



an Open Access Journal by MDPI

## Corrosion in Additive Manufacturing

Guest Editors:

### Dr. Raul Figueroa

Department of Materials  
Engineering, Applied Mechanics  
and Construction, University of  
Vigo, Vigo, Spain

### Prof. Dr. Rhys Jones

1. Department of Mechanical and  
Aerospace Engineering, Monash  
University Clayton, Clayton, VIC  
3800, Australia  
2. ARC Industrial Transformation  
Training Centre on Surface  
Engineering for Advanced  
Materials, Faculty of Science,  
Engineering and Technology,  
Swinburne University of  
Technology, John Street,  
Hawthorn, VIC 3122, Australia

Deadline for manuscript  
submissions:  
**closed (20 October 2022)**

### Message from the Guest Editors

Despite the great development and the large number of investigations carried out in Additive manufacturing, the optimization of the manufacturing processes is still necessary. The microstructural changes, the presence of defects and the anisotropy in the properties, condition the final properties and therefore their applicability. Many of the existing investigations limit the characterization of these materials to mechanical behavior, although we cannot forget that degradation processes, such as corrosion in metals, largely condition their applications.

This Special Issue focuses on the corrosion resistance of metallic materials and metallic matrix materials obtained by additive manufacturing. Topics of interest include, but are not limited to:

- Correlation between microstructure, manufacturing defects, surface finish and electrochemical response
- Optimization or simulation of AM to improve the properties against corrosion
- Electrochemical response of new AM materials
- Advancements in degradation of AM materials





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 - Q1 (Metallurgy and Metallurgical Engineering) / CiteScore - Q2 (*Condensed Matter Physics*)

## Contact Us

Materials Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

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

[mdpi.com/journal/materials](http://mdpi.com/journal/materials)  
[materials@mdpi.com](mailto:materials@mdpi.com)  
[X@Materials\\_Mdpi](https://twitter.com/Materials_Mdpi)