



## Advanced Study on Polymer-Based Hydrogels

Guest Editor:

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submissions:

**closed (31 March 2026)**

### Message from the Guest Editor

Dear Colleagues,

This Special Issue of *Polymers* aims to highlight some of the most innovative findings in the construction, characterization, performance optimization, and functional application of advanced polymer hydrogel materials with considerations of their impact on human health, energy, and the sustainability of the environment.

We invite the research community to contribute to this Special Issue by submitting comprehensive reviews or original research articles. Topics of interest include, but are not limited to, the following:

- Design, characterization method, and structure–activity relationship of hydrogel network structure and interaction;
- Hydrogels with special properties, such as anti-freezing, anti-drying, self-healing, shape memory, etc.;
- Improvement in the performance and exploration of the functional application of hydrogels, including high-performance hydrogel materials, hydrogel biomedical materials, hydrogel flexible electronic and wearable materials, hydrogel new energy materials, hydrogel bionic devices, and hydrogel flexible robots.





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## Editor-in-Chief

### Prof. Dr. Alexander Böker

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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.

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