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Membranes for Fuel Cells

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Message from the Guest Editors

Dear Colleagues,

Fuel cells based on polymer electrolyte membranes (PEMs) play an important role in applications. A good PEM must present high proton conductivity, excellent mechanical strength, mechanical, chemical and electrochemical stability, low fuel or oxidant crossover, and be manageable for fabrication in membrane electrode assemblies.

Solid oxide fuel cells based on oxygen ion conductors (SOFC) and protonic conduction electrolytes (PCFC) are promising candidates for green energy production. Membranes based on oxygen-electron conductors have been studied the last few decades for oxygen extraction from air, as well as for direct partial oxidation of natural gas. Similarly, membranes based on mixed protonelectron conducting oxides have been widely studied in recent years for application as hydrogen separation membranes and for different catalytic membrane reactors applications.

This Special Issue, "Membranes for Fuel Cells", will be a perfect forum to bring together the latest results obtained by key laboratories focused on membranes and membrane materials with applications in fuel cell research and development.







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Message from the Editor-in-Chief

You are cordially invited to contribute a research article or a comprehensive review for consideration and publication in *Membranes* (ISSN 2077-0375).

Membranes is an international, peer-reviewed open accessjournal of membrane technology published monthly online by MDPI. The journal covers the broad aspects of the science and technology of both biological and nonbiological membranes, including membrane dynamics and the preparation and characterization of membranes and their applications in water, environment, energy, and food industries. Articles contributing to better understanding of transport processes in all types of membranes are also welcome. The scientific community and the general public have unlimited and free access to the content as soon as it is published. We would be pleased to welcome you as one of our authors.

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