Special Issue

Preparation and Application of Biomass-Based Nanocellulose

Message from the Guest Editors

Dear Colleague, We invite you to submit your research to this Special Issue entitled Preparation and Application of Biomass-Based Nanocellulose. With the rising prominence of global climate change and resource shortage, in recent years increased attention has been paid to environmentally friendly materials. Biomass is a sustainable and renewable material that can provide us with shelter and oxygen and can remove carbon dioxide from the atmosphere. Nanocellulose is a kind of eco-friendly nanomaterial isolated from biocellulosic fibers, such as wood, cotton, hemp, agricultural crops, by-products, etc. Nanocellulose has obtained increasing attention owing to its high strength and stiffness, low density, biodegradability, and nanoscale cellulosic fibrils. It has shown great potential as a reinforcing material for composites, transparent biomaterials, green electronics, flexible displays, drug releases, etc. Advanced materials based on nanocellulose have attracted much attention in materials science. The aim of this Special Issue is to document the recent experimental and computational advances in the preparation and advanced applications of nanocellulose isolated from biomass.

Guest Editors

Dr. Wenhua Gao

Plant Fiber Material Science Research Center, State Key Laboratory of Pulp and Paper Engineering, School of Light Industry and Engineering, South China University of Technology, Guangzhou 510640, China

Dr. Qianqian Wang

School of Environment and Safety Engineering, Biofuels Institute, Jiangsu University, Zhenjiang 212013, China

Deadline for manuscript submissions

closed (10 September 2022)



an Open Access Journal by MDPI

Impact Factor 3.2 CiteScore 6.4 Indexed in PubMed



mdpi.com/si/101898

Materials
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
materials@mdpi.com

mdpi.com/journal/materials





an Open Access Journal by MDPI

Impact Factor 3.2 CiteScore 6.4 Indexed in PubMed





About the Journal

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.

Editor-in-Chief

Prof. Dr. Maryam Tabrizian

 Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada
 Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Ei Compendex, CaPlus / SciFinder, Inspec, Astrophysics Data System, and other databases.

Journal Rank:

JCR - Q2 (Metallurgy and Metallurgical Engineering) / CiteScore - Q1 (Condensed Matter Physics)