

## Special Issue

# Ceramic Membranes for Fuel Cell Applications and Hydrogen Production

### Message from the Guest Editor

You are warmly invited to submit your original work or a review article to this Special Issue of *Membranes* entitled "Ceramic Membranes for Fuel Cell Applications and Hydrogen Production". Over the last few decades, researchers have investigated two types of fuel cells based on ceramic membranes: Solid Oxide Fuel Cells (SOFCs) and Protonic Ceramic Fuel Cells (PCFCs). The progress has led to a decrease in the operating temperature, from 1000 to below 700 °C, a significant improvement in performance, as well as a noteworthy increase in lifetime. Ceramic-based membranes have also been developed for hydrogen production using electrolysis or gas separation. The aim of this Special Issue is to provide an overview of the latest results obtained in the field and to highlight possible research directions to further advance the development of these technologies. **Keywords**

- gas separation
- fuel cell
- ceramic membrane
- electrolysis
- oxygen transport membrane
- hydrogen transport membrane

### Guest Editor

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### Deadline for manuscript submissions

closed (31 December 2019)



## Membranes

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## About the Journal

### 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 access journal of membrane technology published monthly online by MDPI. The journal covers the broad aspects of the science and technology of both biological and non-biological 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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### Editor-in-Chief

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