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# Biomass-Based Polymer Membranes and Films: Synthesis, Characterization, and Applications

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Message from the Guest Editors

Polymer membranes and films have been widely applied in chemical separations, sensors, batteries, and flexible electronic devices. Biomass-based polymers provide a sustainable material platform for developing membranes and films, which feature the advantages of zero carbon emissions, abundant natural functional groups, easy degradation and tunable properties via different synthesis modification methods. In recent years, extensive efforts have been devoted to engineering biomass-based polymer membranes and films with tailored-made structures and outstanding performance. However, the variety of biomass-based polymers for membranes/films, in addition to fabrication technologies, is still limited. Furthermore, their applications still need to be expanded.

For this Special Issue of *Polymers*, full research papers, communications, and review articles are invited on the following topics:

- Biomass-based polymer membrane/film synthesis;
- Biomass-based polymer membrane/film characterization;
- Biomass-based polymer membrane/film modification;
- Biomass-based polymer membranes for chemical separations;
- Biomass-based polymer films for sensors, batteries, and electronic devices.



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## **Editor-in-Chief**

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### Message from the Editor-in-Chief

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I would like to invite you to contribute to the success of the journal by sending us your high quality research papers. We would be pleased to welcome you as one of our authors.

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