

A Journal of the Gesellschaft Deutscher Chemiker

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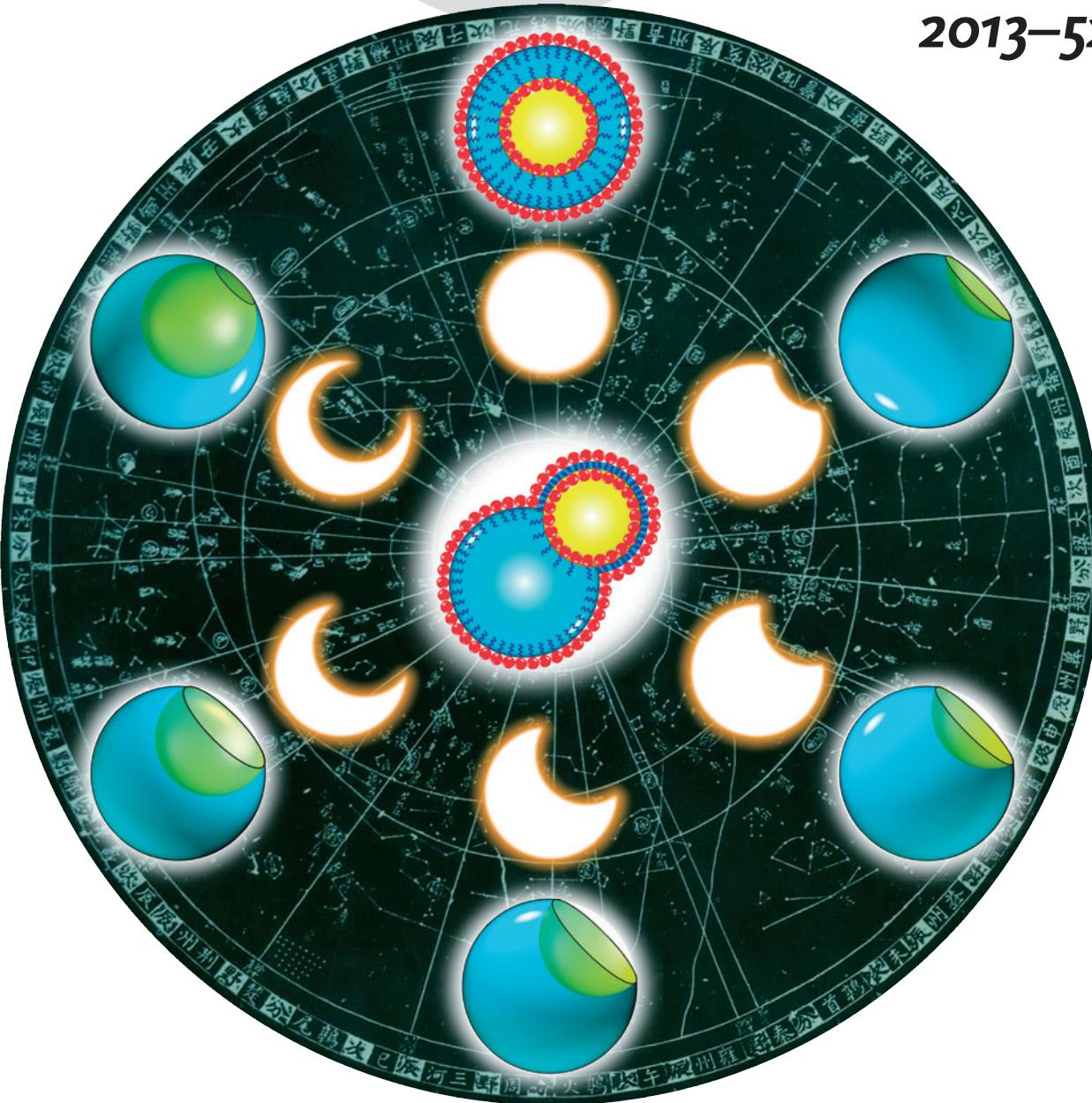
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2013–52/31



Schistosomiasis Chemotherapy

Review by A. Robert, B. Meunier et al.

