Special Issue

Cellulose-Based Nanomaterials and Nanocomposites

Message from the Guest Editors

Cellulose nanomaterials and nanocomposites contribute significantly to sustainability due to their excellent potential as biodegradable and renewable alternatives to non-biodegradable polymers used in single-use plastics, reinforcing fibers, and coatings across various industrial sectors, such as papermaking, construction, electronics, and medicine. Cellulose nanopapers have attracted considerable attention for their unique physical and optical properties, as well as their ability to be modified to exhibit electric and magnetic properties. Cellulose nanomaterials obtained from, for example, cellulose nanofibers, have been shown to reinforce composite materials such as biodegradable polymers PLA, paper, and cement. A new generation of materials consisting of, or reinforced with, nanocelluloses is required to replace high-environmental-impact materials. However, further research is needed to enhance the feasibility of large-scale production and commercialization. This Special Issue invites submissions reporting novel contributions to the understanding and application of cellulose nanomaterials, including nanopapers and nanocellulose-modified materials.

Guest Editors

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Dr. Roberto Aguado
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Deadline for manuscript submissions

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Message from the Editor-in-Chief

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. We are proud of our increasing impact factor and ability to provide rapid decisions to authors.

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