



an Open Access Journal by MDPI

## Carbon Fibers and Their Composite Materials

Guest Editor:

**Prof. Luke Henderson**

Institute for Frontier Materials,  
Carbon Nexus, Deakin University,  
Waurin Ponds Campus, Geelong,  
VIC, Australia

Deadline for manuscript  
submissions:

**closed (20 December 2018)**

### Message from the Guest Editor

Carbon fiber is synonymous with high performance. It is a key material in the reduction of CO<sub>2</sub> emissions via light-weighting mass transport vehicles, often thought of as an alternative to traditional structural materials, such as metals. Despite being around for decades, carbon fibers themselves and their composites are still an extremely active area of research, spanning from fiber production through to their large-scale application in the aerospace industry. The study and characterization of the fibers, resins, fiber-matrix interactions, nano-fillers, and novel resins all contribute to a larger tapestry of understanding towards the factors defining the performance of composite materials.

This Special Issue will focus on recent work that focuses on advancing the performance of carbon fiber composites. Topics can include, but are not limited to:

- Fiber characterization using novel techniques
- Interface analysis and fiber-to-matrix adhesion
- Chemical Modifications of resins, sizings, or fibers and effect on performance
- Non-structural applications of carbon fiber



[mdpi.com/si/12689](https://mdpi.com/si/12689)

# Special Issue



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

## Contact Us

Materials Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/materials](http://mdpi.com/journal/materials)  
[materials@mdpi.com](mailto:materials@mdpi.com)  
[X@Materials\\_Mdpi](https://twitter.com/Materials_Mdpi)