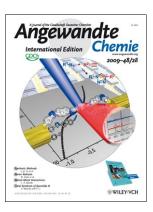


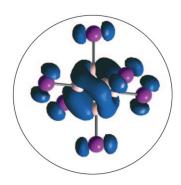
D. Menche and P. Li

Cover Picture

Xiaodong Chen, Adam B. Braunschweig, Michael J. Wiester, Sina Yeganeh, Mark A. Ratner,* and Chad A. Mirkin*

The in situ generation of molecules that bridge nanogaps generated by on-wire lithography is achieved by using click chemistry. C. A. Mirkin, M. A. Ratner, and coworkers show in their Communication on page 5178 ff. that these molecular junctions give high yields, and they describe how this strategy can be generalized to incorporate diverse molecular architectures within the nanogaps. Tracking of the molecular assembly process within the nanogaps is allowed by their strong electromagnetic field.





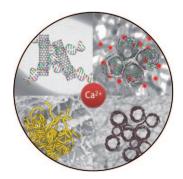
Boron Radicals

In their Minireview on page 5082 ff., W. Kaim et al. discuss two- and three-dimensional paramagnetic compounds with at least partially boron-centered electron spin. DFT calculations can be used to explain the extremely variable spin distribution.

Synthetic Methods

J.-Q. Yu and co-workers describe in their Review on page 5094 ff. the catalytic cycles for the palladium-catalyzed C–H activation/C–C cross-coupling reactions and demonstrate the versatility and utility of the C(aryl)–C bond-forming reactions starting from C(aryl)–H bonds.





Nanofiber Networks

DNA-wrapped carbon nanotubes can be ionically "spot welded". This self-assembly technique results in a highly porous, spongelike material, as described by G. Spinks, S. J. Kim, and co-workers in their Communication on page 5116 ff.