



*materials*



an Open Access Journal by MDPI

## Advanced Manufacturing Technology and Treatment Process of Metallic Materials

Guest Editor:

**Dr. Animesh Kumar Basak**

Adelaide Microscopy, The  
University of Adelaide, Adelaide,  
SA 5005, Australia

Deadline for manuscript  
submissions:

**closed (20 July 2024)**

### Message from the Guest Editor

Metallic materials act as a building block for any given structural applications, and the demand for metallic materials prepared by advanced manufacturing technologies is ever rising. Additive manufacturing, encompassing a wide range of technologies, is regarded as a new ‘turning point’ in industrial production. The root of successful advanced manufacturing technologies lies in the better understanding of microstructure–processing–property relationships from the macro- to the nano-scale level. We believe that growth in additive manufacturing will also depend on the performance of the materials employed and the development of new materials. In view of that, the development of different post-treatments for additively manufactured components is still in scarcity, and its in-depth understanding is sought after.

This Special Issue aims to cover the recent progress in the advanced manufacturing of metallic materials, with a focus on related post-treatment processes such as heat treatment, aging, thermomechanical processing, physical and numerical simulation, structural characterization, and so on.



[mdpi.com/si/174200](https://mdpi.com/si/174200)

# Special Issue



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 and Metallurgical Engineering) / CiteScore - Q1 (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)