Special Issue

Polymer Composites Reinforced by Metallic Architectures and Inserts

Message from the Guest Editors

The potential applications of polymer composites reinforced by metallic structures span a wide range of sectors, including aerospace, automotive, energy, electronics, and biomedical engineering. In these fields, the combination of lightweight polymer matrices with structurally and functionally active metallic architectures offers unique opportunities for damage-tolerant structures, thermally or electrically functional components, and integrated smart systems. This Special Issue aims to collect experimental, numerical, and theoretical contributions addressing the design, manufacturing, characterization, and modeling of polymer composites reinforced by metallic structures and architected inserts. Particular emphasis is placed on the role of reinforcement architecture, interface behavior, and multifunctionality. Contributions focusing on mechanical performance under static and dynamic loading, impact and fatigue behavior, thermal and electrical transport, electromagnetic response, and durability are especially welcome.

Guest Editors

Dr. Cristiano Fragassa
Dr. Ana Pavlovic
Dr. Carlo Santulli

Deadline for manuscript submissions

20 December 2026

Materials

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed

mdpi.com/si/270280

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

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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

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