Special Issue

Recent Progress in the Development, Material Properties, and Post-Processing of Additively Manufactured Components

Message from the Guest Editors

Additive manufacturing (AM) includes a set of processes in which a complex component can be produced in a layer-wise fashion using the heating provided by a laser or electron source. AM is a rapidly growing manufacturing capability. This technology is expected to revolutionize the fabrication of complex-shaped parts, in particular for application fields, where complex geometries, highly customized parts, small part production numbers and/or lead-time saving, play a decisive role. Nonetheless, despite all the remarkable efforts, there are significant challenges that are limiting the wider uptake and exploitation of AM, spanning across the entire AM supply chain. These include a lack of AM design and modelling skills and software, a gap in understanding in properties obtained from different machines and technologies, and their effect on part failure. Moreover, [...] This Special Issue is dedicated to disseminate these recent scientific efforts. For this Special Issue in *Materials*, it is our pleasure to invite you to submit reviews and articles in the areas of material supply, part design, process modelling, process technology, post-processing techniques, and applications of AM.

Guest Editors

Prof. Dr. Abdollah Saboori

Integrated Additive Manufacturing Center, Department of Management and Production engineering, Politecnico di Torino, Corso duca degli Abruzzi 24, 10129 Turin, Italy

Dr. Giulio Marchese

Department of Applied Science and Technology, Politecnico di Torino, Corso Duca degli Abruzzi 24, 10129 Turin, Italy

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

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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

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