

## Special Issue

# Smart Nanofibrous Membranes: Fabrication, Characterization and Applications

### Message from the Guest Editors

Smart nanofibrous membranes represent a critical area of research, with a wide range of potential applications in fields as diverse as chemical engineering, materials science, biomedicine engineering, information science, energy, environment engineering, etc. These membranes exhibit unique properties, such as smart responsive behavior, which can be harnessed for a variety of purposes, including separation, filtration, encapsulation, micro-/nanostructure design, and energy harvesting. As such, they hold great promise for addressing challenges in areas such as water treatment, drug delivery, and other advanced manufacturing. This Special Issue aims to compile the latest advancements and innovations in the field of smart nanofibrous membranes. It will explore the design, synthesis, characterization, and application of these advanced materials, highlighting their potential to revolutionize various industries, including, but not limited to, healthcare, environmental protection, sustainable energy, and smart sensors.

### Guest Editors

Dr. Xin Wei

Dr. Yuying Cao

Prof. Dr. Tong Lin

### Deadline for manuscript submissions

closed (20 February 2025)



## 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

Prof. Dr. Spas D. Kolev  
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