

Special Issue

State-of-the-Art Conductive Hydrogels

Message from the Guest Editor

Conductive hydrogels, a unique class of materials merging the properties of hydrogels and electrical conductivity, have emerged as a focal point of intense scientific and technological exploration. In recent years, significant progress has been made in the development of conductive hydrogels. Novel synthesis routes have been devised, enabling the precise control of their microstructure and composition. This has led to the creation of hydrogels with enhanced conductivity, mechanical strength, and biocompatibility. For example, the incorporation of conductive nanomaterials such as carbon nanotubes, graphene, and conductive polymers into the hydrogel matrix has been a prevalent strategy to boost their electrical performance. For this Special Issue, we invite you to contribute original research or comprehensive review articles. We encourage submissions that offer novel insights into the design, synthesis, and characterization of conductive hydrogels. Articles demonstrating their innovative applications in emerging fields such as wearable electronics, environmental sensing, and energy storage are also highly welcome.

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 4.9.

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.

Editor-in-Chief

Prof. Dr. Alexander Böker

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