Special Issue

Conventional and Unconventional Methods of Metal Nanoparticle Synthesis, Analysis and Applications

Message from the Guest Editors

The topic of this Special Issue covers the following aspects: (a) the development of new chemical preparation methods for the fabrication of metal nanostructures using biocompatible reagents, one-pot techniques, and/or other improved techniques; (b) the detailed characterization of new nanostructured, metalbased materials including kinetic studies, the determination of mechanisms of nucleation and growth, new insights into the process of nanoparticle/nanocluster synthesis, properties, the role of stabilization, and surface functionalization; (c) diverse synthesis techniques using conventional approaches such as synthesis in batch reactors and unconventional tools, e.g., using microreactor systems, microwaves, etc.; (d) methods of analysis (AFM, HRTEM, STEM, IR, DLS, NMR, XRD, XPS, MP-AES, spectrophotometry, fluorimetry, and others); (e) unique properties of nanomaterials and applications; (f) other aspects related to colloidal systems. It is our pleasure to invite you to submit a manuscript to this Special Issue. Full papers, communications, and reviews are all welcome.

Guest Editors

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Deadline for manuscript submissions

closed (20 April 2023)



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Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. Materials provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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