

Special Issue

Nanocellulose-Based Materials for Active Food Packaging

Message from the Guest Editors

The need to reduce food spoilage, waste and recalls, as well as foodborne illness outbreaks, has spotlighted the active packaging technology as a way to enhance the safety, quality and shelf-life of the packaged foods. The use of the nanometric forms of cellulose, *i.e.* bacterial cellulose, cellulose nanocrystals and cellulose nanofibers, in numerous food-packaging applications is an active field of research. In fact, the synergetic partnership between nanocellulose (with an eco-friendly connotation and singular properties) and active additives can originate multifunctional nanomaterials as packaging tools with customizable properties. This Special issue will gather the current and future advancements in the field of nanocellulose-based materials for active food packaging with focus on nanomaterials with antimicrobial and antioxidant agents, oxygen and ethylene scavengers, and carbon dioxide emitters to improve the shelf-life, safety and quality of food.

Guest Editors

Dr. Carla Vilela

CICECO–Aveiro Institute of Materials, Department of Chemistry,
University of Aveiro, 3810-193 Aveiro, Portugal

Prof. Dr. Carmen S. R. Freire

CICECO–Aveiro Institute of Materials, Department of Chemistry,
University of Aveiro, 3810-193 Aveiro, Portugal

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Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
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Nanoscience and nanotechnology are exciting fields of research and development, with wide applications to electronic, optical, and magnetic devices, biology, medicine, energy, and defense. At the heart of these fields are the synthesis, characterization, modeling, and applications of new materials with lower nanometer-scale dimensions, which we call “nanomaterials”. These materials can exhibit unusual mesoscopic properties and include nanoparticles, coatings and thin films, metal–organic frameworks, membranes, nano-alloys, quantum dots, self-assemblies, 2D materials such as graphene, and nanotubes. Our journal, *Nanomaterials*, has the goal of publishing the highest quality papers on all aspects of nanomaterial science to an interdisciplinary scientific audience. All of our articles are published with rigorous refereeing and open access.

Editor-in-Chief

Prof. Dr. Eugenia Valsami-Jones

School of Geography, Earth and Environmental Science, University of
Birmingham, Birmingham B15 2TT, UK

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