

Thermoelectric Materials

M. G. Kanatzidis et al.

Boron in Solid-State ChemistryB. Albert and H. Hillebrecht

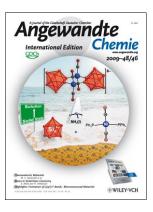
Highlights: Formation of C(sp²)-F Bonds · Microstructured Materials

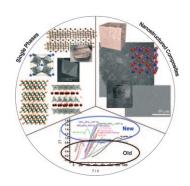


Cover Picture

Stefanie Joseph, Markus Hamberger, Fabian Mutzbauer, Oliver Härtl, Martin Meier, and Nikolaus Korber*

New shores are waiting: Si_9^4 cluster anions are well-known in solid-state compounds with the composition $M^1_{12}Si_{17}$ (M=Na-Cs). These solids can be dissolved in liquid ammonia, yielding pure silicon building blocks for solution reactions. In their Communication on page 8770 ff., N. Korber and co-workers describe the synthesis of the nonasilicide nickel complex shown in the cover picture by a rational ligand-exchange reaction. Is a new low-temperature route to silicon materials waiting beyond the horizon?



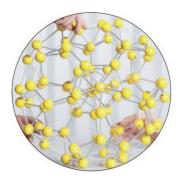


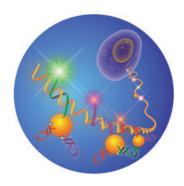
Thermoelectric Materials

The performance of a variety of thermoelectric materials, including chalcogenides, solid solutions, alloys, and nanostructured solids, are analyzed by M. G. Kanatzidis and co-workers in their Review on page 8616 ff.

Boron and Borides

A critical overview of the solid-state chemistry of the element boron and the borides is presented by B. Albert and H. Hillebrecht in their Review on page 8640 ff. The synthesis of single-phase products and their definitive identification is not unproblematic.





DNA Analysis

In their Communication on page 8670 ff., C. Fan et al. explain how multicolor molecular beacons can be constructed from gold nanoparticles self-assembled with stem-loop probes and helper oligonucleotides. The beacons can be used to analyses multiple DNA targets in parallel.