

Highlights

Silicon Double Bonds

D. Scheschkewitz

Reversible Formation of a Blue Arsilene and Isolation of Air-Stable Emissive Disilenes

Protein-Structure Determination

P. E. Barran

(Re)Solution of a Protein Fold Without Solution

Reviews

Molecular Functional Units

F. C. Simmel and Y. Krishnan

Nucleic Acid Based Molecular Devices

Communications

Nanotube Assembly

M. E. van der Boom et al.

Coordination-Polymer Nanotubes and Spheres: A Ligand–Structure Effect **(Cover Picture)**

Boride Nanoparticles

D. Portehault et al.

A General Solution Route toward Metal Boride Nanocrystals **(Inside Cover)**

Hybrid Nanoparticles

Y. Sun et al.

Plasmonic/Magnetic Bifunctional Nanoparticles **(Frontispiece)**

Methane Activation

C. Copéret, P. Sautet et al.

Optimal Water Coverage on Alumina: A Key To Generate Lewis Acid–Base Pairs that are Reactive towards the C–H Bond Activation of Methane **(Back Cover)**

N-Methyl Amino Acids

J. W. Szostak et al.

Optimal Codon Choice Can Improve the Efficiency and Fidelity of *N*-Methyl Amino Acid Incorporation into Peptides by In Vitro Translation

Metal-Free Catalysis

D. S. Su et al.

Carbon-Catalyzed Oxidative Dehydrogenation of *n*-Butane: Selective Site Formation during sp^3 -to- sp^2 Lattice Rearrangement

Porphyrinoids

D. Kim, A. Osuka et al.

Oxocyclohexadienylidene-Substituted Subporphyrins

