

Special Issue

Smart Biopolymers and Sensors

Message from the Guest Editor

Smart, intelligent, or responsive biopolymers are materials derived from biological sources that exhibit responsive behaviors to external stimuli such as temperature, pH, light, or magnetic fields. These materials have gained significant attention due to their potential applications in various industries, offering sustainable and innovative solutions. Biopolymers are typically sourced from renewable resources like plants, algae, and microorganisms, making them a more sustainable option. Their biodegradability ensures they break down naturally, reducing the environmental footprint and addressing the growing concern over plastic waste. Despite their advantages, their adoption faces several challenges. The production cost is often higher than that of conventional polymers, and there are still technical problems in scaling up manufacturing processes. Furthermore, novel applications and materials are still required, as well as advances in current known smart biopolymers. Smart biopolymers represent a promising frontier in material science, potentially transforming various industries through their responsive and sustainable properties.

Guest Editor

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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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