

2009-48/49 Visible Suzuki-Miyaura-Coupling CHEMSUSCHEW G. A. Molander and B. Canturk **Energy Generation and Storage** U. Stimming and J. Kunze Nobel Prize: Ribosomes Subscribe K. H. Nierhaus **Enzyme Models** Y. Naruta et al. Radical Polymerization

C. Barner-Kowollik

Cover Picture

Antoine Diguet, Reine-Marie Guillermic, Nobuyuki Magome, Arnaud Saint-Jalmes, Yong Chen, Kenichi Yoshikawa, and Damien Baigl*

Light was used to create a wavelength-dependent interfacial tension gradient at a liquid/liquid interface to induce an interfacial flow; thereby generating droplet motion in the direction opposing the gradient. This \((the chromocapillary effect\)\) is described by D. Baigl et al. in their Communication on page 9281 ff. The liquid droplets can be controlled using light along the trajectories of any shape (e.g., a heart) with good precision.



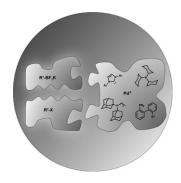


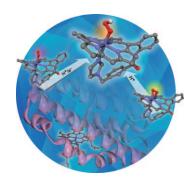
Energy Technology

U. Stimming and J. Kunke discuss in their Essay on page 9230 ff. the methods used for energy conversion based on both the Carbot cycle and electrochemical processes. The advantages and disadvantages of both methods are addressed, and they also compare Ostwald's views on the subject with those of today.

Suzuki-Miyaura Coupling

Organotrifluoroborates in combination with monocoordinated palladium complexes are often the best catalyst systems for Suzuki–Miyaura coupling reactions, as shown by numerous examples in the Review by G. A. Molander and B. Canturk on page 9240 ff.





Enzyme Models

In their Communication on page 9262 ff., Y. Naruta et al. report how a hydroperoxo-heme species can be prepared by two different routes. Protonation of a seven-coordinate side-on heme peroxide results in spin-state switching.