



## Metal Additive Manufacturing: Design, Performance, and Applications

Guest Editors:

**Dr. Nikolaos Kladovasilakis**

**Dr. Konstantinos Tsongas**

**Dr. Dimitrios Tzetzis**

Deadline for manuscript  
submissions:

**20 June 2024**

### Message from the Guest Editors

Dear Colleagues,

Additive manufacturing (AM), due to its high potential for forming complex shapes in an almost unrestricted manner, allows the production of individualized products and fully functional parts for a wide range of engineering materials. Research in AM of metals, there is still a need for a robust understanding of processes, challenges, application-specific needs, and considerations associated with these technologies.

Hence, this Special Issue aims to provide an opportunity for researchers to submit high-quality comprehensive reviews, original research papers and technical case studies in the field of metal additive manufacturing. Topics include but are not limited to:

Metal AM process, such as Powder bed fusion, Electron beam, and other customized and novel processes;  
Microstructure characterization/defects–mechanical property relationships;  
Post-build/in situ treatments and their influence on material properties and final quality;  
Development of alloys/materials customized for AM and multi-material metal AM;

etc.





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 - Q2 (*Metallurgy & Metallurgical Engineering*) / CiteScore - Q2 (*Condensed Matter Physics*)

## Contact Us

Materials Editorial Office  
MDPI, St. Alban-Anlage 66  
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)