

Electronic Supplementary Material

Superhydrophobic, mechanically flexible and recyclable reduced graphene oxide wrapped sponge for highly efficient oil/water separation

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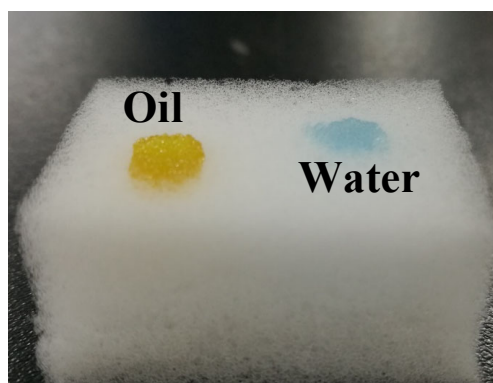


Fig. S1 The amphipathic commercial melamine sponges (water is stained with methylene blue; oil is vacuum pump oil)

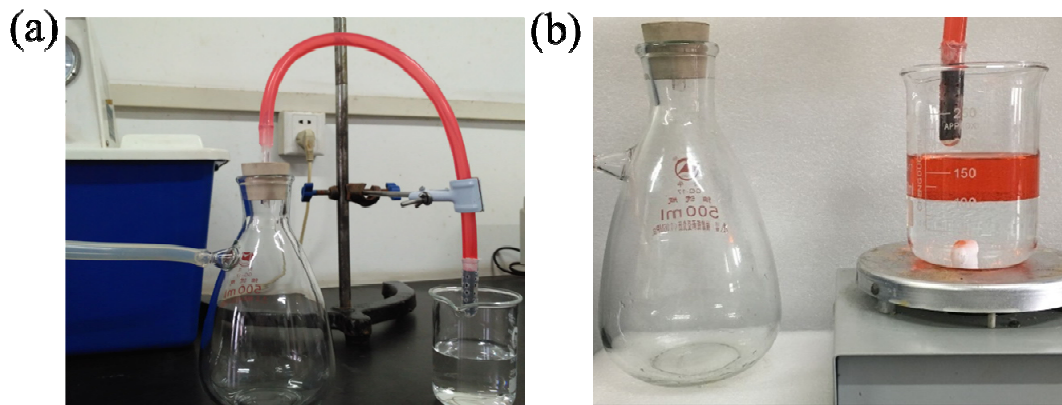


Fig. S2 The photographs of the device for continuous oil removal from water: (a) non-turbulent water-oil mixture; (b) turbulent water-oil mixture

