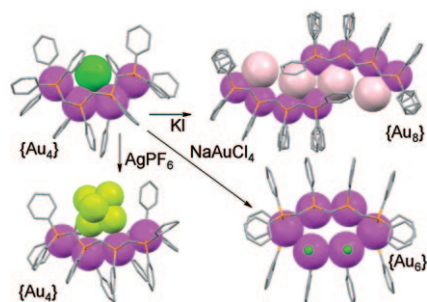
Breaking the chain: Reaction of a zirconium hydrazinediide with organoazides gives 2-pentazene-1,4-diyl complexes, such as $[\text{Zr}(\text{N}_2^{\text{TBS}}\text{N}_{\text{py}})\{\text{N}(\text{Ad})\text{N}_3\text{NPh}_2\}]$ (C gray, N blue, Si green, Zr turquoise), by formal [2+3] cycloaddition. Bonding within the N_5 chain is investigated using density functional calculations. These complexes thermally eject N_2 to give side-on bonded diazenides.



Nitrogen Chains

T. Gehrmann, J. Lloret Fillol, H. Wadepohl, L. H. Gade* 2152–2156

Assembly of an $\text{R}_3\text{N}_5^{2-}$ Chain by Cycloaddition of a Hydrazinediide and an Azide at Zirconium and its Thermal Fragmentation



A flexible building block: Flexible tetragold(I) chain complexes supported by a new single methylene-bridged tetraphosphine ligand were synthesized and further transformed into discrete linear octagold(I) $\{\text{Au}_8\}$ and cyclic hexagold(I) $\{\text{Au}_6\}$ structures by reaction with KI and NaAuCl_4 , respectively (see picture, Au purple, Cl dark green, PF_6 light green, I pink). The tetragold complexes are also luminescent at room temperature.

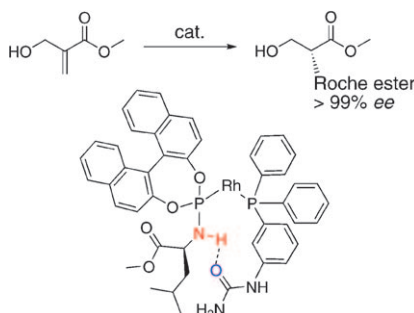
Gold(I) Complexes

Y. Takemura, H. Takenaka, T. Nakajima, T. Tanase* 2157–2161

Hexa- and Octagold Chains from Flexible Tetragold Molecular Units Supported by Linear Tetraphosphine Ligands



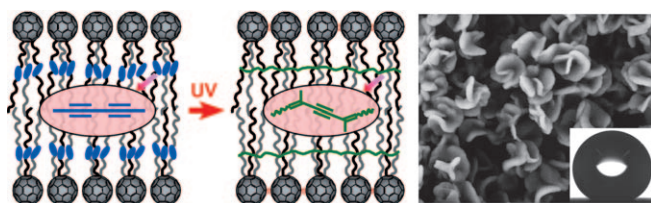
H bonds make the catalysts! A single hydrogen bond between ligands coordinated to a rhodium center is critical for the formation of pure supramolecular catalysts for asymmetric hydrogenation reactions. The ester group of the amidite ligand (see scheme) also forms a hydrogen bond with the coordinated substrate. Use of the heterocomplex afforded the highest enantioselectivity reported to date for the hydrogenation of several ester substrates.



Asymmetric Catalysis

P.-A. R. Breuil, F. W. Patureau, J. N. H. Reek* 2162–2165

Singly Hydrogen Bonded Supramolecular Ligands for Highly Selective Rhodium-Catalyzed Hydrogenation Reactions



Fullerene flakes: A diacetylene-functionalized fullerene derivative self-organizes into flakelike microparticles (see picture). Both the diacetylene and C_{60} moieties can be effectively cross-linked, which leads to

supramolecular materials with remarkable resistivity to solvent, heat, and mechanical stress. Moreover, the surface of the cross-linked flakelike objects is highly durable and water-repellent.

