# Special Issue

# Polymer-Based Dielectric Materials for Energy Storage

## Message from the Guest Editor

Dielectric capacitors are widely used in microelectronics, biomedical, hybrid vehicles, high-power transducers, high-voltage power transmission systems and military applications due to their fast charge/discharge speeds and good power density. Importantly, dielectric material is one of the key parts of dielectric capacitors. The motivation of this Special Issue (SI) is to investigate the influence of chemical composition, microstructure and heat treatment on the energy storage performance of dielectric composites, and can include big-data analyses and simulations on this kind of dielectric composites, which can significantly improve the energy storage performance of dielectric capacitors. This SI offers some new methods, materials and strategies for the fabrication of composite dielectrics for simultaneously realizing a great breakdown strength, a good discharged energy density and an excellent discharging efficiency. Finally, these works provide some ideal candidates for next-generation high-pulse-energy storage capacitors.
Dr. Yue Zhang

## Guest Editor

Dr. Yue Zhang
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## Deadline for manuscript submissions

closed (30 September 2023)

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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 4.9.

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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