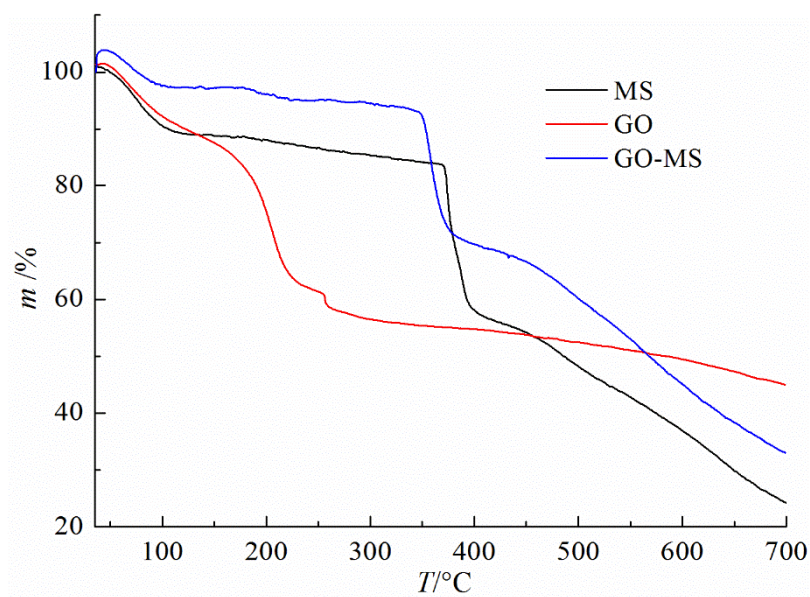


Fig. S3 TG of MS, GO and GO-MS

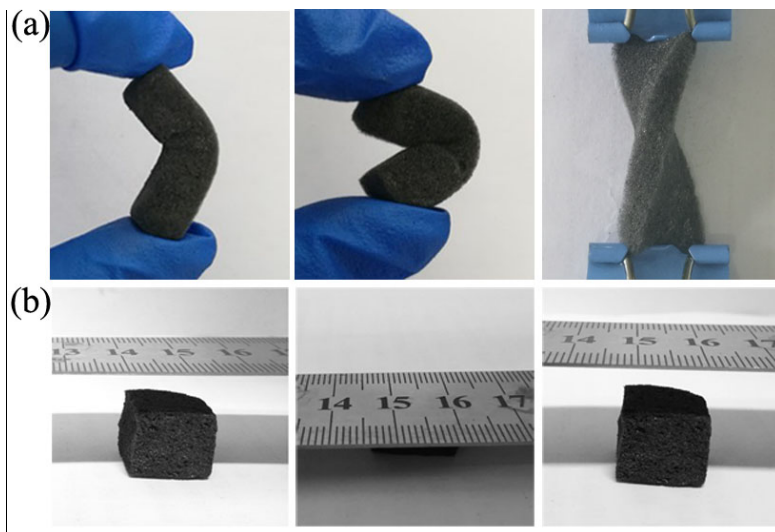


Fig. S4 The mechanical performances of the prepared RGO-MS

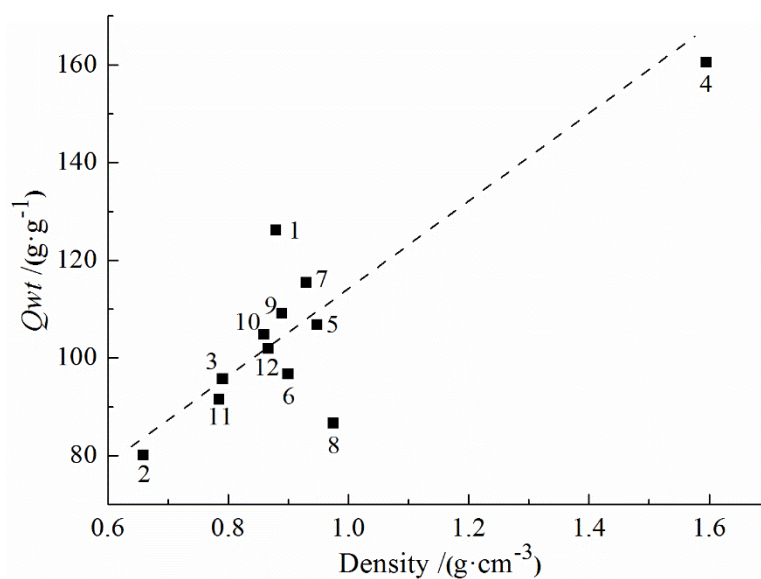


Fig. S5 The relationship between Q_{wt} and density of the organic liquid absorbed identified by numbers (1-pump oil, 2-hexane, 3-acetone, 4-phenixin, 5-N, N-dimethylformamide, 6-ethyl acetate, 7-tetraethyl orthosilicate, 8-acetylacetone, 9-butyl acrylate, 10-xylene, 11-isopropyl alcohol, 12-toluene)

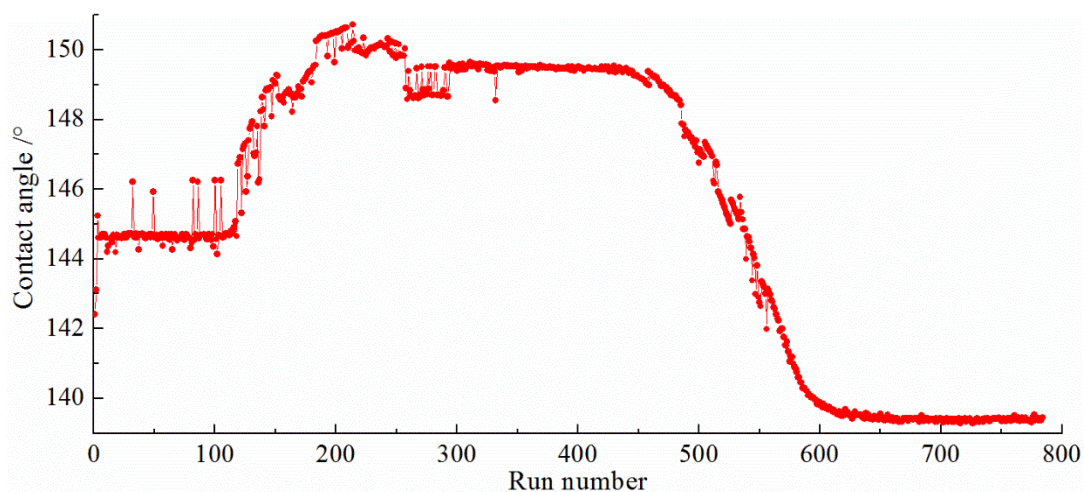


Fig. S6 The sliding angle of RGO-MS

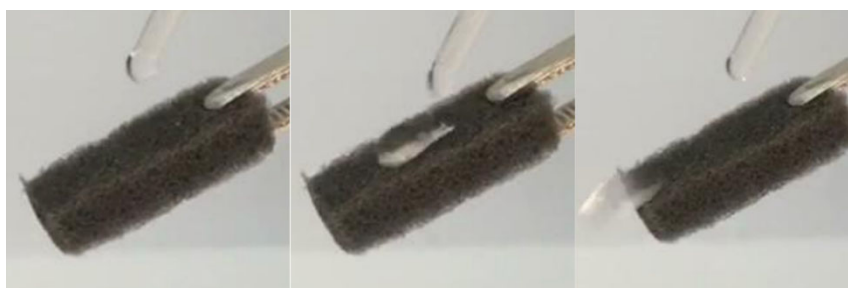


Fig. S7 Images of capturing a water droplet easily bouncing away after hitting RGO-MS