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2009–48/1

Synthesis of Metal Nanoparticles
Y. Xia et al.

Functional Polymers
H.-A. Klok et al.

Transfer Hydrogenative C–C Coupling
M. Krische et al.

Editorial: A Source of Joy
P. Gölitz

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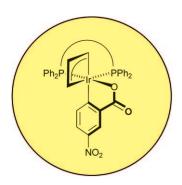
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Cover Picture

Younan Xia,* Yujie Xiong, Byungkwon Lim, and Sara E. Skrabalak

Crystals as you like them: The last decade has witnessed the successful synthesis of metal nanocrystals in a rich variety of shapes. As a zero-order approach, a typical synthesis can be divided into three distinct stages: nucleation, evolution of nuclei into seeds, and growth of seeds into nanocrystals. As illustrated in the cover picture and discussed by Y. Xia et al. in their Review on page 60 ff., the final shape of a nanocrystal is determined primarily by the internal structure of the seed and the binding of the capping agent.



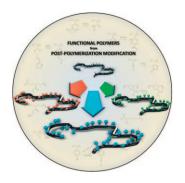


Catalytic Carbonyl Addition

Transfer hydrogenative C–C coupling enables carbonyl addition to aldehydes or alcohols in the absence of stoichiometric organometallic reagents. In their Minireview on page 34 ff. M. J. Krische et al. present an overview of such methods.

Functional Polymers

In the Review on page 48 ff., H.-A. Klok and co-workers describe the synthesis of functional polymers with defined molecular weights, compositions, and structures by the post-polymerization functionalization of polymers with reactive side groups.





Combinatorial Chemistry

In their Communication on page 104 ff, A. J. Nelson and co-workers describe how compounds with 84 distinct scaffolds can be prepared from a diversity-oriented synthesis that uses just six basic reaction types.