Special Issue

New Polymeric Nanomaterials: Optimization and Application in the Field of Environmental Sensors

Message from the Guest Editors

Environmental monitoring increasingly depends on advanced nanomaterials for real-time pollutant detection in soil, water, and air. This Special Issue highlights the development, optimization, and application of novel nanomaterials in environmental sensing, focusing on the integration of IoT and AI technologies. Combining machine learning with sensor networks enables big data analysis, pattern recognition, and predictive modeling of environmental parameters and climate trends. Incorporating nanomaterials into polymer matrices is crucial for developing innovative, high-performance sensing devices. Polymers, as versatile and cost-effective substrates, provide an excellent platform for creating sensors capable of detecting various chemicals with superior selectivity and sensitivity. By embedding nanoscale fillers into polymer matrices, researchers can fine-tune material properties, such as mechanical, thermal, electrical, and barrier characteristics, unlocking significant potential for advanced sensing applications.

Guest Editors

Dr. Marius Bumbac

Dr. Cristina Pachiu

Dr. Octavian Buiu

Dr. Bogdan Şerban

Deadline for manuscript submissions

31 January 2026

Polymers

an Open Access Journal by MDPI

Impact Factor 4.9
CiteScore 9.7
Indexed in PubMed

mdpi.com/si/244279

Polymers
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
polymers@mdpi.com

mdpi.com/journal/polymers

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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
Lehrstuhl für Polymermaterialien und Polymertechnologie, University of Potsdam, 14476 Potsdam-Golm, Germany

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