Electronic Supplementary Material (ESI) for Environmental Science: Nano.

Supporting Information

One-step synthesis of robust and anti-oil-fouling biomimetic cactus-like hierarchical architecture for highly efficient oil/water separation

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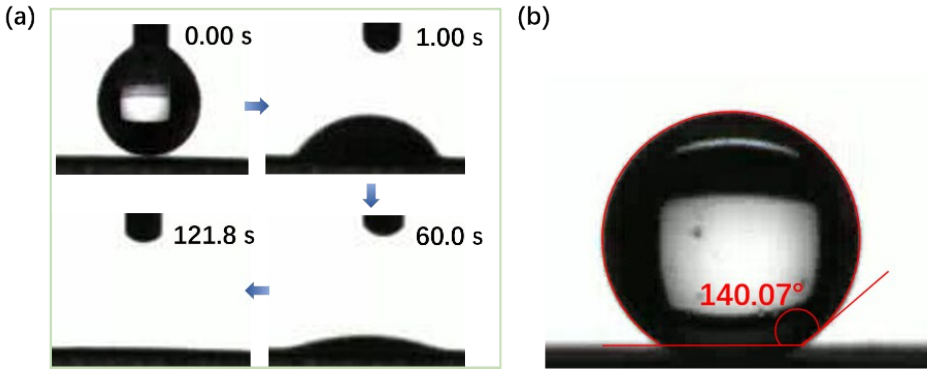

Fig. S1 (a) A 5 μL water droplet spreading on the pristine SSM with 121.8 s; (b) photograph of the UOCA for the pristine SSM.

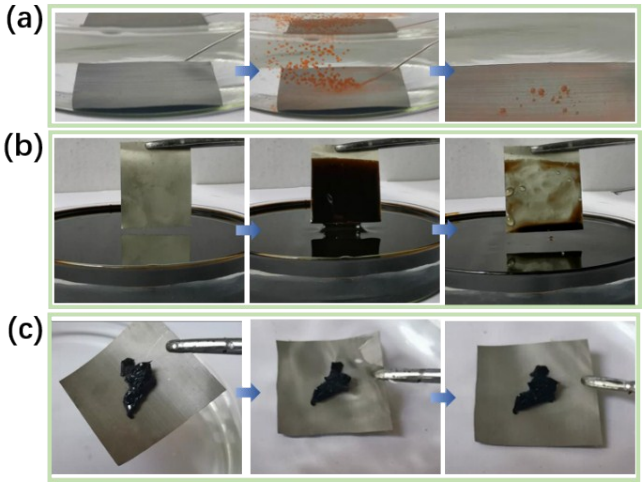

Fig. S2. (a) *n*-hexane, (b) light crude oil and (c) heavy crude oil to demonstrate the oil resistance performance of pristine SSM.

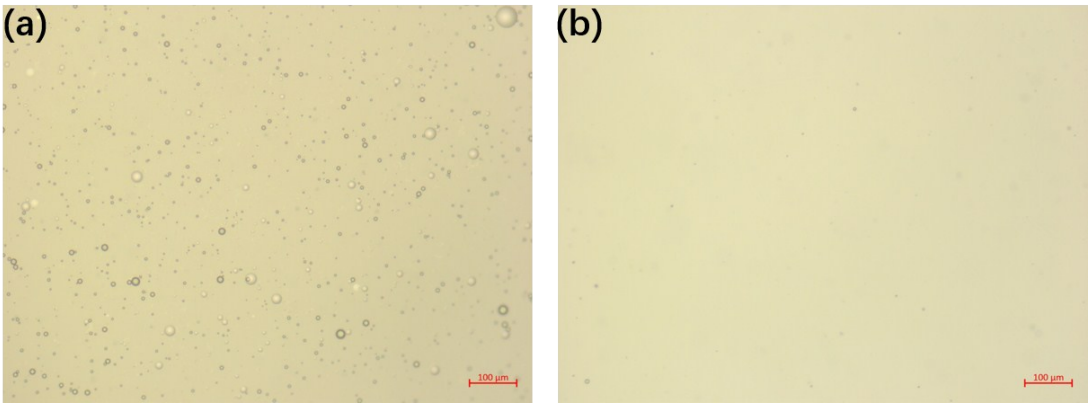

Fig. S3. Digital images of the diesel oil/water emulsion before and after separation.

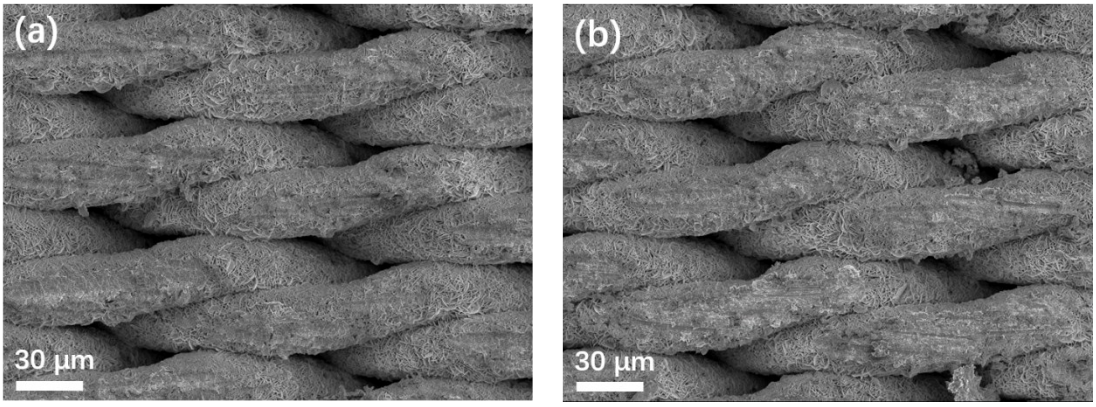

Fig. S4. SEM images of the mesh structure after sandpaper abrasion (a) abrasion 5 times; (b) abrasion 10 times.

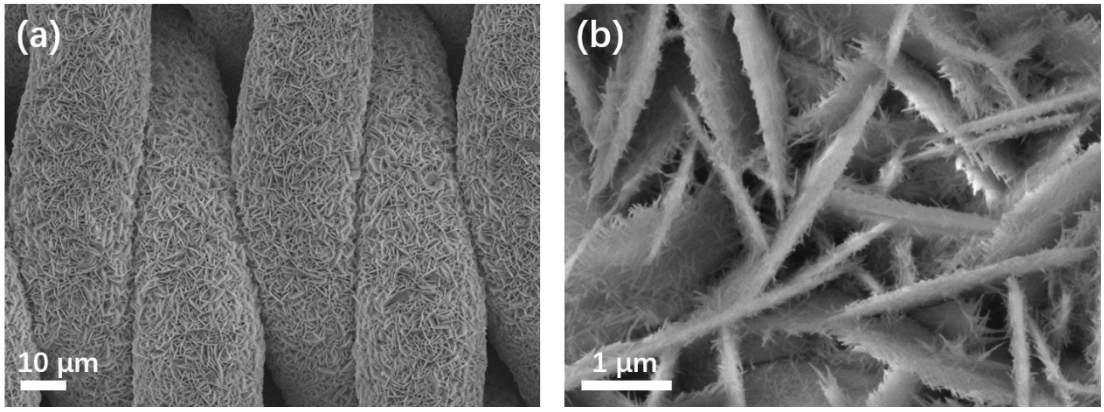

Fig. S5. Low-magnification and high-magnifcation of SSM soaking in aqueous solution with pH of 3 after 7 days.