

Electrospun Nanofibrous Membranes and Their Processes and Applications

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Message from the Guest Editors

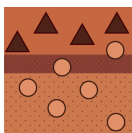
Electrospun nanofibrous membranes (ENMs) could provide high permeation due to their specific structures, including having a 3D interconnected web-like structure, high porosity, and tunable pore size, to name but a few. This has great potential for industrial applications where significant energy-saving benefits are necessary. In recent years, ENMs have been used in a wide area including microfiltration, ultrafiltration, nanofiltration, reverse osmosis, forward osmosis, and membrane distillation, and have displayed great potential for effective water purification. In some cases, they demonstrated obvious advantages compared with the traditional membranes.

The current Special Issue aims to seek the state-of-the-art in research progress and reviews in this field. The topic is very comprehensive, and may involve exploration of innovative raw materials for ENMs, membrane design and fabrication methodology, structure–performance relationship studies, membrane simulations and calculations, membrane process investigation, pilot tests, and more.

Keywords

- electrospun nanofibrous membrane
- structure–property relationships
- modification
- water purification
- fouling





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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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