Fullerenes

J. Wang, Y. Shen, S. Kessel, P. Fernandes, K. Yoshida, S. Yagai, D. G. Kurth, H. Möhwald, T. Nakanishi* 2166–2170

Self-Assembly Made Durable: Water-Repellent Materials Formed by Cross-Linking Fullerene Derivatives

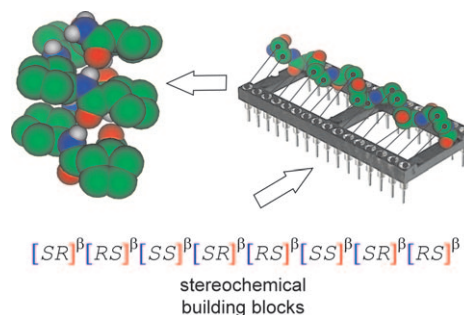


Foldamers

I. M. Mándity, E. Wéber, T. A. Martinek,*
G. Olajos, G. K. Tóth, E. Vass,
F. Fülöp* ————— 2171–2175



Design of Peptidic Foldamer Helices:
A Stereochemical Patterning Approach



Assembly language: The programmed sequences of stereochemical building blocks lead to novel biomimetic helices.

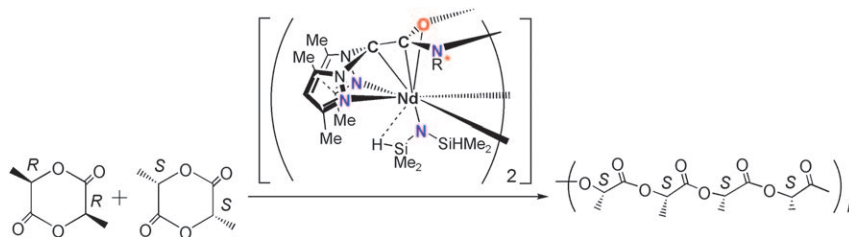
The rational design approach offers new possibilities for creating periodic secondary structures.

Polyester Synthesis

A. Otero,* J. Fernández-Baeza,
A. Lara-Sánchez,* C. Alonso-Moreno,
I. Márquez-Segovia, L. F. Sánchez-Barba,
A. M. Rodríguez ————— 2176–2179



Ring-Opening Polymerization of Cyclic Esters by an Enantiopure Heteroscorpionate Rare Earth Initiator



With a sting in its tail: An enantiopure neodymium complex (see scheme) acts as an efficient single-site initiator for the controlled ring-opening polymerization of

rac-lactide, forming isotactic polyester. The heteroscorpionate complex was characterized spectroscopically and by X-ray diffraction.

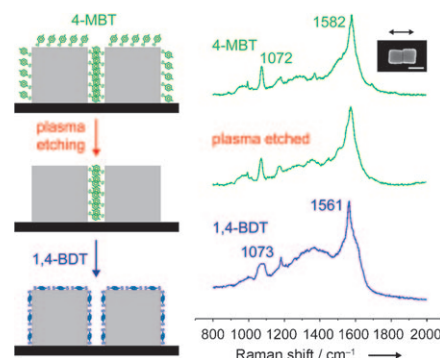
Surface Enhanced Raman Scattering

P. H. C. Camargo, M. Rycenga, L. Au,
Y. Xia* ————— 2180–2184



Isolating and Probing the Hot Spot Formed between Two Silver Nanocubes

Out of the frying pan: Hot spots can greatly increase the sensitivity of surface-enhanced Raman scattering, but they remain poorly understood. A new strategy based on plasma etching (see picture) can be used to isolate and exclusively probe the SERS-active molecules adsorbed in the hot-spot region between two silver nanocubes.

