Special Issue

Multi-Material Additive Manufacturing for Advanced High-Tech Components

Message from the Guest Editors

Advanced Additive Manufacturing (AM) technology can be further explored to revolutionize our conception/understanding of materials and structures. Additionally, the potential of smart materials such as shape memory alloys, piezoelectric materials magnetorheological materials, and electro-rheostat materials combined with AM design freedom is huge, and offers a new range of diversified solutions for several engineering challenges. In this Special Issue, we welcome reviews, articles, and short communications that focus on metal-based advanced high-tech components via additive manufacturing. We cordially invite you to submit your contribution to this issue, whose topics include, but are not limited to, the following (experimental and numerical studies are welcome):

- Advanced Additive Manufacturing strategies;
- Laser Powder-Bed-Fusion;
- Metal-based multi-material design
- Nature-inspired architectures and solutions by AM;
- Multi-functional components;
- Smart materials;
- Topological optimization and high-efficient solutions.

Guest Editors

Dr. Flavio Bartolomeu

Centre for Micro-Electro Mechanical Systems (CMEMS-UMinho), University of Minho, Campus de Azurém, 4800-058 Guimarães, Portugal

Prof. Dr. Filipe Samuel Correia Pereira da Silva

Centre for Micro-Electro Mechanical Systems (CMEMS-UMinho), University of Minho, Campus de Azurém, 4800-058 Guimarães, Portugal

Deadline for manuscript submissions

closed (20 July 2023)



an Open Access Journal by MDPI

Impact Factor 3.2 CiteScore 6.4 Indexed in PubMed



mdpi.com/si/110786

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



materials



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

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

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)