

Special Issue

Smart Additive Manufacturing, Design and Evaluation

Message from the Guest Editor

Additive manufacturing and 3D printing technologies are globally recognized as novel fabrication processes for advanced materials and components with multifunctional structures. These technologies offer tremendous potential for design innovations and customization, complex part fabrication, rapid prototyping, and distributed digital manufacturing. In this approach, three-dimensional models are designed and created according to theoretical concepts using computer software, and two-dimensional cross-sections are created by slicing operations automatically. Computer-aided design, manufacture, and evaluation are referred to as smart additive processing. By using **Smart Additive Manufacturing, Design, and Evaluation**, practical metal and ceramic components with functionally geometric structures are developed to modulate effectively energy dispersions and mass transfers through computer-aided theoretical design, automatic manufacture and visualized evaluation. Smart processes that will help to realize a sustainable society will be discussed in this Special Issue.

Guest Editor

Prof. Dr. Soshu Kiriwara

Joining and Welding Research Institute, Osaka University, 11-1 Mihogaoka, Ibaraki City, Osaka 567-0047, Japan

Deadline for manuscript submissions

closed (30 June 2021)



Applied Sciences

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 5.5



mdpi.com/si/41785

Applied Sciences
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
applsci@mdpi.com

mdpi.com/journal/

applsci





Applied Sciences

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 5.5



[mdpi.com/journal/
applsci](https://mdpi.com/journal/applsci)



About the Journal

Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal *Applied Sciences* has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo
Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32,
20133 Milano, Italy

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), Ei Compendex, Inspec, CAPIus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)