

## Special Issue

# 3D/4D Printing of Polymers: Recent Advances and Applications

### Message from the Guest Editors

The dramatic increase in computational power for mathematical modeling and simulation highlights the significant role scientific computing can play in the analysis of many emerging complex manufacturing processes, including 3D and 4D polymer printing. However, for this goal to be realized, experimentally validated next-generation computational tools must be developed in order to enable engineers and scientists to rapidly develop and analyze new additive manufacturing processes, resulting in superior products produced at lower overall operational costs.

Of particular interest for this Special Issue is the design and synthesis of novel surface-based materials and the fabrication of complex three-dimensional and four-dimensional (time-dependent) structures that exhibit desired mechanical, thermal, electrical, magnetic, and optical behaviors. In many cases, these manufacturing processes, especially those involving material extrusion for 3D and 4D printing, may involve complex multi-step multi-physical stages that combine disparate techniques in order to create structures that are impossible to construct using standard manufacturing methods.

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### Guest Editors

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## Polymers

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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.

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### Editor-in-Chief

Prof. Dr. Alexander Böker

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