



an Open Access Journal by MDPI

Development and Applications of Laser-Based Additive Manufacturing

Guest Editors:

Prof. Dr. Changjun Chen

Laser Processing Research Center, School of Mechanical and Electric Engineering, Soochow University, Suzhou 215131, China

Dr. Chaolin Tan

Singapore Institute of Manufacturing Technology (SIMTech), Agency for Science, Technology and Research (A*STAR), 2 Fusionopolis Way, Singapore 138634, Singapore

Dr. Ashfaq Khan

Department of Engineering and Mathematics, Sheffield Hallam University, Sheaf Street, Sheffield S1 1WB, UK

Deadline for manuscript submissions: **20 August 2024**



mdpi.com/si/194939

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:

https://www.mdpi.com/journal/materials/special_issues/V76BS15







an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Maryam Tabrizian

 Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada
Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The iournal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites. advanced materials characterization, porous materials, manufacturing processes and svstems. 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.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Ei Compendex, CaPlus / SciFinder, Inspec, Astrophysics Data System, and other databases.

Journal Rank: JCR - Q2 (*Metallurgy & Metallurgical Engineering*) / CiteScore - Q2 (*Condensed Matter Physics*)

Contact Us

Materials Editorial Office MDPI, St. Alban-Anlage 66 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/materials materials@mdpi.com X@Materials_Mdpi