# **Special Issue**

## Structure and Performance Based on SLM

## Message from the Guest Editor

LPBF (Laser powder bed fusion) is one of the most promising additive manufacturing technologies. It can directly fabricate metallic components with complicated geometries, especially with regard to the internal structure. Its digital characteristics enable it to manufacture lattice/porous structures to meet the requirements of the aerospace, medical, and other industries. This Special Issue will focus on the design, manufacturing and mechanical behaviour of lattice/porous structures based on LPBF. More attention should be paid to the effect of the configuration, structural parameters and other influencing factors on the performance/property as well as the evaluation on their special stiffness, special strength, special energy absorption and other effective performances. Multifunctional lattice/porous structures are particularly of interest. Both experiments and modelling efforts are encouraged. Additionally, the bioinspired lattice/porous structure and its biomechanics and biocompatibility are of interest.

## Guest Editor

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## Deadline for manuscript submissions

closed (10 October 2023)



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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

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