

Special Issue

State-of-Art within 3D Printing and Advanced Machining Processes

Message from the Guest Editor

The term 3D Printing comprises different processes in which three-dimensional parts are obtained layer-by-layer. Over the years, they are becoming more and more used in different sectors such as aeronautical, automotive, medical, etc. Some general advantages of 3D the printing processes for metals over the traditional processes such as machining are that they allow obtaining complex parts, they produce less waste and, if the same geometry and material are considered, parts can be lighter. Advanced Machining Processes allow obtaining parts that are difficult to be manufactured by means of conventional processes. Reasons to use Advanced Manufacturing Processes comprise high workpiece strength or hardness, machining of brittle materials, need of too slender tools in conventional machining processes, great geometrical complexity of the part and special dimensional and/or surface finish requirements, among other. Special emphasis is given to the recent advances in the different techniques, to the characterization of the produced parts regarding surface finish, dimensional accuracy and/or mechanical properties, as well as to new applications of metallic materials.

Guest Editor

Dr. Irene Buj Corral

Department of Mechanical Engineering, School of Engineering of Barcelona (ETSEIB), Universitat Politècnica de Catalunya, 08028 Barcelona, Spain

Deadline for manuscript submissions

closed (30 June 2021)



Metals

an Open Access Journal
by MDPI

Impact Factor 2.6
CiteScore 4.9



mdpi.com/si/32298

Metals

MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
metals@mdpi.com

[mdpi.com/journal/
metals](https://mdpi.com/journal/metals)





Metals

an Open Access Journal
by MDPI

Impact Factor 2.6
CiteScore 4.9



[mdpi.com/journal/
metals](https://mdpi.com/journal/metals)



About the Journal

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.

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

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), Inspec, CAPIus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Metallurgy and Metallurgical Engineering) /
CiteScore - Q1 (Metals and Alloys)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.5 days after submission; acceptance to publication is undertaken in 2.6 days (median values for papers published in this journal in the first half of 2024).