



an Open Access Journal by MDPI

# Synthesis, Morphology, and Properties of Functional Nanomaterials

Guest Editor:

#### Assoc. Prof. Andrey S. Mereshchenko

Institute of Chemistry, Saint-Petersburg State University, 26 Universitetskii pr., Petergof, St. Petersburg 198504, Russia

Deadline for manuscript submissions: closed (10 October 2022)

### Message from the Guest Editor

The properties of nanomaterials are typically determined not only by composition but by the size and morphology of nanoparticles. This feature is used to design materials with specific photoactive, conductive/semiconductive, mechanical, and other properties. In microelectronics, the design of nanowires, single-electron transistors, diodes, and other nanoelectronics allows improving the computer performance. Functional nanomaterials play an important role in cleaning the environment, and molecular sieves and selective sorbents are widely used for gas separation. Functional nanomaterials have gained great popularity in medicine. Functional nanomaterials are opening up a whole new area of research of molecular design.

This Special Issue, collecting topics from an interdisciplinary viewpoint, is aimed at providing a resourceful background for readers, addressing the design of new functional materials and the devices based on them. Further, authors are encouraged to submit original works on the mechanisms of formation of nanocrystals and the effect of synthesis parameters on the morphology and properties of such materials.









an Open Access Journal by MDPI

# **Editor-in-Chief**

#### Prof. Dr. Maryam Tabrizian

 Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada
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 iournal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites. advanced materials characterization, porous materials, manufacturing processes and svstems. 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, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/materials materials@mdpi.com X@Materials\_Mdpi