Special Issue

Reinforced Polymer Composites with Natural and Nano Fillers

Message from the Guest Editors

Polymer composites reinforced with natural and nano fillers have attracted significant attention due to their potential to combine high performance with sustainability. Natural fibers and bio-based fillers offer low density, renewability, and cost-effectiveness, while nanomaterials such as nano-clays, carbon nanotubes, graphene, and metal oxides contribute to enhanced mechanical, thermal, barrier, and functional properties. The synergy between natural and nano fillers opens new avenues for designing advanced composite systems suitable for structural and multifunctional applications across automotive, aerospace, marine, packaging, and biomedical fields. This Special Issue highlights recent developments in the synthesis, processing, characterization, and application of reinforced polymer composites using natural and/or nano fillers. We invite original research articles, reviews, and communications on topics such as interface engineering, hybrid filler systems, biodegradable composites, surface modification, and performance optimization. Contributions exploring green processing methods and promoting environmental sustainability are especially encouraged.

Guest Editors

Dr. Ge Cao

Institute of Corrosion Science and Technology, Guangzhou 510530, China

Dr. He Zhang

Department of Mechanical Engineering, The University of Hong Kong, Hong Kong 999077, China

Deadline for manuscript submissions

10 June 2026



an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed



mdpi.com/si/249684

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

mdpi.com/journal/ materials





an Open Access Journal by MDPI

Impact Factor 3.2 CiteScore 6.4 Indexed in PubMed





About the Journal

Message from the Editor-in-Chief

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.

Editor-in-Chief

Prof. Dr. Maryam Tabrizian

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

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)