materials

IMPACT FACTOR 3.2

Indexed in: PubMed

CITESCORE 6.4

an Open Access Journal by MDPI

The Additive Manufacturing of Metallic Alloys

Guest Editors:

Dr. Wenbin Qiu
Wuxi Institute of Technology, Wuxi 214121, China

Dr. Sheng Cao
College of Chemistry and Materials Science, Jinan University, Guangzhou 510632, China

Dr. Longqing Chen
Institute of Nuclear Science and Technology, Sichuan University, Chengdu, China

Deadline for manuscript submissions:
closed (20 March 2025)

Message from the Guest Editors

Dear Colleagues,

The development of advanced metallic alloys can lead to improved industrial technologies and products for use in aerospace, medical science, electronics, construction, etc. With the assistance of additive manufacturing (AM, also known as 3D printing), scientists further discovered the possibility to efficiently create complex geometries, lightweight designs and unique mechanical properties. However, there are still major challenges to be overcome within this attractive research topic.

This Special Issue focuses on interesting research advances in the field of AM-prepared metallic alloys. Either a fundamental or engineering study is acceptable, as long as the work helps to tackle a specific barrier that hinders the development of metallic alloys fabricated via AM, or reports any novel discovery that is of particular interest to the relevant communities. Potential topics include, but are not limited to:

- Material development;
- Process and/or post-treatment optimization;
- Microstructural characterization and analysis;
- Modeling and simulation techniques;
- Quality control and sustainability.

materials

IMPACT FACTOR 3.2 | Indexed in: PubMed | CITESCORE 6.4

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

mdpi.com/journal/materials
materials@mdpi.com
𝕏@Materials_Mdpi