Special Issue

Laser Assisted Manufacturing

Message from the Guest Editors

Dear colleagues, Additive manufacturing (AM) methods have growth and evolved rapidly in recent years. Current methods for AM have been categorised into seven main groups, which are material extrusion, material jetting, vat polymerisation, powder bed fusion, directed energy deposition, sheet lamination and binder jetting. In these techniques, lasers play integral roles during the processes which has resulting effects on the 3D printed parts. In this special issue, state of the art reviews and current research results, which focus on the laser-materials interactions during additive manufacturing, will be reported. This includes, but not limited to, assessing the effect of laser characteristics (such as geometry, laser power, laser scanning speed), laser scanning strategies and post-process laser treatments. Submissions related to novel applications, designs, processes or characterisation methods using lasers related to AM are also welcomed.

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Message from the Editor-in-Chief

Quantum Beam Science focuses on application of quantum beams for the study and characterization of materials in their widest sense, and developments of quantum beam sources, instrumentation and facilities. Quantum beams include synchrotron radiation, neutron beams, electrons, lasers, muons, positrons, ions. The journal covers disciplines including, solid state physics, chemistry, crystallography, materials science, biology, geology, earth- and planetary materials, and engineering. Articles presenting multiple quantum beams for complementary studies are welcome.

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