Special Issue

Advanced Manufacturing and Multifunctional Applications of Fiber-Reinforced Polymer Composites

Message from the Guest Editors

Currently, the FRP industry is increasingly focused on innovative and sustainable manufacturing techniques. Emerging trends include eco-friendly production methods, additive manufacturing, and Al/ML-driven process optimization, alongside growing emphasis on recycling and circular economy principles. These advancements aim to enhance efficiency, reduce environmental impacts, and unlock new functionalities in smart composites.

This Special Issue invites original research on the manufacturing, machining, characterization, and applications of FRP composites, with particular focus on the following:

- Sustainable and eco-friendly manufacturing techniques:
- Smart composites with embedded functionalities;
- AI/ML-driven process optimization;
- Recycling and circular economy approaches;
- Additive manufacturing of FRPs.

We welcome experimental, numerical, and theoretical studies that address these cutting-edge developments, offering insights into the future of FRP technologies.

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 4.7.

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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