

Special Issue

Polymer Based Fuel Cells for Energy Conversion

Message from the Guest Editors

Polymer-based fuel cells use a conducting membrane as the electrolyte. There are two types of such fuel cells, including polymer electrolyte fuel cells (PEMFCs) and direct alcohol fuel cells (DAFCs). Polymer electrolyte fuel cells are the most promising electrochemical-generating devices due to their high efficiency, high power density, low greenhouse gas emissions, and suitability for various applications, such as transportation and stationary power generation, while DAFCs are the most promising for portable device uses due to their high energy density. Although methanol is the one currently used in commercial DAFCs, other liquid alcohols such as ethanol, propanol, and glycerol have also been researched as alternatives for DAFCs due to their high energy density compared to methanol. While these fuel cells are a promising technology, they still have limitations, including the cost of the catalysts used, and the fact that they require a reliable and a safe supply of hydrogen and are sensitive to humidity.

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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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