Electronic Supplementary Material (ESI) for Journal of Materials Chemistry A.

Smart Zwitterionic Sulfobetaine Silane Surfaces with Switchable Wettability for Aquoeus/Nonaquoeus Drops

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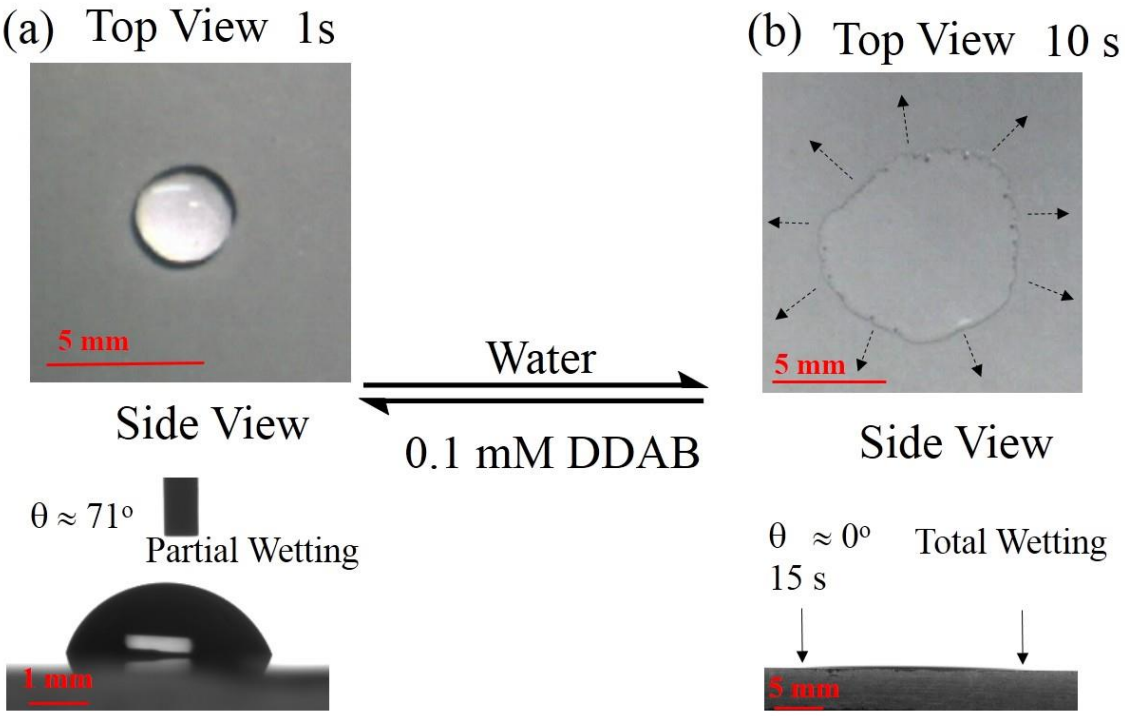

Figure S1. Reversibly switchable wettability for 5 µl pure water drop on the (a) DDAB contaminated and (b) clean SBSi surfaces.

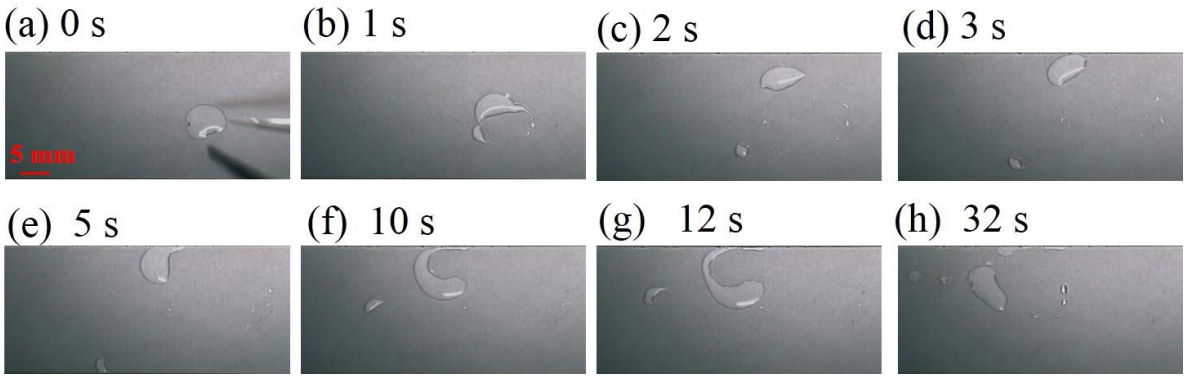

Figure S2. The drop fission and dewetting of 5µl 1mM aqueous DPC drop on a clean SBSi surface.

