



an Open Access Journal by MDPI

Microstructure, Fatigue and Corrosion Behavior of Additively Manufactured Alloys

Guest Editor:

Prof. Dr. Evgeny A. Kolubaev

Institute of Strength Physics and Materials Science, Siberian Branch, Russian Academy of Sciences, 634055 Tomsk, Russia

Deadline for manuscript submissions: closed (31 December 2022)

Message from the Guest Editor

This Special Issue aims to review the state of the art in metal additive manufacturing. Manuscripts will focus on the latest developments and most recent data on processes based on the melting of powder and wire feedstocks as well as the structure and properties of additively manufactured alloys.

Topics of interest include the latest advances in the electron-beam additive technology, including but not limited to the following:

- 1. Powder-based additive manufacturing
- 2. Wire-based additive manufacturing
- 3. Printing parameter selection
- 4. Product geometry control
- 5. Product structure and properties control
- 6. Fatigue behavior of additively manufactured alloys
- 7. Corrosion behavior of additively manufactured alloys
- 8. Additive manufacturing multi-material components
- 9. Simulation of metal additive manufacturing

10. Automation, control, and management of electronbeam systems









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 metallurgical field the ranging from processing. and mechanical behavior. phase transitions 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 and Metallurgical Engineering*) / CiteScore - Q1 (Metals and Alloys)

Contact Us

Metals Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/metals metals@mdpi.com X@Metals_MDPI