

Special Issue

Advanced Polymer Materials and Composites: Manufacturing, Properties, and Applications in the Aerospace Field

Message from the Guest Editors

Advanced polymer materials and polymer-based composites are of great interest for the aeronautics and space fields due to their tremendous technological potential across numerous applications. These materials offer the exciting prospect of creating novel components and structures with tailor-made properties and multifunctionality. This Special Issue aims to collect recent studies on cutting-edge research with implications for the aerospace industry. In particular, this issue focuses on the rapidly evolving field of polymer materials and polymer-based composites, including nanocomposites, which hold significant promise for diverse applications in aeronautics and space exploration. Specific areas of interest include recent advancements and breakthroughs in manufacturing processes for aeronautical and space structures, the development of lightweight and durable components with tailored properties, and the sustainable fabrication of polymer-based materials and composites. Research adopting a multidisciplinary approach, tackling challenges associated with harsh environments, fatigue, damage tolerance, and other operational aspects is also encouraged.

Guest Editors

Prof. Dr. Susanna Laurenzi

Department of Astronautical Electrical and Energy Engineering, Sapienza University of Rome, Via Salaria 851-881, 00138 Rome, Italy

Dr. Elisa Toto

Department of Chemical Engineering Materials Environment, Sapienza University of Rome, Via del Castro Laurenziano 7, 00161 Rome, Italy

Deadline for manuscript submissions

closed (20 March 2024)



Materials

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed



mdpi.com/si/182071

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)