Flexible Carbon Materials

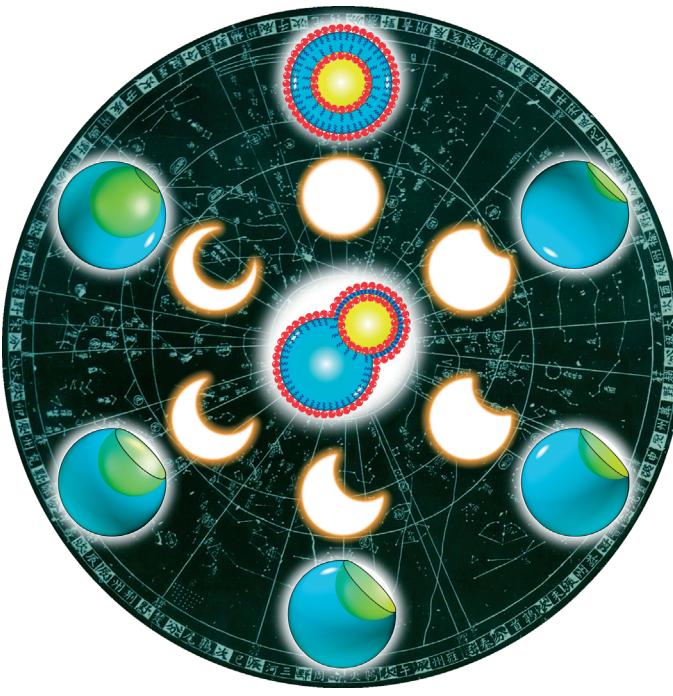
Highlight by A.-H. Lu et al.

Porous Single Crystals

Highlight by P. Schmuki and S. So

125 **Angewandte**
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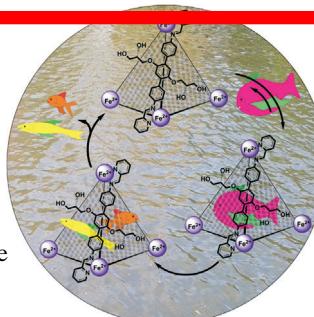
Hole-shell microparticles ...



... with controllable structures and flexible internal surfaces have been fabricated from controllably evolved water/oil/water emulsions, as described by L.-Y. Chu et al. in their Communication on page 8084 ff. These microparticles could be used as microcontainers for controlled capture/release and as microreactors for confined reactions.

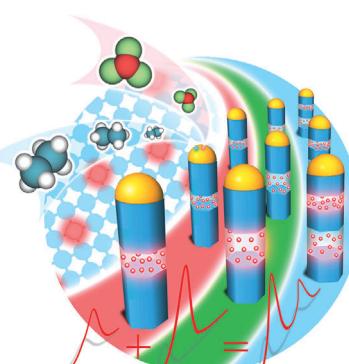
Host–Guest Catalysis

A water-soluble $[Fe_4L_6]$ capsule catalyzes the hydrolysis of the neurotoxic organophosphate dichlorvos. J. R. Nitschke and co-workers show in their Communication on page 7958 ff. that dichlorvos is hydrolyzed in the capsule and the water soluble products released from it.



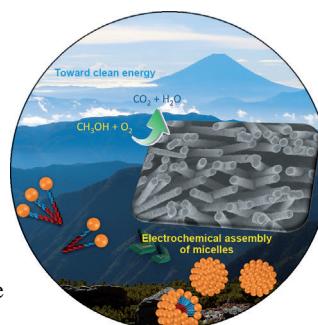
Surface Plasmon Resonances

In their Communication on page 8079 ff., M. A. Filler and L.-W. Chou report the synthesis of silicon nanowires containing multiple, axially registered, doped regions, which are investigated by infrared spectroscopy.



Electrocatalysis

In their Communication on page 8050 ff. Y. Yamauchi et al. report self-supported platinum nanorods that are prepared by electrochemical assembly of platinum-containing micelles in the pores of a polycarbonate membrane.



