

Special Issue

Advanced Polymer Composites and Nanocomposites in Automotive Applications

Message from the Guest Editor

This Special Issue will focus on the materials science of polymer-based composites utilized in automotive components. It will address the chemistry, structure, properties, and performance of polymeric reinforcements and matrices employed in various vehicle parts (cars, buses, railways, etc.). Significant emphasis will be placed on the incorporation and effects of nanoscale and microscale fillers in enhancing specific functional properties (e.g., mechanical strength, thermal stability, barrier properties, electrical conductivity, flame retardancy). We invite contributions detailing the processing techniques and conditions crucial for achieving targeted material characteristics essential for diverse automotive applications. Dedicated papers are encouraged on specific component areas such as exterior panels, interior trim, seating structures, brake components, flooring, springs, wheels, and battery enclosures. Research integrating fundamental theoretical models describing structure–property relationships with experimental data is particularly welcome. We look forward to receiving your contributions.

Guest Editor

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Deadline for manuscript submissions

20 May 2026



Materials

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed



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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.

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