Special Issue

Novel Synthetic Fibers for Textile Applications

Message from the Guest Editor

Today, melt and wet spinning of polymers are the most commonly used methods for manufacturing commercial synthetic fibers, due to high spinning velocities and the simplicity of the production line. Ongoing research efforts have ensured that fibers and textiles remain high value-added products. This Special Issue aims to collect contributions on the most recent advances in the field of fiber melt and wet spinning. Topics of interest are novel polymers, additives and processes to be used in melt and wet spinning; multicomponent spinning; exceptional design of feeding line, spinneret, or drawdown unit; spinning instabilities; physical and chemical characterization; as well as applications of synthetic fibers. In addition to experimental results, theoretical contributions and simulation studies that elucidate the physics of fiber spinning and answer fundamental questions regarding fiber morphologies—from the nanoscale to the macroscale—are also welcome.

Guest Editor

Dr. Rudolf Hufenus

Laboratory for Advanced Fibers, Empa-Swiss Federal Laboratories for Materials Science and Technology, St. Gallen, Switzerland

Deadline for manuscript submissions

closed (31 March 2021)

Materials

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed

mdpi.com/si/39967

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

mdpi.com/journal/materials

Materials

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed

mdpi.com/journal/materials

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
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

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)