



Tailored Textile-Reinforced Composite Materials

Guest Editor:

Prof. Dr. Robert Böhm

Faculty of Engineering, Leipzig
University of Applied Sciences,
Karl-Liebknecht-Straße 134,
04277 Leipzig, Germany

Deadline for manuscript
submissions:

closed (31 August 2020)

Message from the Guest Editor

Textile-reinforced composites offer great advantages for lightweight structures, since their properties can be tailored on different length scales. The variety of design options with regard to their constituents, multiaxial fiber arrangements, and near-net-shape semifinished product configurations is an essential feature of high-performance textiles. Despite being investigated for decades, textile composites are still an extremely interesting research area, spanning from manufacturing technologies via multiscale modeling and experimental testing to multifunctional applications.

This Special Issue will focus on recent progress in the field of tailoring composite properties. Topics can include but are not limited to:

- Advanced textile manufacturing technologies;
- Damage-tolerant textile composites;
- Tailored properties using scale-bridging approaches;
- Virtual design and digital twins;
- Multifunctional composite application.

Keywords

- textile composites
- tailored properties
- virtual material design
- advanced manufacturing





an Open Access Journal by MDPI

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

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.

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 & Metallurgical Engineering*) / CiteScore - Q2 (*Condensed Matter Physics*)

Contact Us

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

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/materials
materials@mdpi.com
[X@Materials_Mdpi](https://twitter.com/Materials_Mdpi)