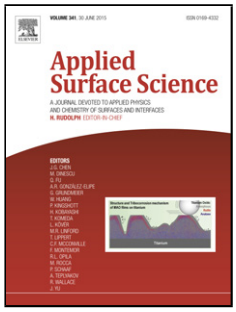

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Fabrication of superhydrophobic nano-aluminum films on stainless steel meshes by electrophoretic deposition for oil-water separation

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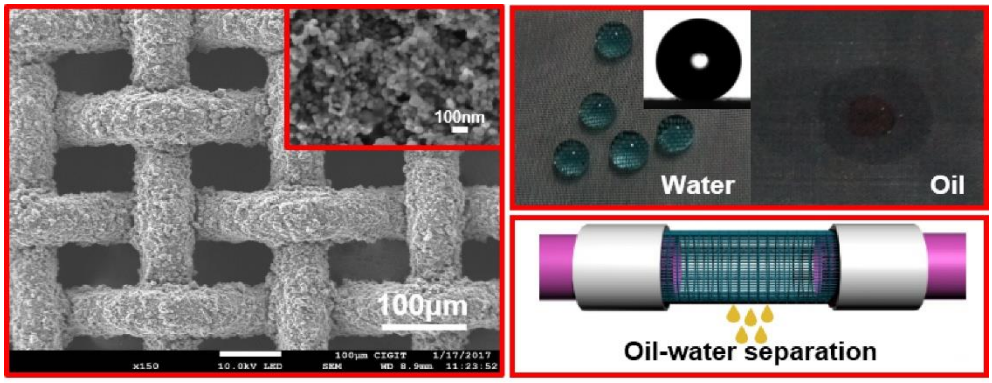
Graphical abstract



Highlights

- Superhydrophobic nano-Al films on stainless steel meshes have been successfully fabricated by EPD.
- The WCA of superhydrophobic stainless steel mesh can reach 160° ± 1.2°.
- The superhydrophobic meshes exhibit stable performance on the oil-water separation, and oil-water separation efficiency is up to 95.8 % ± 0.9 %.