Special Issue

Development and Applications of Laser-Based Additive Manufacturing

Message from the Guest Editors

Manufacturing technology is crucial for the advancement of humankind. Amidst this ongoing human endeavour, several breakthroughs have been made in manufacturing technologies. However, none have been as promising and prevalent in recent times as the development of additive manufacturing (AM) technologies. Additive manufacturing entails the layered deposition of materials and the cohesion of these layers to create intricate parts in a single-step process. Among the most effective methods for joining these successive layers is the utilisation of lasers as targeted heat sources for fusing the layers. Consequently, lasers have emerged as invaluable tools in AM, particularly for metal processing. Due to their numerous advantages, AM techniques find application in nearly every sector. Although laser-based AM has undergone extensive investigation in recent years, it still holds significant untapped potential. Hence, this Special Issue aims to explore the latest developments and applications of laser-based additive manufacturing. You can submit now:
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Deadline for manuscript submissions

20 August 2025

Materials

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed

mdpi.com/si/194939

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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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