Special Issue

Biobased Functional Materials for Sustainable Food Packaging and Preservation

Message from the Guest Editors

Reducing food and packaging waste is crucial for environmental protection. Proper waste management, including agricultural waste, is essential, as agricultural waste can serve as a raw material for new, environmentally friendly packaging. During food storage, changes occur in organoleptic, sensory, biochemical, and microbiological properties. Such changes can be significantly limited and slowed by selecting appropriate packaging that fulfills its intended purpose. Essential properties for a well-chosen packaging material include barrier protection and safeguarding the product from microbial access and mechanical contamination from the external environment. The packaging material used should limit the permeability of gases and flavors, and inhibit the oxidation of fats. Antimicrobial properties are intended to ensure the safety of the packaged product against the growth of microorganisms and the production of harmful metabolites. Furthermore, sustainable packaging of edible coatings and films can also serve as carriers for various substances, such as colorants, flavors, antioxidants, antimicrobial substances, and sweeteners, which may have various effects.

Guest Editors

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