

## Special Issue

# Advanced Materials Design and Manufacturing Technologies of Nonferrous Metals

### Message from the Guest Editors

Although the consumption of non-ferrous metal materials (Mg, Al, Zn, Ti, Cu, Ni, etc.) only accounts for 5% of the total consumption of metal materials, they play an important role in engineering because of their excellent electrical and thermal conductivity, small relative density, stable chemical properties, heat resistance and corrosion resistance. Recently, advanced materials design and manufacturing technologies have been developed, for example, machine learning, CALPHAD methods, high throughput computing, additive manufacturing, semi-solid processing, etc. This Special Issue focuses on the development of advanced materials design and manufacturing technologies which has opened up a new way for the application of non-ferrous metals in structural and functional materials. It is my great pleasure to invite everyone to submit a manuscript for this Special Issue. Full papers, communications, or reviews on advanced materials design and manufacturing technologies of nonferrous metals are all welcome.

---

### Guest Editors

Dr. Yilong Dai

Dr. Youwen Yang

Dr. Deqiao Xie

---

### Deadline for manuscript submissions

closed (20 October 2023)



## Materials

---

an Open Access Journal  
by MDPI

---

**Impact Factor 3.2**  
**CiteScore 6.4**  
**Indexed in PubMed**



[mdpi.com/si/121548](https://mdpi.com/si/121548)

*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)