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Highly-Efficient Membrane Gas Separation Materials: From Synthesis to Applications

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Message from the Guest Editor

All these considerations were taken into account when the topic of this Special Issue was proposed: Highly-Efficient Membrane Gas Separation Materials: From Synthesis to Applications. It must give a balanced picture of the materials to which engineers have now access for solving various gas separation problems: air separation, removal of carbon dioxide from its mixtures with nitrogen and methane, separation of light hydrocarbons, extraction of helium from natural gas, etc.

Keywords:

- Membrane gas separation
- New membrane materials
- Transport phenomena in membranes
- Polyacetylenes
- Perfluorinated polymers
- Si-containing polynorbornenes
- Polyimides
- Poly(phenylene oxide)
- Mixed matrix membrane
- Ionic liquids
- Fuel cells
- Predictions of transport parameters
- Permeability coefficients
- Selectivity
- Free volume



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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 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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