



## Manufacturing Processes Simulation Based on Atomistic Modelling

Guest Editors:

**Prof. Dr. Konstantinos  
Salonitis**

Sustainable Manufacturing  
Systems Centre, School of  
Aerospace Transport and  
Manufacturing, Cranfield  
University, Cranfield MK43 0AL,  
UK

**Dr. Michail Papanikolaou**

Cranfield University, Sustainable  
Manufacturing Systems Centre,  
Cranfield, MK43 0AL, UK

Deadline for manuscript  
submissions:

**closed (31 December 2020)**

### Message from the Guest Editors

The goal of this Special Issue is the collection and presentation of state-of-the-art developments in the atomistic modelling of manufacturing processes. We seek research contributions related to atomistic/mesoscale/multiscale modelling of manufacturing and processes encompassing the following topics:

- Material removal processes;
- Solidification/annealing;
- Indentation;
- Laser ablation;
- Additive manufacturing;
- Material characterization;
- Ion beam processing.





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**, **CAPLUS / SciFinder**, and **other databases**.

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

## Contact Us

Metals Editorial Office  
MDPI, St. Alban-Anlage 26  
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)