Special Issue

Advances in Metal-Based Nanoparticles

Message from the Guest Editors

During the past two decades, the remarkable progress in nanotechnology has extended the application of metal-based nanoparticles in the biomedical and agriculture sector. Metal-based nanoparticles have emerged as highly valuable either by themselves nor as functional building blocks, arguably being one of the most relevant recent achievements in materials science that have the potential to shape our near future. However, the application of such materials requires a directed design providing actuation and stability in a particularly complex environment, such as living organisms. Novel routes in biomedical and agricultural research and practice are expected in the near future.

Keywords

- Metal oxide nanoparticles
- Noble metal nanoparticles
- Bimetallic nanoparticles
- Heteronanostuctures
- Core–shell nanoparticles
- Magnetic nanoparticles
- Biomedical applications
- Agricultural applications
- Nanoagrochemicals

Guest Editors

Prof. Dr. Catherine Dendrinou-Samara

Laboratory of Inorganic Chemistry, Department of Chemistry, Aristotle University of Thessaloniki, 54124 Thessaloniki, Greece

Prof. Dr. Michael Moustakas

Department of Botany, Aristotle University of Thessaloniki, 54124 Thessaloniki, Greece

Deadline for manuscript submissions

closed (10 January 2024)

Materials

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed

mdpi.com/si/32180

Materials
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
materials@mdpi.com

mdpi.com/journal/materials

Materials

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed

mdpi.com/journal/materials

MDPI

About the Journal

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.

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

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 - Q2 (Metallurgy and Metallurgical Engineering) / CiteScore - Q1 (Condensed Matter Physics)