Special Issue

Porous MOF/COF for Membrane Applications

Message from the Guest Editors

Membranes are at the forefront in nearly all areas of science and technology. The operation of membrane technology in the context of resource recovery and sustainable development has illustrated an eco-friendly potential for energy and environmental challenges. Porous crystalline metal-organic frameworks (MOFs) and covalent-organic frameworks (COFs) offer high surface area, thermal and chemical stability, tunable and uniform pore size, structural versatility, and a high degree of control over host-guest interactions. These intrinsic properties play pivotal roles in membrane technology to address critical challenges, including environmental remediation and fuel cells. This Special Issue aims to examine various synthetic strategies and characterization techniques of MOF and COF membranes, with a focus on various applications, including gas separations, liquid separations, sensors, and fuel cells. Within the scope of this Special Issue is not only an exploration of MOF/COF membranes but also of large-scale synthetic challenge under ambient conditions. Original research articles and reviews on different aspects of framework materials are welcome for this Special Issue.

Guest Editors

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Deadline for manuscript submissions

closed (15 May 2023)

Membranes

an Open Access Journal by MDPI

Impact Factor 3.6
CiteScore 7.9
Indexed in PubMed

mdpi.com/si/113930

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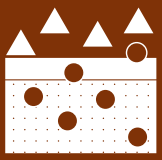

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Message from the Editor-in-Chief

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 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.

Editor-in-Chief

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