



## Recent Developments and Applications of High Performance Graphene Oxide Separation Membrane

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### Message from the Guest Editors

Membrane separation technologies have revolutionized various industrial processes due to their low cost, high efficiency, and environmental sustainability. In recent years, graphene oxide (GO) membranes with multifunctional reactive groups and tunable microstructures have demonstrated great potential to facilitate water transportation, waste rejection, and gas separation, thereby drawing substantial interest. In addition, GO membranes are easy to fabricate, mechanically robust, and amenable to industrial-scale production at low cost. They have been utilized in a broad spectrum of important applications related to the fields of resources, energy, and the environment.

The purpose of this Special Issue is to collect recent advancements in the development and application of innovative graphene oxide membranes. Research areas of interest include membrane fabrications, membrane characterizations, transport and separation mechanisms, molecular dynamics (MD) simulations/calculations, membrane stability, and scaling-up technologies of graphene oxide membranes. Topics related to nanofiltration, gas separation, and pervaporation are also welcome.





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## Message from the Editor-in-Chief

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*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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