Special Issue

Functional Cellulosic Materials

Message from the Guest Editor

Cellulose is the most abundant organic compound on earth, produced not only by plants but also by bacteria, algae, and marine animals (tunicates). Its bio-based and biodegradable nature makes cellulose attractive a highly sustainable material. Other than pure cellulose itself, cellulosic materials include lignocellulosic biomasses, cellulose derivatives (e.g., cellulose acetate, carboxymethyl cellulose, and cellulose sulphates), cellulose-based composites, and gels. They can be designed and fabricated to possess functional abilities and properties, which may include electrical, photonic, thermal, self-cleaning, self-healing, stimuli-responsive, and separation and absorption properties. This would allow cellulose to be employed beyond traditional structural applications, paper products and ordinary textiles, into a wide range of high-value applications that include but are not limited to biomedical, electronics, energy storage/harvesting, and water-treatment applications. This Special Issue aims at covering new developments in functional cellulosic materials. All cellulosic materials, functional properties, and applications are within the scope of this Special Issue.

Guest Editor

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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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