

Special Issue

Advances in Biopolymers and Sustainable Composites for Biomedical and Industrial Applications

Message from the Guest Editors

The growing global emphasis on sustainability, environmental protection and circular-economy strategies has driven significant interest in biopolymers and their composites. This Special Issue of *Materials* seeks to highlight cutting-edge research and technological developments in the design, synthesis, characterization and application of biopolymers and sustainable composite materials across biomedical, industrial and environmental sectors. We invite contributions that explore innovative approaches to enhancing the properties of biopolymers, including mechanical performance, biodegradability and bioactivity, as well as the integration of natural additives or nanomaterials to create multifunctional composites. Studies on additive manufacturing techniques, injection molding and other advanced processing methods that enable the production of complex biopolymer-based structures are particularly welcome. Furthermore, research focusing on environmental impact assessment, life-cycle analysis and the economic feasibility of biopolymer materials and composites is encouraged, as these aspects are critical for large-scale adoption.

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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.

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