Supporting Information

Fig. S1. Profiles of Water contact angle (WCA) on smooth PDMS film (a) and smooth PFTS film (b), and diiodomethane contact angle (DCA) on smooth PDMS film (c) and smooth PFTS film (d).
Fig. S2. The X-ray photoelectron spectroscopy (XPS) full spectrum images of as-spun PDMS/SiO₂ (a), sintering treatment (b), acid treatment (c) and PFTS treatment (d).
Fig. S3. Images of scanning electron microscope (SEM) and atomic force microscope (AFM) results for as-spun PDMS/SiO$_2$ ((a) and (d)), sintering treatment ((b) and (e)) and acid treatment ((c) and (f)) samples, respectively.
Fig. S4. Static water and diiodomethane contact angle profiles for as-spun PDMS/SiO₂ and PFTS treatment in three situations: As-prepared, Seven months later and Ten minutes damage.
Fig. S5. Advancing and receding contact angle (ACA and RCA) of water and diiodomethane profiles for as-spun PDMS/SiO$_2$ and PFTS treatment in three situations: As-prepared, Seven months later and Ten minutes damage. The upper left of each profile shows the value of ACA or RCA.
Fig. S6. Snapshots of sliding behavior for water and diiodomethane on as-spun PDMS/SiO$_2$ and PFTS treatment surface in 90 °C.