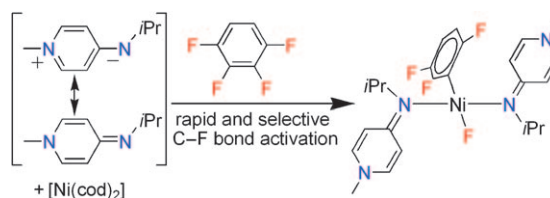


C–F Bond Activation

M. E. Doster,
S. A. Johnson* ————— 2185–2187



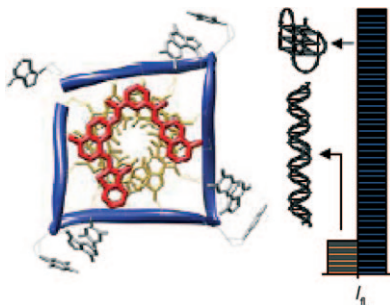
Selective C–F Bond Activation of Tetrafluorobenzenes by Nickel(0) with a Nitrogen Donor Analogous to N-Heterocyclic Carbenes



N, not NHC: A neutral, basic, strong σ -donor nitrogen ancillary ligand with properties analogous to those of N-heterocyclic carbenes (NHCs) was developed to aid in the oxidative additions of challenging substrates to late transition

metals. Selective, room-temperature C–F bond activation was observed with hexa-, penta-, and all three isomers of tetrafluorobenzene using a nickel(0) source in the presence of this donor.

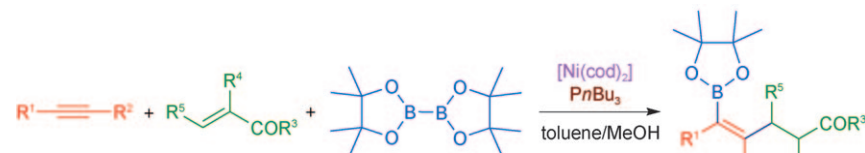
Lighting up: A G-quadruplex-specific fluorescent probe was designed combining the specificity of the pyridodicarboxamide motif for guanine quadruplexes and the fluorescence properties of thiazole orange. While the assembly of the two partners through a flexible linker leads to a nonselective probe, merging them in a single, rigid scaffold leads to a dye that elicits the properties required for G-quadruplex sensing.



G-Quadruplex DNA

P. Yang, A. De Cian,
M.-P. Teulade-Fichou,* J.-L. Mergny,*
D. Monchaud _____ **2188–2191**

Engineering Bisquinolinium/Thiazole
Orange Conjugates for Fluorescent
Sensing of G-Quadruplex DNA



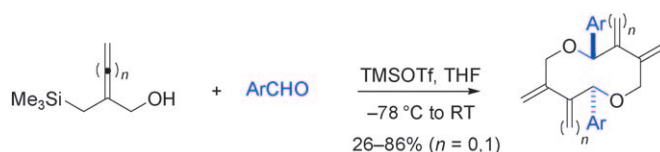
Three-component coupling reactions of an alkyne, an enone, and a diboron reagent provide access to highly substituted alkenyl boronates in good to excellent yields (see scheme). The coupling is

highly regio- and stereoselective, and the products are amenable to further functional-group transformations. $R^1, R^2 = H$, alkyl, aryl, CO_2Me ; $R^3 =$ alkyl, Ph; $R^4, R^5 = H$, alkyl.

Multicomponent Reactions

S. Mannathan, M. Jeganmohan,
C.-H. Cheng* _____ **2192–2195**

Nickel-Catalyzed Borylative Coupling of
Alkynes, Enones, and Bis(pinacolato)-
diboron as a Route to Substituted Alkenyl
Boronates



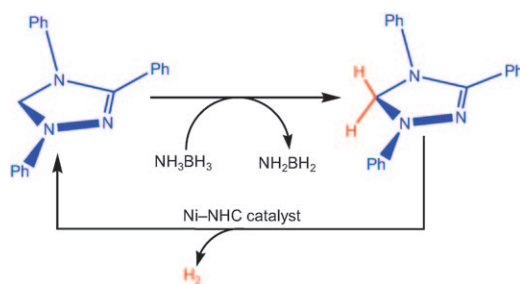
Double or nothing: The title reaction converts a range of aromatic aldehydes and allenylmethyl/allyl silanes into 1,6-dioxecane derivatives in good to excellent yields (see scheme; Ar = aryl, Tf = triflate,

THF = tetrahydrofuran, TMS = trimethylsilyl). In addition, the bisdiene product has been transformed into the corresponding tricyclic compound through a Diels–Alder reaction.