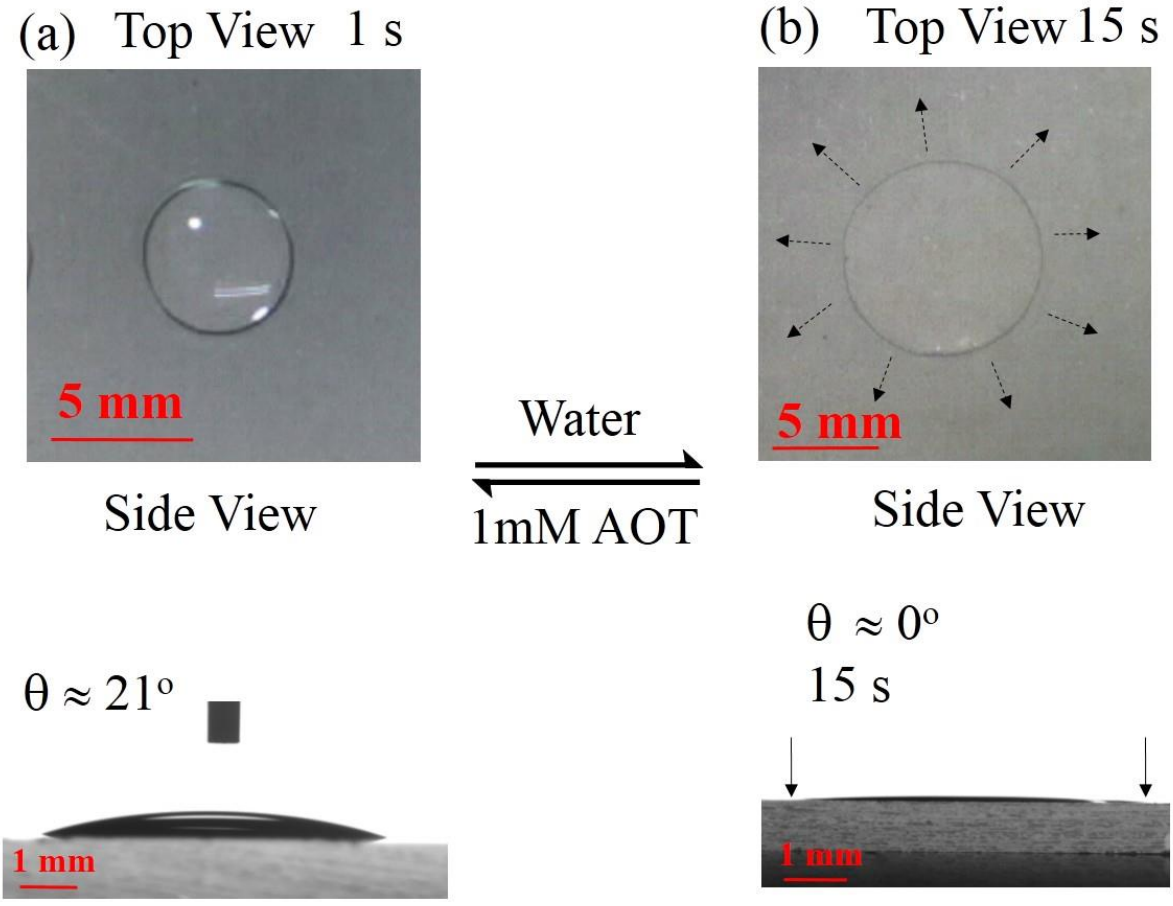

Figure S3. Reversibly switchable wettability for 5 µl pure hexadecane drop on the (a) 1 mM AOT contaminated and (b) clean SBSi surfaces.

