



## 3D Printing of Metal

Guest Editor:

**Prof. Dr. Zhanyong Zhao**

School of Materials Science and  
Engineering, North University of  
China, Taiyuan, China

Deadline for manuscript  
submissions:

**closed (31 December 2022)**

### Message from the Guest Editor

Dear Colleagues,

Metal 3D printing, as an advanced forming, can manufacture parts directly from digital model by using layer by layer material build-up approach. This manufacturing method can prepare complex shape metal parts in short time, with and high precision. 3D printing processes can be classified into two major groups, Powder Bed Fusion based technologies and Directed Energy Deposition. 3D printing features freedom to part complexity, part design and light-weighting for aerospace, automobile and other industries application. The Global Metal 3D Printing Market is mainly driven by the the fast developing of aerospace and automobile industry. The Global Metal 3D Printing Market size was valued at USD 534.18 Million in 2020 and is projected to reach USD 4458.76 Million by 2028, growing at a CAGR of 30.38% from 2021 to 2028.

In this Special Issue, we welcome articles that focus on metal 3D printing materials, processes and their influence on the final products' microstructure and performance, providing guidance for the development of metal 3D printing technology.





an Open Access Journal by MDPI

## Editors-in-Chief

### **Prof. Dr. Hugo F. Lopez**

Department of Materials Science  
and Engineering, College of  
Engineering & Applied Science,  
University of Wisconsin-  
Milwaukee, 3200 N. Cramer  
Street, Milwaukee, WI 53211, USA

### **Prof. Dr. Yong Zhang**

Beijing Advanced Innovation  
Center of Materials Genome  
Engineering, State Key  
Laboratory for Advanced Metals  
and Materials, University of  
Science and Technology Beijing,  
30 Xueyuan Road, Beijing 100083,  
China

## Message from the Editorial Board

Metallic materials play a vital role in the economic life of modern societies; contributions are sought on fresh developments that enhance our understanding of the fundamental aspects related to the relationships between processing, properties and microstructure – disciplines in the metallurgical field ranging from processing, mechanical behavior, phase transitions and microstructural evolution, nanostructures, as well as unique metallic properties – inspire general and scholarly interest among the scientific community.

## 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), Inspec, Ei Compendex, CAPus / SciFinder, and other databases.

**Journal Rank:** JCR - Q2 (Metallurgy and Metallurgical Engineering) / CiteScore - Q1 (Metals and Alloys)

## Contact Us

Metals Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

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

[mdpi.com/journal/metals](http://mdpi.com/journal/metals)  
[metals@mdpi.com](mailto:metals@mdpi.com)  
[X@Metals\\_MDPI](https://twitter.com/X@Metals_MDPI)