

Supporting information for

A self-cleaning TiO₂ coated mesh with robust underwater superoleophobicity for oil/water separation in complex environment

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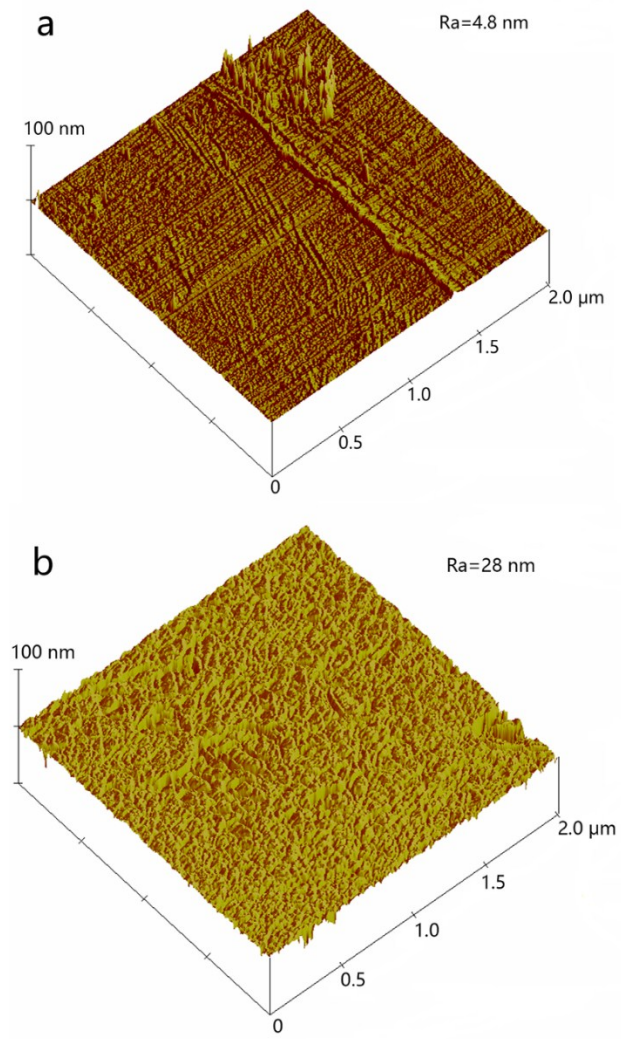


Figure S1. 3D AFM images of (a) pristine stainless mesh and (b) TiO_2 coated mesh.

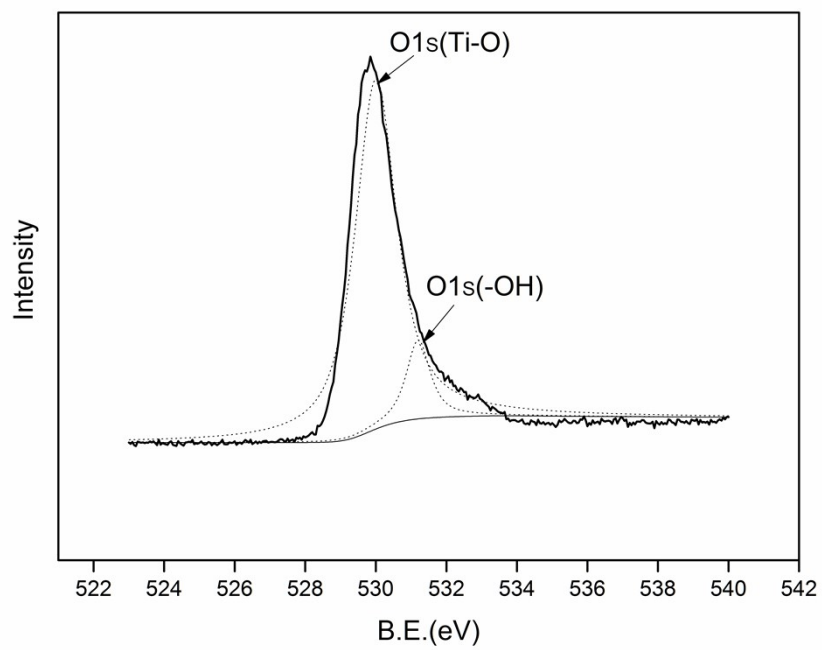


Figure S2. High resolution XPS spectra of the O 1s region for the TiO₂ coated mesh.