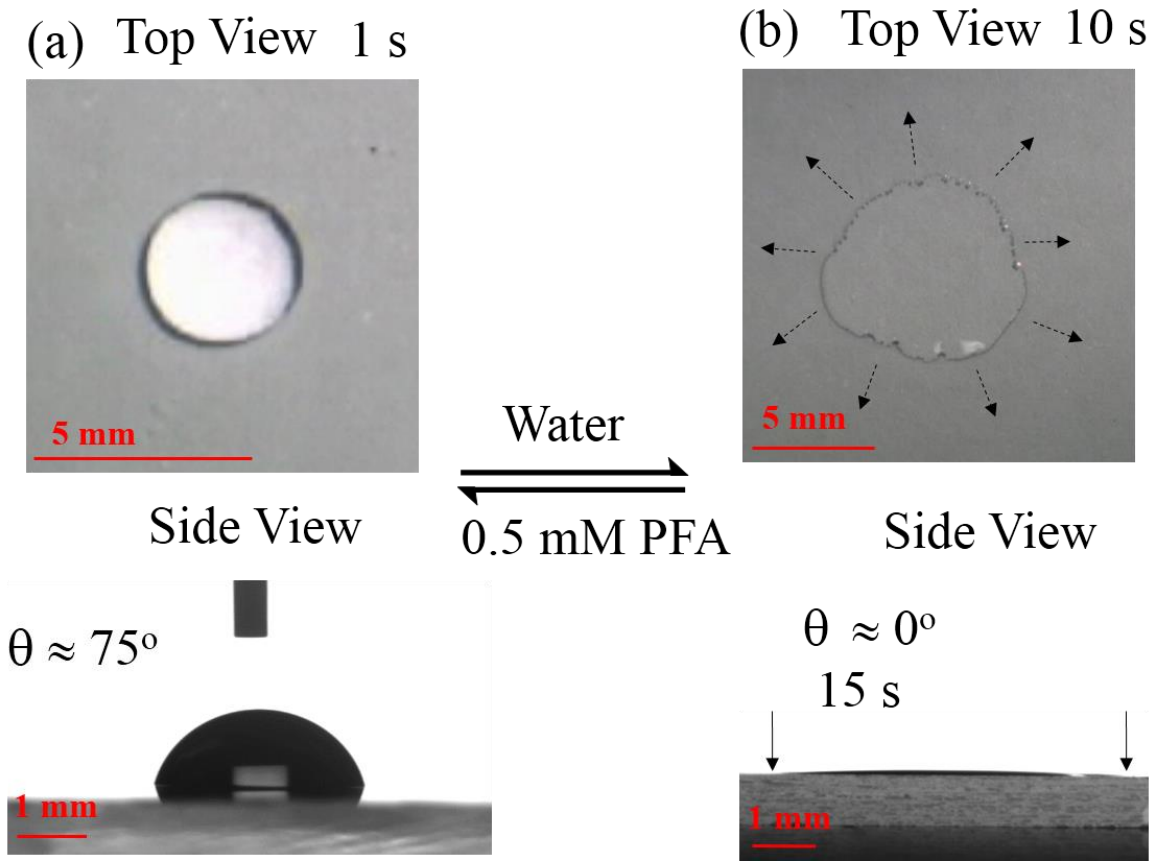

Figure S4. Reversibly switchable wettability for 5 µl pure hexadecane drop on the (a) 0.5 mM PFA contaminated and (b) clean SBSi surfaces.

