

## Electronical Supporting Information

### Highly fluorinated SiO<sub>2</sub> particles Assembled, a durable Superhydrophobic and Superoleophobic coating for both hard and soft materials

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#### 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**).