# Special Issue

## Property Enhancement of Laser Powder Bed Fused Alloy

### Message from the Guest Editors

Laser Powder Bed Fusion (LPBF) is a revolutionary technique for producing intricate metal components. This method offers exceptional design flexibility and efficient material utilization, making it increasingly prevalent in the aerospace, biomedical, and automotive industries. This Special Issue will comprehensively review recent advancements, unresolved challenges, and emerging opportunities associated with LPBF technology. It will explore the fundamental principles and practical applications of LPBF from multidisciplinary perspectives, including materials science, laser–material interactions, in situ monitoring, and process engineering. Particular emphasis will be placed on experimental investigations, data-driven approaches, and numerical simulations aimed at enhancing the mechanical properties, wear resistance, corrosion resistance, microstructure control, and overall forming quality of manufactured parts. Additionally, contributions on the use of post-processing techniques to refine the surface characteristics or improve the part functionality of additively manufactured components are highly encouraged.

### Guest Editors

Dr. Cuiling Zhao
Dr. Baixin Dong
Dr. Ran Cui

### Deadline for manuscript submissions

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

mdpi.com/journal/materials

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### Message from the Editorial Board

*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.

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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

Prof. Dr. Yuguang Ma
State Key Laboratory of Luminescent Materials and Devices, South China University of Technology, Guangzhou 510640, China

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