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Title: Fabrication of Superhydrophobic-superoleophilic Copper Mesh via Thermal Oxidation and Its Application in Oil-Water Separation

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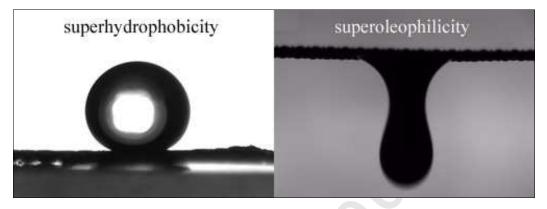
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## ACCEPTED MANUSCRIPT

#### **Graphical Abstract**

A copper mesh with superhydrophobicity and superoleophilicity was fabricated by thermal oxidation, which could be employed to separate oil-water mixtures.



#### Highlight

Copper mesh with superhydrophobicity and superoleophilicity was fabricated.

The mesh exhibited low adhesive self-cleaning and striking loading capacity.

The copper mesh could be applied to separate oil-water mixture.

The superhydrophobic copper mesh exhibits superior corrosion resistance.

# Fabrication of Superhydrophobic-superoleophilic Copper Mesh via Thermal Oxidation and Its Application in Oil-Water Separation

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