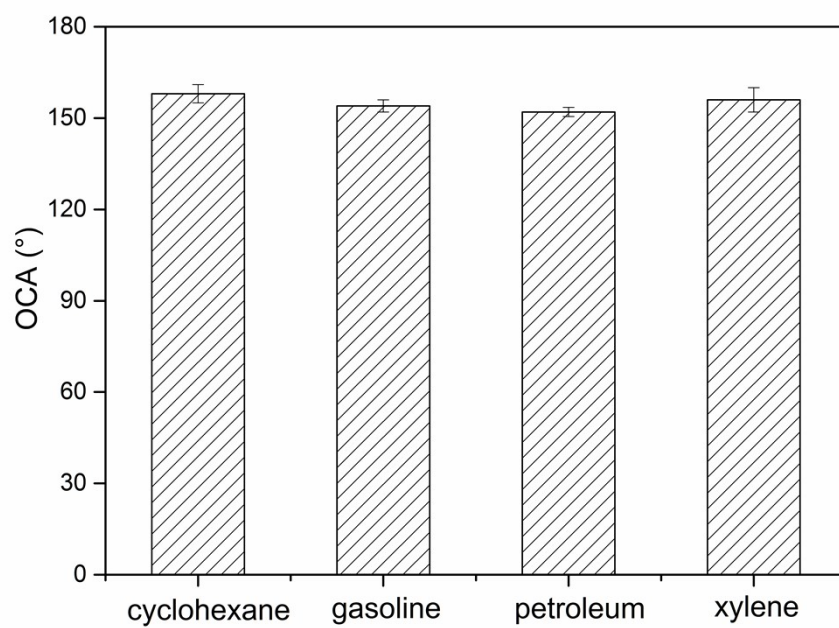


Figure S3. Underwater OCAs of various oils on the TiO₂ coated mesh.

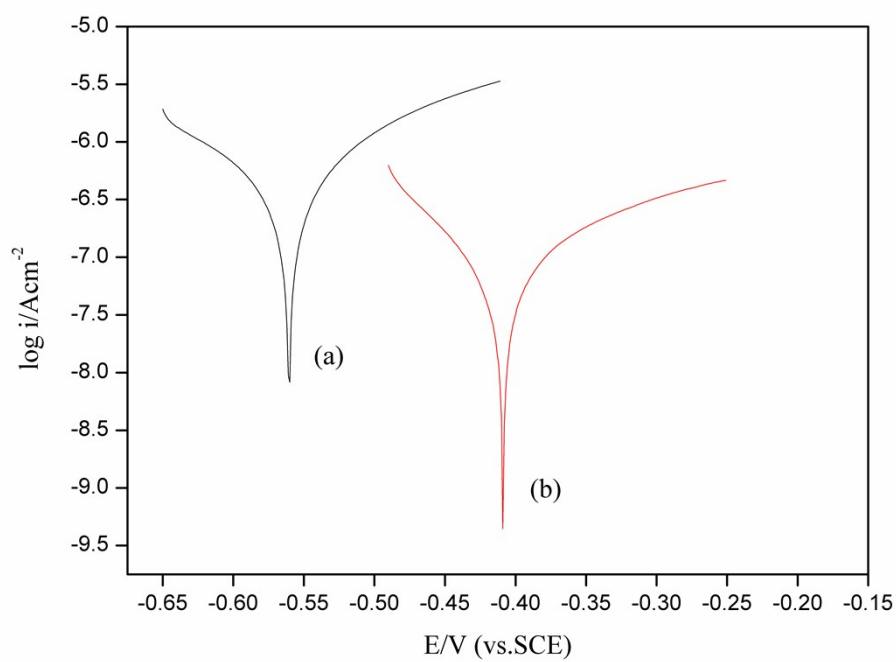


Figure S4. Tafel polarization curves of (a) original stainless mesh and (b) TiO_2 coated mesh. The polarization curve was measured in 0.5 M NaCl solution using CHI660A Electrochemical Measurement System. The samples were used as working electrodes, and the test cell included a platinum auxiliary electrode and a saturated calomel reference electrode (SCE).

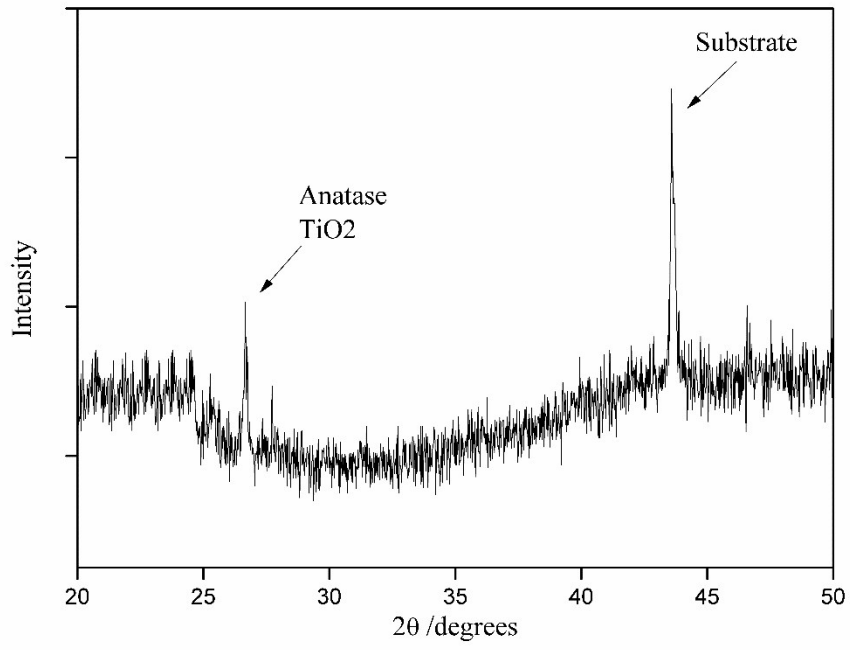


Figure S5. The XRD patterns of TiO₂ coated mesh.