

Supporting information

Superhydrophobic-superoleophilic plasmonic membrane for combined oil/water separation and high-sensitive SERS detection for low concentration of analytes in oil/water mixture

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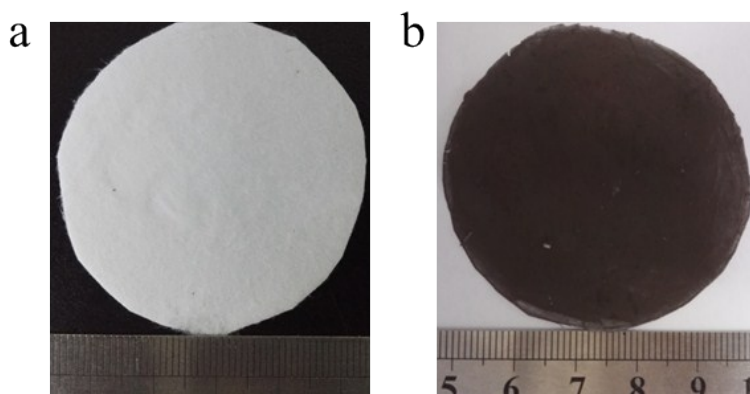


Figure S1: The photographs of (a) pure PS membrane and (b) superhydrophobic SERS substrate

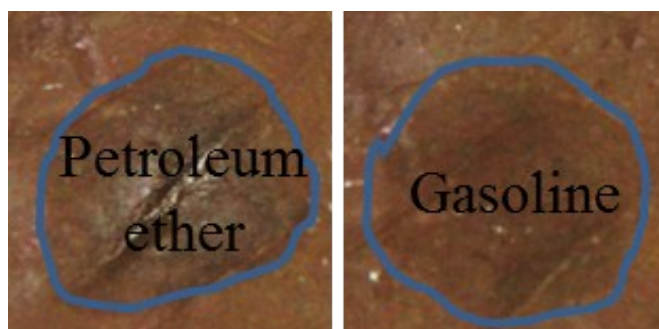


Figure S2: Photographs of (a) petroleum ether, (b) gasoline droplets collapsed on the superhydrophobic substrate.

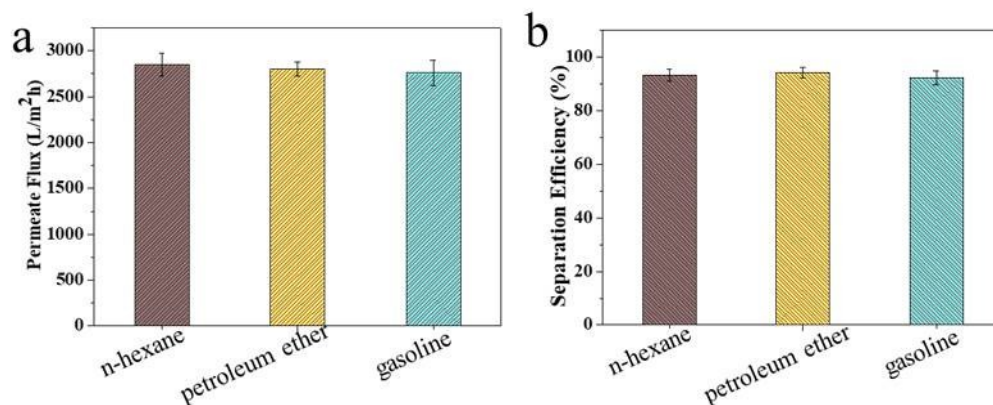


Figure S3: (a) Permeate flux and (b) water and oil separation efficiency of superhydrophobic substrate.

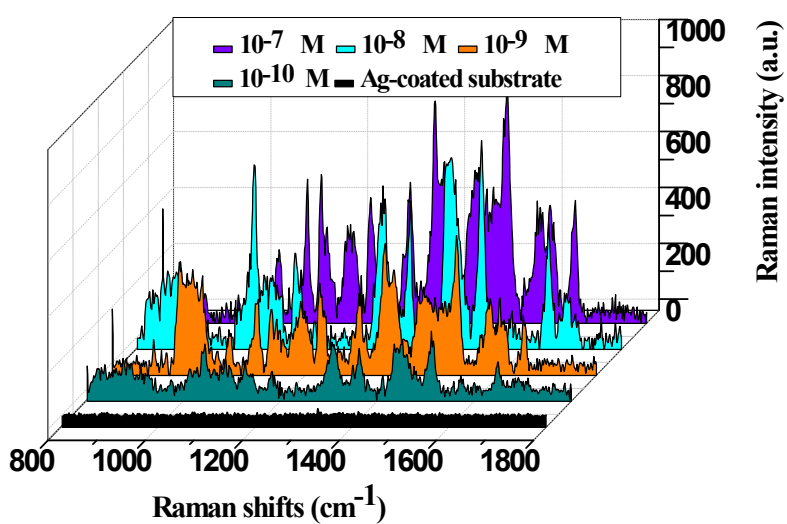


Figure S4: SERS spectra of the mixtures of Sudan III and R6G