

Special Issue

Theoretical Insights and Practical Developments in Biobased and Biodegradable Materials for Food Packaging

Message from the Guest Editors

Given the urgent requirements arising from the circular economy and sustainability goals, there is an increasing emphasis on developing packaging materials that are recyclable, biobased, biodegradable, or compostable. This Special Issue invites theoretical and experimental studies as well as comprehensive reviews that address the design, development, characterization, application, and environmental impact of biobased and biodegradable food packaging materials. Topics of interest include the following:

- Innovative materials and technologies for films, labels, foams, and coatings;
- Active and intelligent packaging for food quality and safety;
- Functional performance and shelf life extension of packaged foods;
- Biodegradability and compostability assessment in different environments;
- Life cycle assessment (LCA), environmental footprint, and circular economy strategies in the context of biobased and biodegradable materials for sustainable food packaging solutions;
- Industrial scalability and regulatory aspects of alternative packaging.

Guest Editors

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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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