



Functional Cellulosic Materials

Guest Editor:

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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.





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Message from the Editor-in-Chief

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