

A simple and Effective Way to Fabricate Mechanical Robust Superhydrophobic Surfaces

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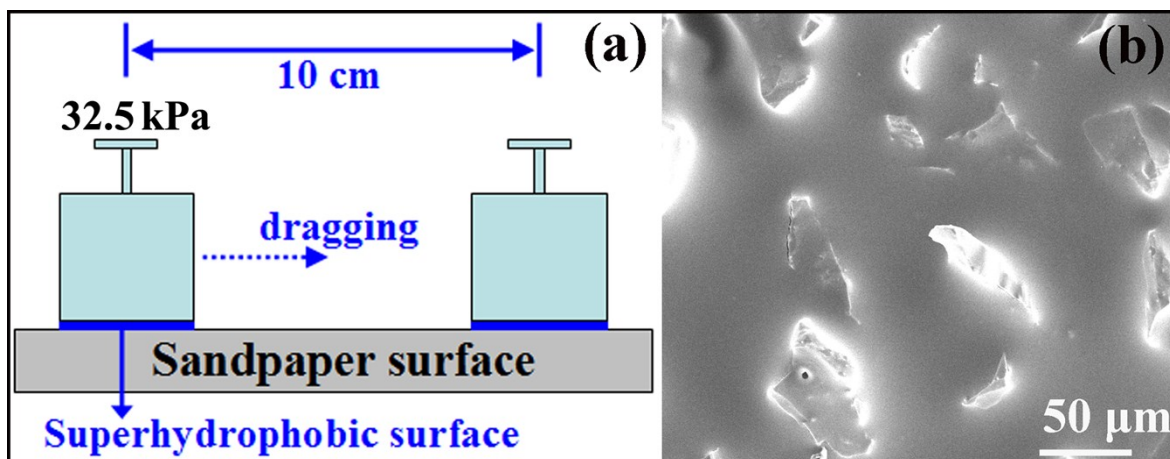


Figure S1. (a) Mechanical stability measurement for the superhydrophobic surface; (b) FE-SEM image of the sandpaper surface (400 #).

The mechanical stability of the as-prepared superhydrophobic surface was measured using a home-made method (see Figure S1). Sandpaper surface (400 #) was used as an abrasion surface, with the superhydrophobic sample surface facing this abrasion material. The surface microstructures of the sandpaper was observed using SEM. It was observed that lots of protrusions with typical size about 20~50 μm existed on the sandpaper surface. The superhydrophobic sample was dragged forward in one direction with a pressure of 32.5 kPa applied on the sample surface. The moving distant is about 10 cm and the speed is about 5 cm/s. After each abrasion cycle, the CA and SA were measured to evaluate the mechanical stability of the sample.

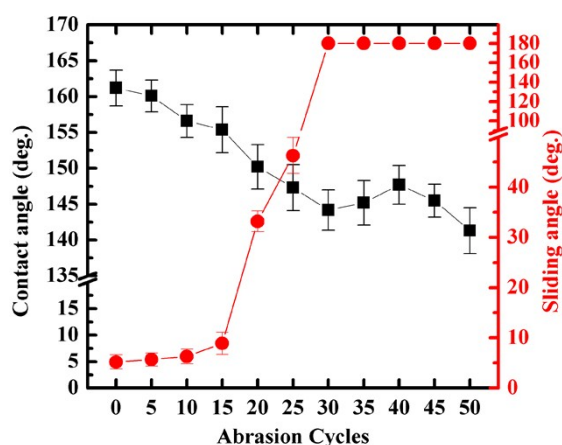


Figure S2. Mechanical stability measurement for the Cu/SR composite. The abrasion surface is 600# sandpaper.