Special Issue

Ligand-Decorated Metal Nanoparticles for Catalysis

Message from the Guest Editor

Small organic molecules or macromolecules bearing suitable functional groups can be exploited to control the size of metal nanoparticles (NPs) during their synthesis and in the course of their application in catalytic reactions. The synthesis of such ligand-stabilized NPs, containing a single or two types of metal atoms, can be achieved by the reduction of well-defined metal complexes, the reduction of metal precursors in the presence of the chosen ligand, or by the post-functionalization of metal NPs with the desired ligand. This Special Issue welcomes original research articles and reviews dealing with any aspect concerning the synthesis, characterization, and catalytic application of ligand-stabilized NPs. Topics of particular interest include the following:

- The synthesis and characterization of ligand and macroligand-stabilized metal NPs.
- The application of well-defined metal NPs consisting of one or more different kinds of metal atoms for any kind of catalytic substrate conversion.
- Mechanistic studies of catalytic reactions carried out by means of ligand-decorated NPs.

Guest Editor

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Deadline for manuscript submissions

closed (31 August 2024)

Catalysts

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Impact Factor 4.0
CiteScore 7.6

mdpi.com/si/193164

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