

Electronical Supporting Information

Highly fluorinated SiO₂ particles Assembled, a durable Superhydrophobic and Superoleophobic coating for both hard and soft materials

Qi Li ^{a,b}, Zhiguang Guo ^{*, a,b}

^a. *Hubei Collaborative Innovation Centre for Advanced Organic Chemical Materials and Ministry of Education Key Laboratory for the Green Preparation and Application of Functional Materials, Hubei University, Wuhan, People's Republic of China.*

^b. *State Key Laboratory of Solid Lubrication, Lanzhou Institute of Chemical Physics, Chinese Academy of Sciences, Lanzhou, People's Republic of China.*

**Corresponding author. Tel.: 0086-931-4968105; Fax: 0086-931-8277088. Email address: zguo@licp.acs.cn (Guo)*

Video description:

Injected water and O-xylene bouncing on the 4:2 coating surface (**Movie S1**).

Water adhesive tests on the 4:2 and 2:4 coating surfaces (**Movie S2**).

O-xylene droplet roll off the coated semi-curved fabric (**Movie S3**).

Jumping drop on superhydrophobic and superoleophobic surfaces (**Movie S4**).

Single droplet and multiple droplet rolling back and forth on PET film bent into a U-shape (**Movie S5**).

Self-cleaning behavior of the coated glass against alkali blue particles, and anti-fouling tests of the single side coated paper against water, glycol and O-xylene (**Movie S6**).