Synthetic Methods

P. R. Ullapu, S.-J. Min, S. N. Chavre,
H. Choo, J. K. Lee, A. N. Pae, Y. Kim,
M. H. Chang, Y. S. Cho* _____ **2196–2200**

Intermolecular Double Prins-Type
Cyclization: A Facile and Efficient
Synthesis of 1,6-Dioxecanes



Enders' N-heterocyclic carbene (NHC) dehydrogenates ammonia–borane with a relatively low barrier, producing NH_2BH_2 and $NHC-(H)_2$. The nickel NHC catalyst present in the reaction media can activate

the $NHC-(H)_2$ produced to regenerate the free NHC and release H_2 . The release of free NHC enables further dehydrogenation of ammonia–borane.

Hydrogen Storage

P. M. Zimmerman, A. Paul,* Z. Zhang,
C. B. Musgrave _____ **2201–2205**

The Role of Free N-Heterocyclic Carbene
(NHC) in the Catalytic Dehydrogenation
of Ammonia–Borane in the Nickel NHC
System



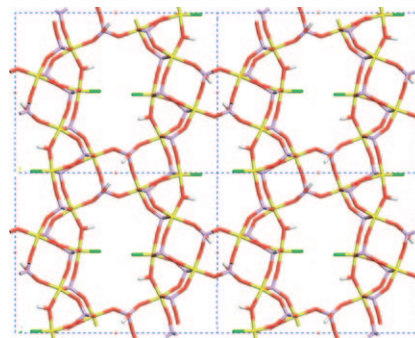
Ionothermal Synthesis

L. Liu, Y. Li, H. Wei, M. Dong, J. Wang,
A. M. Z. Slawin, J. Li, J. Dong,*
R. E. Morris ————— 2206–2209



Ionothermal Synthesis of Zirconium Phosphates and Their Catalytic Behavior in the Selective Oxidation of Cyclohexane

On their best behavior: Three zirconium compounds with one-, two-, and three-dimensional structures have been successfully synthesized by the ionothermal approach. The 3D zirconium phosphate (see picture; F green, H white, O red, P pink, Zr yellow) exhibits high catalytic performance, with a cyclohexane conversion ratio of 32% and cyclohexanone selectivity of up to 83%.



Sulfur Dications

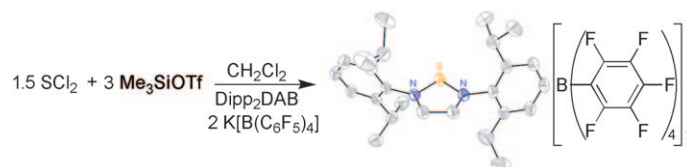
C. D. Martin, M. C. Jennings,
M. J. Ferguson,
P. J. Ragogna* ————— 2210–2213



Dicationic Sulfur Analogues of N-Heterocyclic Silylenes and Phosphenium Cations

DABling with sulfur: Sulfur(II) dications can be prepared using α -diimines to stabilize the positive charge (see scheme; DAB = diazabutadiene, Dipp = 2,6-diisopropylphenyl, OTf = CF_3SO_3). The bond-

ing is best described as that of a N,N-chelated sulfur(II) dication; these species represent the first sulfur-based structural mimics of N-heterocyclic silylene compounds and phosphenium cations.



Guanyl Radicals

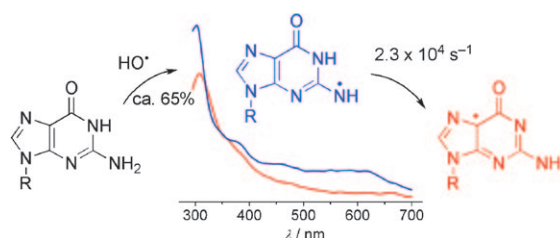
C. Chatgililoglu,* M. D'Angelantonio,
M. Guerra, P. Kaloudis,
Q. G. Mulazzani ————— 2214–2217



A Reevaluation of the Ambident Reactivity of the Guanine Moiety Towards Hydroxyl Radicals

Radically different: Contrary to previous proposals, the main reaction of the $\text{HO}^\bullet$ radical with guanosine or 2-deoxyguanosine is the hydrogen abstraction from the NH_2 moiety to give a guanyl radical. This

radical, characterized by a broad band in the visible region (around 610 nm), undergoes tautomerization to the most stable isomer.



