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Advances in membrane technology for paving the way for water sustainability

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Clean water as basic human need is not available to 1.4 -1.8 billion people around the world. It is essential to direct current research trends toward sustainable water and wastewater treatment technologies that can solve the existing industrial and environmental issues, especially when it comes to solutions that can be successfully commercialized on the global scale. Membrane applications are the most effective and sustainable methods of addressing environmental problems in treating water and wastewater to meet or exceed stringent environmental standards. Nevertheless, membrane fouling is one of the primary operational concerns that is currently hindering its widespread application. Her major research focus is to optimize synthesis of biomimetic membranes designed with antifouling, and selective permeation that will pave the way for the production of clean water.

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