## Special Issue

# Progress in Metals Additive Manufacturing: From New Design to New Materials and Post Processing

## Message from the Guest Editor

Additive manufacturing (AM) includes a set of processes in which a complex component can be produced in a layerwise fashion using the heating provided by a laser or electron source. Metals Additive Manufacturing (AM) is a rapidly growing manufacturing capability. This technology is expected to revolutionize the fabrication of metallic parts, where complex geometries, highly customized parts, small part production numbers and/or lead-time saving, play a decisive role. Nonetheless, despite all the remarkable efforts, there are significant challenges that are limiting the wider uptake and exploitation of metals AM, spanning across the entire metal AM supply chain. These include a lack of AM design and modelling skills and software, a gap in understanding in properties obtained from different machines and technologies, and an incomplete understanding of the causes of part quality variation and their effect on part failure. We invite you to submit reviews and articles in the areas of material supply, part design, process modelling, process technology, postprocessing techniques and applications of metals AM.

## **Guest Editor**

Prof. Dr. Abdollah Saboori

Integrated Additive Manufacturing Center, Department of Management and Production engineering, Politecnico di Torino, Corso duca degli Abruzzi 24, 10129 Turin, Italy

## Deadline for manuscript submissions

closed (15 July 2020)



an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed



mdpi.com/si/19963

Materials
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
materials@mdpi.com

mdpi.com/journal/ materials





an Open Access Journal by MDPI

Impact Factor 3.2 CiteScore 6.4 Indexed in PubMed





## About the Journal

## 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.

#### Editor-in-Chief

Prof. Dr. Maryam Tabrizian

 Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada
 Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

## **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)