

Special Issue

Advances in the Mechanisms and Technologies of Nanomaterial Formation

Message from the Guest Editor

Nanomaterials, due to their unique surface, volume, and quantum size effects, exhibit a series of mechanical, optical, electrical, acoustic, and magnetic properties that are fundamentally different from those of ordinary polycrystalline and amorphous solids, and have a wide range of applications in various fields. Therefore, the formation of nanomaterials and their preparation techniques have attracted widespread attention, and studying their structure, properties, and applications has become a hotspot in materials science research. This Special Issue, "Advances in the Mechanisms and Technologies of Nanomaterial Formation", is mainly focused on the formation mechanisms and advanced preparation technologies of nanomaterials. The scope includes, but is not limited to: nanoparticles, nanocatalysts, nanoporous materials, nanocomposites, nanofilms, and nanoscale technologies. Both experimental and theoretical studies are of interest. We particularly welcome experimental and computational studies that can reveal the relationship between structure and properties, and then demonstrate the formation mechanism of nanomaterials with desired structures and properties.

Guest Editor

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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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