

Special Issue

Nanocellulose and Cellulose-Based Nanocomposites: Synthesis, Characterization and Applications

Message from the Guest Editors

Nanocellulose combine, in a very exciting manner, important properties of cellulose with the amazing features of nanoscale materials and offers a completely new group of materials. Nanocellulose, both fibers and crystals, have been shown to have promising and interesting properties which, combined with their enormous surface area, low density, biocompatibility, biodegradability, and renewability, make them interesting starting materials for many different uses. These open a wide range of possible properties, as well as smart applications, in many fields from chemistry, medicine, biotechnology, and materials engineering. However, there are still some issues to overcome, and the main challenges in the field are related to efficient preparation and isolation of nanosize cellulosic materials from their natural sources. Additionally, high application potential nanocellulose has resulted in increased academic and industrial interests toward the development of nanocellulose-based materials and cellulose nanocomposites. The purpose of this Special Issue is to collect high-quality articles in the fields of synthesis, characterization, and applications of nanocellulose.

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Message from the Editor-in-Chief

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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