Special Issue

Modeling Metal 3D Printing Processes

Message from the Guest Editor

Metal 3D printing is definitively a disruptive manufacturing process that will modify the way we design a huge number of mechanical parts. Due to the different approaches in the manufacture of structural parts, these can be optimized using simulation software able to help the designer in opting for the best geometry, saving material and time. Thus, a large field of investigation is now open to researchers, who can create new algorithms and models in order to optimize these routines. This Special Issue intends to attract high-quality papers in metal 3D printing modeling, disseminating the most recent advances in this field of investigation. Works on topological optimization, structural analysis, improvements on manufacturing processes, and other related issues will be welcome.

Guest Editor

Dr. Francisco J. G. Silva

Department of Mechanical Engineering, ISEP–School of Engineering, Polytechnic of Porto, 4200-072 Porto, Portugal

Deadline for manuscript submissions

closed (15 February 2020)

Metals

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 5.3

mdpi.com/si/20321

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

mdpi.com/journal/metals

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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.

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