



an Open Access Journal by MDPI

Advances in 3D Printing and Additive Manufacturing Techniques

Guest Editor:

Dr. Swee Leong Sing

Department of Mechanical Engineering, National University of Singapore, Singapore 117575, Singapore

Deadline for manuscript submissions: closed (30 April 2024)

Message from the Guest Editor

Additive manufacturing (AM) and 3D printing methods have advanced and evolved rapidly in recent years. Currently, AM techniques are categorized into binder jetting, directed energy deposition, material extrusion, material jetting, powder bed fusion, sheet lamination and vat photopolymerization.

In this Special Issue, novel reviews and current research results that focus on state-of-the-art 3D printing techniques will be reported. These contributions may include, but are not limited to, new applicative techniques for novel materials, as well as pre-processing and post-processing methods for 3D printing.

We particularly welcome contributions that attend to the following areas of interest regarding AM:

- Novel methods for additive manufacturing
- New processes and machines for materials processing by employing additive manufacturing
- Novel applications of 3D printing
- Novel in-situ monitoring systems for 3D printing
- Characterization techniques for 3D-printed parts
- Standard and quality control methods for 3D printing









an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Antonio J. Marques Cardoso

CISE - Electromechatronic Systems Research Centre, University of Beira Interior, Calçada Fonte do Lameiro, P-6201-001 Covilhã, Portugal

Message from the Editor-in-Chief

Machines is an international, peer reviewed journal on machinery and engineering. It publishes research articles, reviews and communications.

Our aim is to encourage scientists to publish their experimental and theoretical results in as much detail as possible. There is no restriction on the length of the papers. Full experimental and/or methodical details must be provided.

There are, in addition, unique features of this journal: Manuscripts regarding research proposals and research ideas will be particularly welcomed; Electronic files or software regarding the full details of the calculation and experimental procedure - if unable to be published in a normal way can be deposited as supplementary material.

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), Inspec, and other databases.

Journal Rank: JCR - Q2 (Engineering, Mechanical) / CiteScore - Q1 (Control and Optimization)

Contact Us

Machines Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/machines machines@mdpi.com X@Machines_MDPI