

## Special Issue

# Multi-Functional Smart Dielectric Materials for High Voltage Insulation

### Message from the Guest Editors

Smart materials based on nano-dielectrics are actively synthesizing and implementing recently such as submarine cable using XLPE doped with MgO, DC cables using PE with carbon black as an insulation, hydro-generator insulation using nano-silica, motor insulation using hybrid organic-inorganic nano-insulation. The European program Horizon 2020 has deployed nanomaterials to replace crosslinked technology for HV cables. This Special Issue aims to provide a platform reporting research advances in smartly designed dielectric materials. Hence, this topic is open to both natural and applied sciences subjects used to apply existing scientific knowledge to develop more practical applications, for example in technology and inventions. The scientific publications related to new and existing smartly structured polymer-based materials synthesis process and their characterization in electric power industry are welcome.

---

### Guest Editors

Dr. M. Tariq Nazir  
Dr. Shakeel Akram  
Prof. Dr. Yiyi Zhang

---

### Deadline for manuscript submissions

closed (15 June 2022)



## Polymers

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.9  
CiteScore 9.7  
Indexed in PubMed



[mdpi.com/si/61350](https://mdpi.com/si/61350)

*Polymers*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[polymers@mdpi.com](mailto:polymers@mdpi.com)

[mdpi.com/journal/  
polymers](https://mdpi.com/journal/polymers)





# Polymers

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.9  
CiteScore 9.7  
Indexed in PubMed



[mdpi.com/journal/  
polymers](https://mdpi.com/journal/polymers)



## About the Journal

### 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

Fraunhofer-Institut für Angewandte Polymerforschung, Lehrstuhl für Polymermaterialien und Polymertechnologie, Universität Potsdam, Geiselbergstraße 69, 14476 Potsdam-Golm, Germany

---

### Author Benefits

#### Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

#### High Visibility:

indexed within Scopus, SCIE (Web of Science), Ei Compendex, PubMed, PMC, FSTA, CAPIus / SciFinder, Inspec, and other databases.

#### Journal Rank:

JCR - Q1 (Polymer Science) / CiteScore - Q1 (General Chemistry)