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## Development of Structure and Barrier Properties of Polymer Nanocomposite Films

Guest Editor:

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Deadline for manuscript  
submissions:

**closed (20 August 2022)**

### Message from the Guest Editor

Dear Colleagues,

This Special Issue (SI) publishes original research articles, review articles, and short communications regarding the preparation and development of original polymer-based nanomaterials with particular morphology and performance in terms of thermal, mechanical, and transport properties by vapor or gas sorption and water and gas permeation processes. The morphology data can be through hierarchical and multigrade approaches. We aim to present a collection of papers that reflect relationships between the design of nanocomposite films, their morphology, and microstructure with barrier performance.

Articles with a focus on biopolymer-based nanocomposites with layered structures and/or incorporating unusual, grafted, and mixed fillers that may be applied in various fields such as medicine, packaging, automotive, transportation, sports, energy storage, water purification, gas separation, and sensors are of interest. In addition, studies on synthetic polymers that fit the scope of the Special Issue are also welcome.



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# Special Issue



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## Message from the Editor-in-Chief

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