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A Robust Salt-tolerant Superoleophobic Chitosan/ Nanofibrillated Cellulose Aerogel for Highly Efficient Oil/water Separation

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Highlights

- A robust salt-tolerant superoleophobic chitosan/ nanofibrillated cellulose aerogel was fabricated via a facile method.
- The aerogel exhibited excellent underwater superoleophobicity and salt-tolerance for a wide range of oil/seawater mixtures.
- The aerogel could separate various kinds of oil/seawater mixtures with high efficiency and good recyclability.

Abstract

Marine pollution caused by frequent oil spill accidents has already produced catastrophic influence on marine ecological environments. Even though traditional superhydrophobic/

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