Asymmetric Synthesis

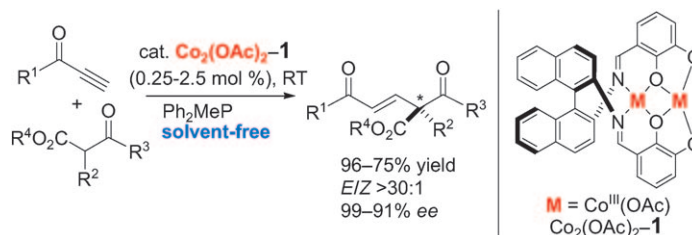
Z. Chen, M. Furutachi, Y. Kato,
S. Matsunaga,*
M. Shibasaki* ————— 2218–2220



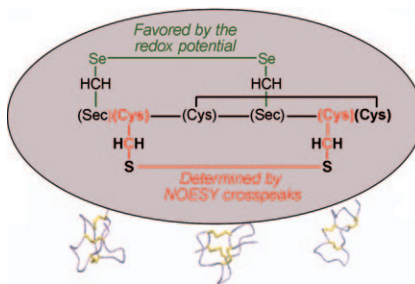
A Stable Homodinuclear Biscobalt(III)–Schiff Base Complex for Catalytic Asymmetric 1,4-Addition Reactions of β -Keto Esters to Alkynes

Two metal cooperation: A homodinuclear Co_2 –Schiff base complex $\text{Co}_2(\text{OAc})_2\text{--}1$ promoted the asymmetric 1,4-addition of β -keto esters to alkynes under solvent-free conditions in air (see scheme). The reactions proceeded without air or mois-

ture sensitivity in high yields and with high enantioselectivities (99–91% ee) at room temperature under highly concentrated conditions (neat–20 m) with 0.1–2.5 mol% catalyst loading.



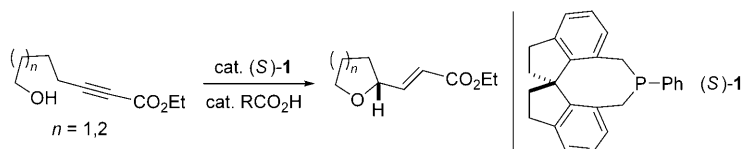
Building bridges: The use of diselenide and selectively ($^{15}\text{N}/^{13}\text{C}$)-labeled disulfide bridges is combined to give improvements in oxidative folding and disulfide mapping. Conotoxin analogues, each with a pair of selenocysteines (Sec) and labeled cysteines (see scheme, red), exhibited significantly improved folding and the labeled cysteines allow correctly folded species to be rapidly identified by NMR spectroscopy.



Integrated Oxidative Folding

A. Walewska, M.-M. Zhang, J. J. Skalicky, D. Yoshikami, B. M. Olivera, G. Bulaj* — 2221 – 2224

Integrated Oxidative Folding of Cysteine/Selenocysteine Containing Peptides: Improving Chemical Synthesis of Conotoxins



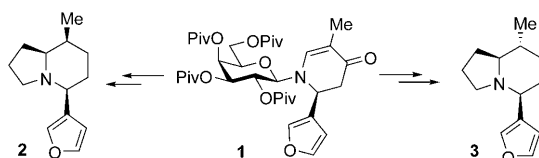
Chiral phosphine 1 catalyzes the transformation of an array of hydroxy-2-alkynoates into saturated oxygen heterocycles with good enantioselectivity. Phenols are also shown to participate in such phos-

phine-catalyzed cyclizations, including an asymmetric variant. This method provides a new approach to the enantioselective synthesis of tetrahydrofurans, tetrahydropyrans, and dihydrobenzopyrans.

