Special Issue

Artificial Intelligence in Polymers

Message from the Guest Editors

Polymers and polymer-based composites are used in a wide range of engineering applications. However, due to the vastness of the chemical and structural space, traditional intuition-driven and/or trial-and-error approaches used to discover polymers with target properties are expensive and time-consuming. With the advanced development of artificial intelligence technologies, the use of machine learning (ML) has shown great potential in data-driven design and the discovery of polymers, also known as polymer informatics. This Special Issue aims to delve into recent advancements in ML-assisted design of polymers and polymer-based composites with exceptional properties such as electrical insulation, thermal stability and mechanical strength. Topics of interest cover various aspects of polymer informatics including polymer dataset generation (experiments and high-throughput computations), machine-readable fingerprinting of polymer structures, ML algorithms describing structure–property relationships, and rational design protocols.

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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

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