

## Special Issue

# Design and Development of Nanosized Materials for Catalytic Applications

### Message from the Guest Editor

Nanosized materials have become increasingly popular for catalytic applications due to their unique physical and chemical properties. These materials have a high surface area-to-volume ratio, which makes them more efficient in catalyzing chemical processes and appealing in a wide range of catalytic applications such as hydrogenation, oxidation, carbon capture and storage, water treatment, and energy conversion. Within this context, the design and development of nanosized materials for catalytic applications is a rapidly growing field that involves the creation of highly active and selective catalysts with improved performance over conventional catalysts. This Special Issue welcomes contributions regarding the design and development of nanosized materials for catalytic applications involving the selection of the appropriate nanomaterial, synthesis using various techniques, characterization, and evaluation of catalytic activity. You are kindly invited to submit a manuscript for this Special Issue. Full papers, communications and reviews are all welcome.

### Guest Editor

Dr. Lingshuai Kong

Institute of Eco-Environmental Forensics, School of Environmental Science and Engineering, Shandong University, Qingdao, 266237, China

### Deadline for manuscript submissions

closed (10 February 2024)



## Materials

an Open Access Journal  
by MDPI

Impact Factor 3.2  
CiteScore 6.4  
Indexed in PubMed



[mdpi.com/si/173271](https://mdpi.com/si/173271)

*Materials*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[materials@mdpi.com](mailto:materials@mdpi.com)

[mdpi.com/journal/  
materials](https://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](https://mdpi.com/journal/materials)



## 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)