

## Special Issue

# Advanced Pd Composite Membranes

### Message from the Guest Editor

Palladium is the material that is the most examined as a H<sub>2</sub> selective membrane due to its relatively fast and unique permeation mechanism. However, Pd membranes are limited in terms of practical industrial applications because of the high material cost and H<sub>2</sub> embrittlement issues at low temperature under H<sub>2</sub> atmosphere. In order to solve the problems, porous substrates and Pd-alloying schemes are employed to fabricate composite membranes that avoid H<sub>2</sub>-embrittlement under targeted operation temperatures.

### Keywords

- palladium composite membranes
- ultrathin palladium membranes
- electroless plating
- sputtering
- membrane reactor
- renewable hydrogen

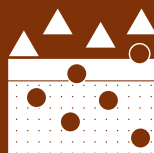
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### Deadline for manuscript submissions

closed (31 October 2020)



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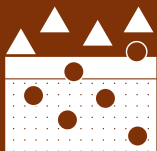


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You are cordially invited to contribute a research article or a comprehensive review for consideration and publication in *Membranes* (ISSN 2077-0375). *Membranes* is an international, peer-reviewed open access journal of membrane technology published 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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