

Special Issue

Polymer-Based Composite Structures and Mechanical Metamaterials

Message from the Guest Editors

Due to their wide-ranging engineering applications, lightweight composite structures and mechanical metamaterials have attracted substantial academic attention in recent years. Key challenges in this field include prototype design, material utilization, fabrication, testing, analysis, and the utilization of new tools such as machine learning and data-driven methods. We cordially invite scholars from around the world to submit advanced research reports in these fields, focusing on the following topics of interest:

Lightweight structures and mechanical metamaterials prepared from polymers, polymer-based composites or soft materials;

3D printing, testing and analysis, impact response and dynamic behaviors of lightweight structures and mechanical metamaterials;

Data-driven and machine learning-based research on lightweight structures and mechanical metamaterials;

Connection and 3D printing of polymer-based composite materials;

Polymer-based composite materials and structures for sustainable development.

Guest Editors

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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.

Editor-in-Chief

Prof. Dr. Alexander Böker

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