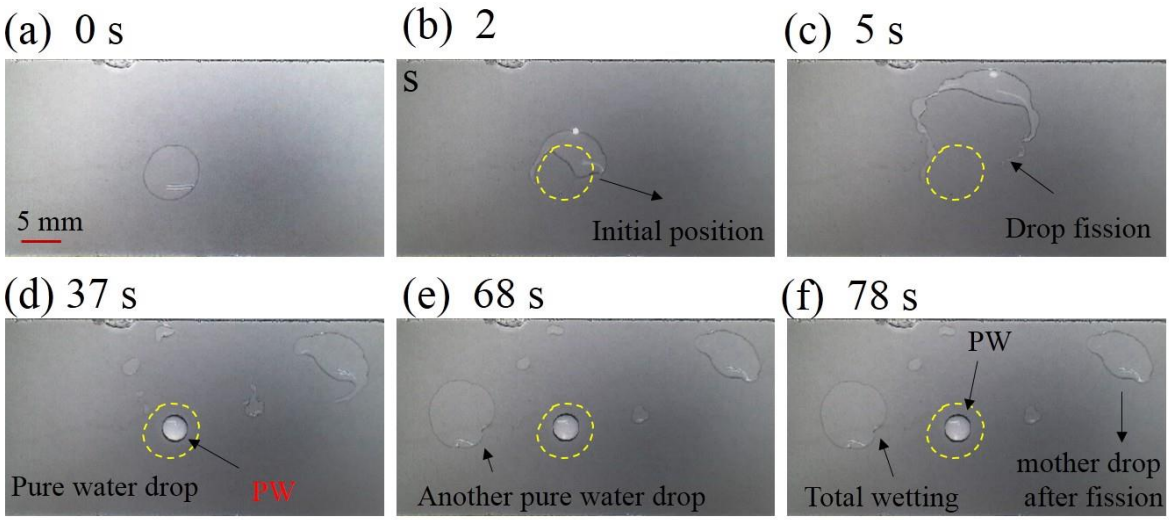

Figure S5. The drop fission and dewetting of 5 µl 0.1 mM CTAB drop on clean SBSi surface

in various time frames (a-f). Note that in (d) pure water drop placed at the initial position (denoted by broken yellow lines) demonstrating partial wetting (PW) and (e) another pure water drop in the vicinity of the initial position showing total wetting.

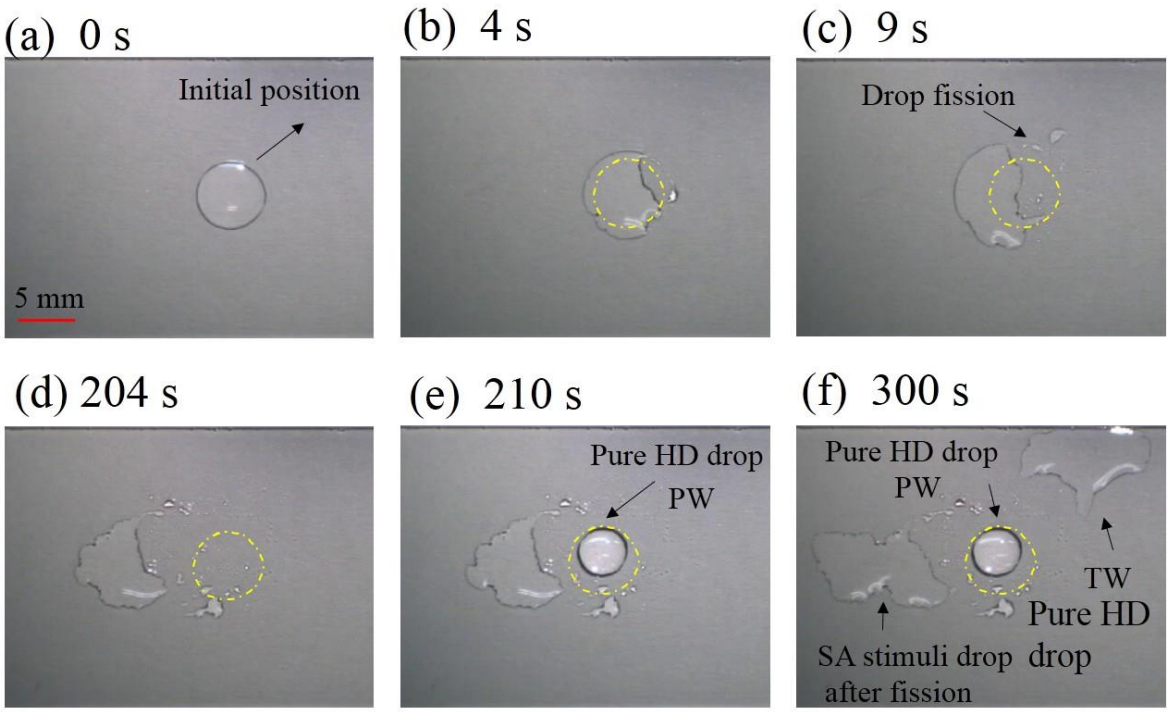

Figure S6. The dewetting and drop fission of 5 µl 1 wt % SA drop on clean SBSi surface in various time frames (a-f). Note that in (c) pure hexadecane drop showing PW placed at the same initial position (denoted by broken yellow lines) and (f) another pure hexadecane drop in the vicinity showing spontaneous spreading (total wetting, TW).