



Damage and Failure Analysis of Polymer-Based Composites

Guest Editors:

Prof. Dr. Xiaoquan Cheng

School of Aeronautic Science and Engineering, Beihang University, Beijing 100191, China

Dr. Wenjun Huang

AVIC China Helicopter Design and Research Institute, Jingdezhen 333001, China

Dr. Qian Zhang

School of Mechanical Engineering, Hefei University of Technology, Hefei 230009, China

Deadline for manuscript submissions:
closed (25 December 2024)

Message from the Guest Editors

Dear Colleagues,

Polymer-based composites have been widely used in aircraft, missiles, automobiles, buildings, and other applications. Studying the damage and failure mechanisms, as well as the destructive performance of polymer-based composites and their structures, can improve the mechanical properties of composite structures, as well as reduce structural weight and total life-cycle costs. Through innovative design and process improvement of composite structures, structural efficiency can be improved and costs can be effectively reduced. Topics of interest for this Special Issue include, but are not limited to, the following:

-Damage and failure mechanism;

-Structure performances;

-Properties of polymer-based composites under different environments;

-Performance of repaired composite structures;

-Properties of hybrid composites;

-Mechanical performance of composites with different process;

-Performance of composite joints.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Alexander Böker

Fraunhofer-Institut für
Angewandte Polymerforschung,
Lehrstuhl für Polymermaterialien
und Polymertechnologie,
Universität Potsdam,
Geiselbergstraße 69, 14476
Potsdam-Golm, Germany

Message from the Editor-in-Chief

Since its foundation in 2009, *Polymers* has developed into an internationally renowned, extremely successful open access journal. The editorial team and the editorial board dedicatedly combine open-access publishing and high-quality rigorous peer reviewing. The performance of the journal has proven this strategy to be well-suited and highly successful. This is reflected in the increasing impact factor of *Polymers*, the most recent one being 4.9.

I would like to invite you to contribute to the success of the journal by sending us your high quality research papers. We would be pleased to welcome you as one of our authors.

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), Ei Compendex, PubMed, PMC, FSTA, CAPlus / SciFinder, Inspec, and other databases.

Journal Rank: JCR - Q1 (Polymer Science) / CiteScore - Q1 (General Chemistry)

Contact Us

Polymers Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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

mdpi.com/journal/polymers
polymers@mdpi.com
X@Polymers_MDPI