Special Issue

3D Printing of Polymer-Based Composite Materials

Message from the Guest Editors

Additive manufacturing technologies offer several potential sources of value compared to traditional production approaches of polymers due to their ability to produce almost any 3D shape, no need for moulds or fixed tooling, and ability to eliminate time-consuming fabrication operations and toolmaking. By enabling the on-demand production of items from digital files, this technology reduces the need for spare-part inventories, etc. This Special Issue invites contributions addressing several aspects of additive manufacturing of polymer-based composite materials, including:

- Mechanical and physicochemical characterization of 3D-printed components
- Recycling and 3D printing
- 3D printing of short and continuous fibre-reinforced polymer composites
- Optimization of 3D printing parameters
- 3D printing of multi-materials and soft polymers
- Degradation and ageing process on 3D-printed polymer-based composite materials
- Numerical modelling and simulation of additive manufacturing processes
- Postprocessing and Nondestructive testing in 3D printing of polymer composites
- Analysis of fracture behaviour of 3D-printed materials in mode I and II, and mixed mode

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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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