



an Open Access Journal by MDPI

## New Insights into Additive Manufacturing for Materials and Structures

Guest Editors:

**Dr. Miao Zhao**

School of Mechanical and Electrical Engineering, University of Electronic Science and Technology of China, Chengdu 611731, China

**Dr. Xinwei Li**

Faculty of Science, Agriculture & Engineering, Newcastle University, 567739, Singapore

**Dr. Guang Fu**

School of Mechanical Engineering, Guizhou University, Guiyang 550025, China

Deadline for manuscript submissions:

**20 March 2025**

### Message from the Guest Editors

Additive manufacturing (AM) has revolutionized the field of materials and structural engineering, opening up new avenues for innovation and design in many industries. This Special Issue will highlight advanced materials and structures with high performances based on AM. It will also demonstrate the challenges and opportunities related to AM, such as improving material properties, enhancing structural performance, and optimizing process parameters. Topics of particular interest include, but are not limited to, the following:

- Additive manufacturing processes, such as laser powder bed fusion, fused deposition modeling, digital light processing, etc.;
- Advanced materials, such as composite materials, high-entropy alloy, fiber-reinforced polymer, etc.;
- Multifunctional structures, such as porous structures, lattice structures, metamaterials, etc.;
- Multifunctional properties, such as lightweight mechanical properties, sound absorption, energy absorption, thermal conductivity, etc.;

Advanced design approaches, such as artificial intelligence, multiscale optimization, material–structure–performance integrated design, etc.



[mdpi.com/si/212890](https://mdpi.com/si/212890)



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, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/materials](http://mdpi.com/journal/materials)  
[materials@mdpi.com](mailto:materials@mdpi.com)  
[X@Materials\\_Mdpi](https://twitter.com/Materials_Mdpi)