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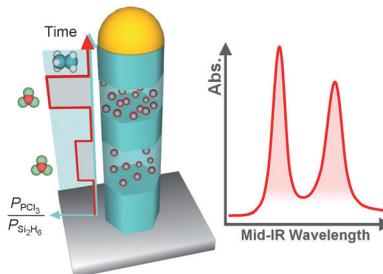
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Multimodal plasmonic resonances: Silicon nanowires that contain multiple, dimensionally controlled, axially registered doped regions were synthesized and investigated by angle-dependent mid-infrared spectroscopy (see picture; P =partial pressure). The wires support mid-infrared multimodal localized surface plasmon resonances.

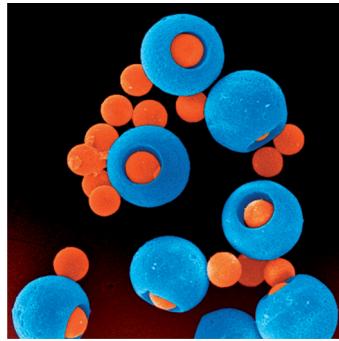
Semiconductor Plasmonics

L.-W. Chou, M. A. Filler* — 8079–8083

Engineering Multimodal Localized Surface Plasmon Resonances in Silicon Nanowires



Inside Back Cover



Hole in one! Hole-shell microparticles (blue, see picture) with controllable structures and flexible internal surfaces have been fabricated from W/O/W emulsions. These microparticles could be used as microcontainers for the controlled capture/release of molecules, microsphere classification/separation, confined cell culture, or as microreactors for catalysis.

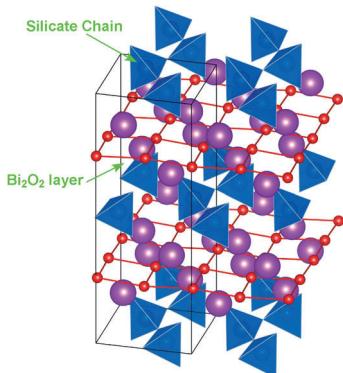
Microfabrication

W. Wang, M.-J. Zhang, R. Xie, X.-J. Ju, C. Yang, C.-L. Mou, D. A. Weitz, L.-Y. Chu* — 8084–8087

Hole-Shell Microparticles from Controllably Evolved Double Emulsions



Front Cover

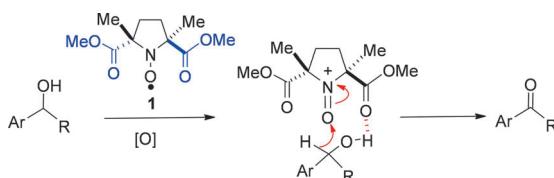


A lead-free ferroelectric: The occurrence of ferroelectricity is demonstrated in a silicate-based compound (Bi_2SiO_5 , see picture), by direct observation of polarization switching. The mechanism of ferroelectricity in Bi_2SiO_5 has been studied by Raman scattering, transmission electron microscopy, X-ray powder diffraction, and first-principles calculations. The observed ferroelectricity stems from twisting of the one-dimensional SiO_4 tetrahedral chain.

Ferroelectricity

H. Taniguchi,* A. Kuwabara, J. Kim, Y. Kim, H. Moriwake, S. Kim, T. Hoshiyama, T. Koyama, S. Mori, M. Takata, H. Hosono, Y. Inaguma, M. Itoh — 8088–8092

Ferroelectricity Driven by Twisting of Silicate Tetrahedral Chains



Electronic tuning: Nitroxyl radical **1** is shown to be an efficient catalyst for the oxidation of secondary alcohols, and promotes oxidation through an oxoammonium species which is highly reactive because of the adjacent electron-

withdrawing ester groups. Chemoselective oxidation of benzylic alcohols in the presence of aliphatic alcohols is observed and is proposed to proceed by a rate-determining hydride transfer.

Radical Reactions

S. Hamada, T. Furuta, Y. Wada, T. Kawabata* — 8093–8097

Chemoselective Oxidation by Electronically Tuned Nitroxyl Radical Catalysts