Asymmetric Catalysis

Y. K. Chung, G. C. Fu* — 2225 – 2227

Phosphine-Catalyzed Enantioselective Synthesis of Oxygen Heterocycles



An animalic note: The first total synthesis of the all-*cis* nupharamine **2**, an alkaloid from beaver castoreum, is based on the stereoselective domino Mannich–Michael reaction of *N*-galactosylfurylaldimine to give **1** (Piv = pivaloyl), subsequent conju-

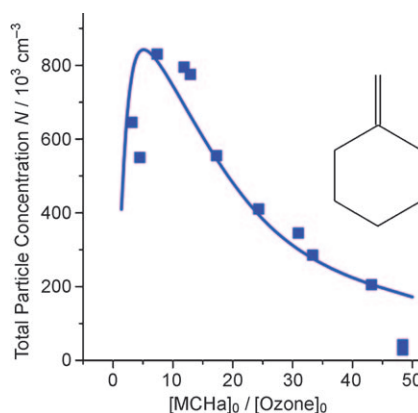
gate cuprate addition, and stereoselective protonation of the enolate. These reactions are all controlled by the carbohydrate. Protonation of the enolate after cleavage of the auxiliary leads to epimer **3**.

Natural Product Synthesis

A. Stoye, G. Quandt, B. Brunnhöfer, E. Kapatsina, J. Baron, A. Fischer, M. Weymann, H. Kunz* — 2228 – 2230

Stereoselective Synthesis of Enantiomerically Pure Nupharamine Alkaloids from Castoreum

The new approach of kinetically controlled ozone removal suppresses particle formation in laboratory ozonolysis experiments for methylcyclohexene and methylenecyclohexane (MCHa) at excess alkene concentrations (see graph). The results support the hypothesis that peroxy radicals are involved in organic nucleation and particle-growth mechanisms.



Aerosol Chemistry

J. L. Wolf, M. A. Suhm, T. Zeuch* — 2231 – 2235

Suppressed Particle Formation by Kinetically Controlled Ozone Removal: Revealing the Role of Transient-Species Chemistry during Alkene Ozonolysis

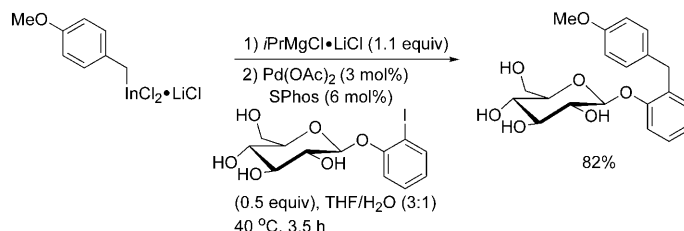


Indium Reagents

Y.-H. Chen, M. Sun,
P. Knochel* _____ **2236–2239**



LiCl-Mediated Preparation of Functionalized Benzylic Indium(III) Halides and Highly Chemoselective Palladium-Catalyzed Cross-Coupling in a Protic Cosolvent



Sensitive functional groups such as COR, CHO, or CH₂OH can be present in benzylic indium reagents prepared by the direct insertion of indium in the presence of LiCl. These reagents undergo palladium-catalyzed cross-coupling reactions

in the presence of a protic cosolvent after activation with *i*PrMgCl·LiCl (see scheme). Remarkable chemoselectivities are achieved by using various electrophiles containing NH or OH groups.



Supporting information is available on www.angewandte.org (see article for access details).



A video clip is available as Supporting Information on www.angewandte.org (see article for access details).

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Corrigendum

Pentagerma[1.1.1]propellane: A Combined Experimental and Quantum Chemical Study on the Nature of the Interactions between the Bridgehead Atoms

D. Nied, W. Kloppe*
F. Breher* _____ **1411–1416**

Angew. Chem. Int. Ed. **2009**, *48*

DOI 10.1002/anie.200805289

In this Communication reference [18d] contains an error. The correct reference is shown here.

- [18] a) L. R. Sita, I. Kinoshita, *J. Am. Chem. Soc.* **1992**, *114*, 7024; b) L. R. Sita, I. Kinoshita, *J. Am. Chem. Soc.* **1991**, *113*, 5070; c) L. R. Sita, I. Kinoshita, *J. Am. Chem. Soc.* **1990**, *112*, 8839; d) L. R. Sita, R. D. Bickerstaff, *J. Am. Chem. Soc.* **1989**, *111*, 6454.