



Functional Cellulosic Materials

Guest Editor:

Dr. Junqiang Justin Koh

Institute of Materials Research
and Engineering (IMRE), Agency
for Science, Technology and
Research (A*STAR), Singapore

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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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Editor-in-Chief

Prof. Dr. Maryam Tabrizian

1. Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada

2. Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

Message from the Editor-in-Chief

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Materials Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

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