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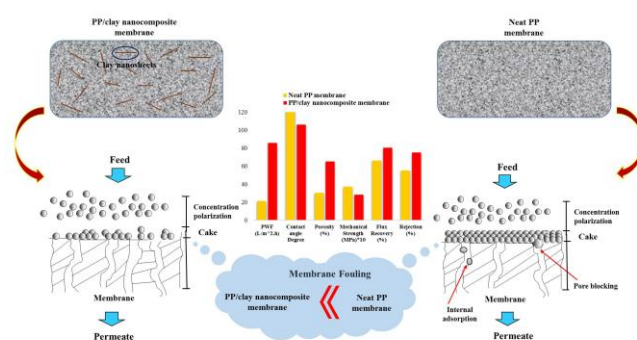
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Graphical abstract



## Highlights

- Nanoclays embedded polypropylene membrane was fabricated in the presence of PP-grafted maleic anhydride as a compatibilizer.
- Pure water flux of modified membranes increased to more than 4-folds.
- Membrane performance was significantly improved in presence of clay nanoparticles.
- Antifouling performance of modified membrane during filtration of BSA solution was greatly enhanced.

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