

Special Issue

Advances in 4D Printing: Material, Processes, Applications

Message from the Guest Editors

A few years ago, additive manufacturing (AM) processes were primarily seen as efficient tools for rapid prototyping. Today, owing to the remarkable advancements made in both materials and AM machines, these processes are extensively utilized for industrially producing functional parts with complex geometries. While AM has made significant progress, it is not yet fully mature, and the increasing array of available materials is currently expanding its applicability, as seen in the case of 4D printing. In 4D printing, structures created through 3D printing can undergo geometric deformations over time, controlled by external stimuli such as changes in temperature, electrical fields, etc. This capability finds applications in various fields, including biomedicine, textiles, among others, can be fabricated. This Special Issue aims to highlight the latest advances in the 4D printing of polymers and composites. The articles featured will focus into the development of innovative materials, the fabrication of complex structures, and the diverse applications of 4D-printed objects.

Guest Editors

Dr. Sébastien Charlon

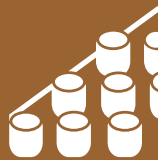
Centre for Materials and Processes, Institut Mines Telecom Nord Europe, F-59508 Douai Cedex, France

Dr. Alexandre Khaldi

Optics Department, IMT Atlantique Bretagne-Pays de la Loire, 29238 Brest, Cedex 3, France

Deadline for manuscript submissions

closed (20 September 2024)



Materials

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed



mdpi.com/si/192203

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

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





Materials

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed



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



About the Journal

Message from the Editorial Board

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.

Editors-in-Chief

Prof. Dr. Maryam Tabrizian

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

Prof. Dr. Yuguang Ma

State Key Laboratory of Luminescent Materials and Devices, South China University of Technology, Guangzhou 510640, China

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 and Metallurgical Engineering) /
CiteScore - Q1 (Condensed Matter Physics)