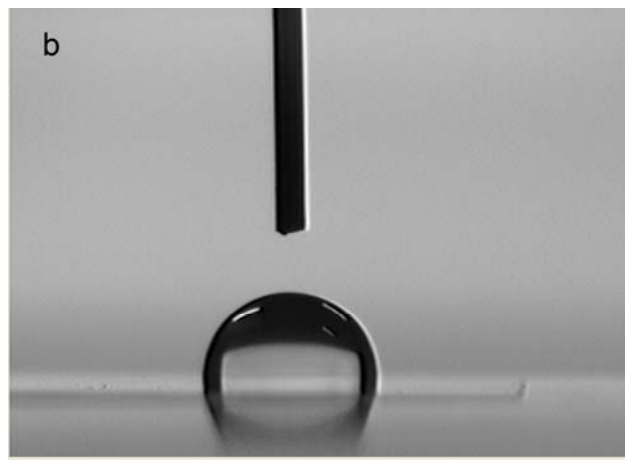
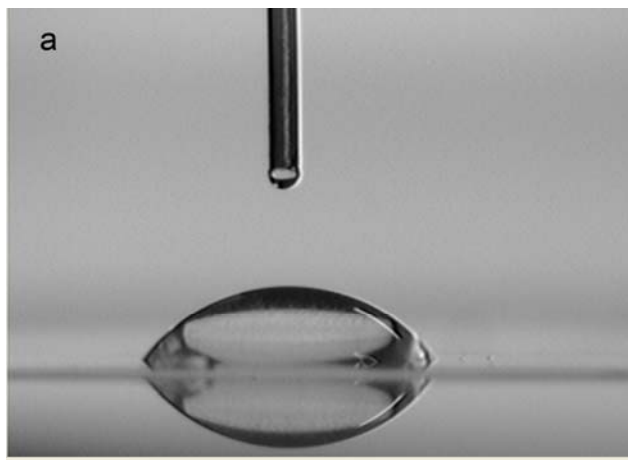
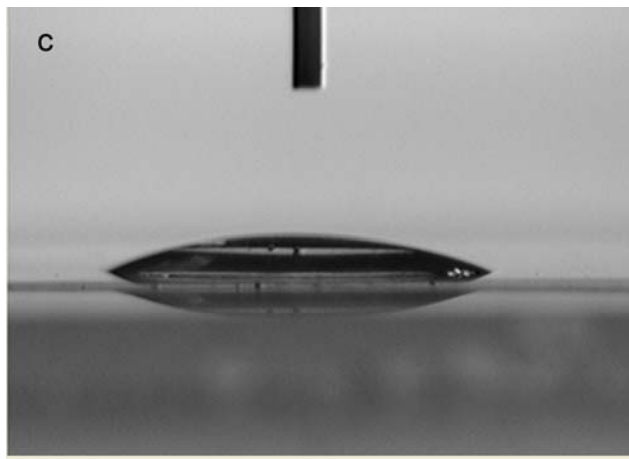


**Supporting Informations for “Fabrication of Hierarchical  $\text{CaCO}_3$  Mesoporous Sphere: Particle-Mediated Self-Organization Induced by Biphasic Interfaces and SAMs”**

**Water Contact Angle Measurement.** The water contact angle measurements were performed for characterizing the modified result of PET substrate by use of contact angle measuring system JC2000C1 (POWEEACH). So the contact angles of both OTS-SAMs modified PET surface and ultraviolet irradiation treated PET substrate were measured. In theory, the OTS-SAMs modified PET surface should be hydrophobic, while it became hydrophilic after ultraviolet irradiation. Meanwhile, the contact angle of blank PET substrate also was measured for comparison.

**Figure S1.** Water contact angle ( $^\circ$ ) images of different substrates: a) the blank substrate was ultrasonically cleaned successively in distilled water, ethanol and acetone; b) the substrate with assembled OTS on the surface; c) the substrate with assembled OTS on the surface and UV irradiated. The contact angle values of Figure a-c were  $60^\circ$ ,  $100.8^\circ$ , and less than  $10^\circ$  respectively.





**Figure S2.** SEM images of different substrate surfaces: a) the blank substrate was ultrasonically cleaned successively in distilled water, ethanol and acetone; b) the substrate with assembled OTS on the surface and UV irradiated.

