

Special Issue

New Advances in Plasma Processes for Polymers

Message from the Guest Editors

The world of polymer modification is abuzz with the dynamic advancements in plasma processing. Unlike traditional methods, plasma treatments leave the bulk material untouched, focusing solely on enhancing its physical, chemical, and mechanical properties. This technology allows for the efficient treatment of large and intricate polymer structures, significantly improving their adhesion, wettability, and biocompatibility. With precise control over plasma parameters, researchers can craft features on the nanoscale, perfect for applications in electronics, biomedical devices, and sensors. Plasma polymerization has also witnessed remarkable progress. This technique essentially builds thin polymeric films from plasma, resulting in coatings with unique properties like superior chemical resistance, electrical conductivity, and even antimicrobial activity. Overall, advancements in plasma processing for polymers are propelling the development of next-generation materials. These materials boast enhanced performance and novel functionalities, highlighting plasma's crucial role in driving innovation across various high-impact industries.

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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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