Special Issue

Progress and Challenges of Rubber Materials

Message from the Guest Editors

Rubber-based products have become irreplaceable materials not only in various technological applications but also in everyday life, from tiny seals and gaskets, conveyor belts, and tires to products used in the pharmacy, healthcare, and food industries. With the development of science and technology, rubber-related materials have also been part of more challenging applications, ranging from marine, aviation, or space technology to sensors, actuators, or shielding materials. This poses much higher demands on the requirements of rubber-based products in terms of their functional properties. Thus, more research interest is focused on smart material structures and composites, functional fillers, special additives, vulcanization systems, testing methodologies, and production strategies.

This Special Issue is devoted to all aspects of rubber science and technology, including, but not limited to, the following: rubbers, thermoplastic elastomers, blends, composites, smart materials, eco-friendly materials, fillers, vulcanization systems, rheology, new approaches in testing, methodology, processing and fabrication techniques, 3D-printing, ageing, and recycling.

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Deadline for manuscript submissions

30 December 2026

Materials

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed

mdpi.com/si/245442

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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.

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