Special Issue

Polymer Electrolytes Membranes

Message from the Guest Editors

Rapid industrialization and population explosion are the main reasons for the current energy crisis and resources shortage. Fossil fuels are our major sources of energy. The combustion of these fuels results in the emission of greenhouse gases, and threatens human health. Fuel cells are a promising clean energy technology since they are not limited by heat-engine thermodynamics and can operate at low temperature without combustion byproducts. As an alternate energy carrier, hydrogen generate power for domestic, industrial, and transportation sectors. Hydrogen production by water electrolysis at low temperature is most promising because of the purity of produced hydrogen (99.9%) and its compatible nature with all electricity sources. Polyelectrolyte membranes, namely, anion exchange membranes (AEMs) and proton exchange membranes (PEMs), are a critical component of fuel cells, water electrolysis, redox flow batteries, electrodialysis, CO2 electroreduction, etc. This Special Issue welcomes contributions focused on the Synthesis and Characterization of Polymer Electrolyte Membranes for electrochemical devices and CO2 electroreduction to produce value-added chemicals.

Guest Editors

Dr. Mrinmay Mandal

School of Chemical and Biomolecular Engineering, Georgia Institute of Technology (Georgia Tech), Atlanta, GA, USA

Prof. Dr. Chengji Zhao

Alan G. MacDiarmid Institute, College of Chemistry, Jilin University, Changchun 130012, China

Deadline for manuscript submissions

closed (1 December 2021)

Polymers

an Open Access Journal by MDPI

Impact Factor 4.9
CiteScore 9.7
Indexed in PubMed

mdpi.com/si/63795

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

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

MDPI

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 4.7.

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

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, CAPlus / SciFinder, Inspec, and other databases.

Journal Rank:

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