



materials



an Open Access Journal by MDPI

Advances in the Mechanisms and Technologies of Nanomaterial Formation

Guest Editor:

Dr. Qi Wang

School of Materials Science and Engineering, University of Science and Technology Beijing, Beijing 100083, China

Deadline for manuscript submissions:
closed (20 March 2024)

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.



mdpi.com/si/179570

Special Issue



an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Maryam Tabrizian

1. Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada

2. Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

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.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Ei Compendex, CaPlus / SciFinder, Inspec, Astrophysics Data System, and other databases.

Journal Rank: JCR - Q1 (Metallurgy and Metallurgical Engineering) / CiteScore - Q2 (*Condensed Matter Physics*)

Contact Us

Materials Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/materials
materials@mdpi.com
[X@Materials_Mdpi](https://twitter.com/Materials_Mdpi)