Supporting Information

Mimic Nature, Beyond Nature: Facile Synthesis of Durable Superhydrophobic Textiles Using Organosilanes

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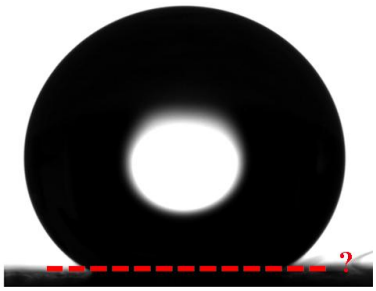

Figure S1. Typical image of a water drop on the superhydrophobic textile.

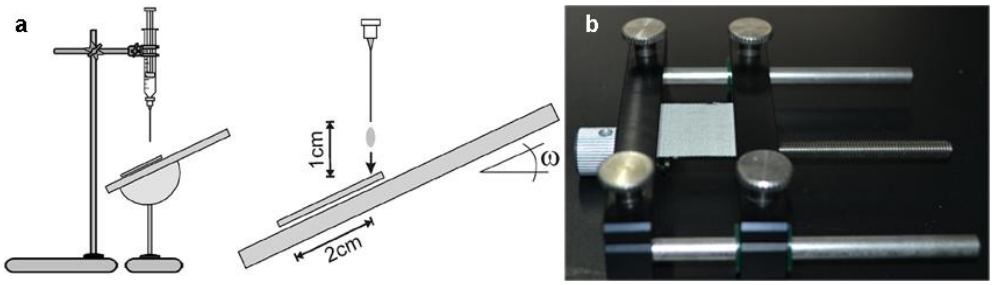

Figure S2. (a) Principle setup employed for measuring WSA (ω) and (b) the sample holder.

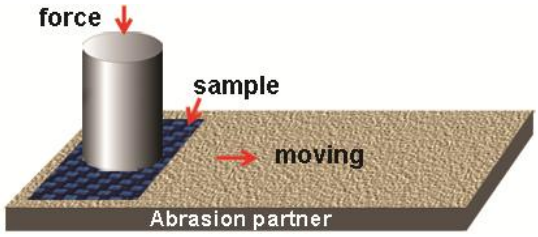

Figure S3. Schematic illustration of the abrasion test employed to evaluate the mechanical durability of the samples.

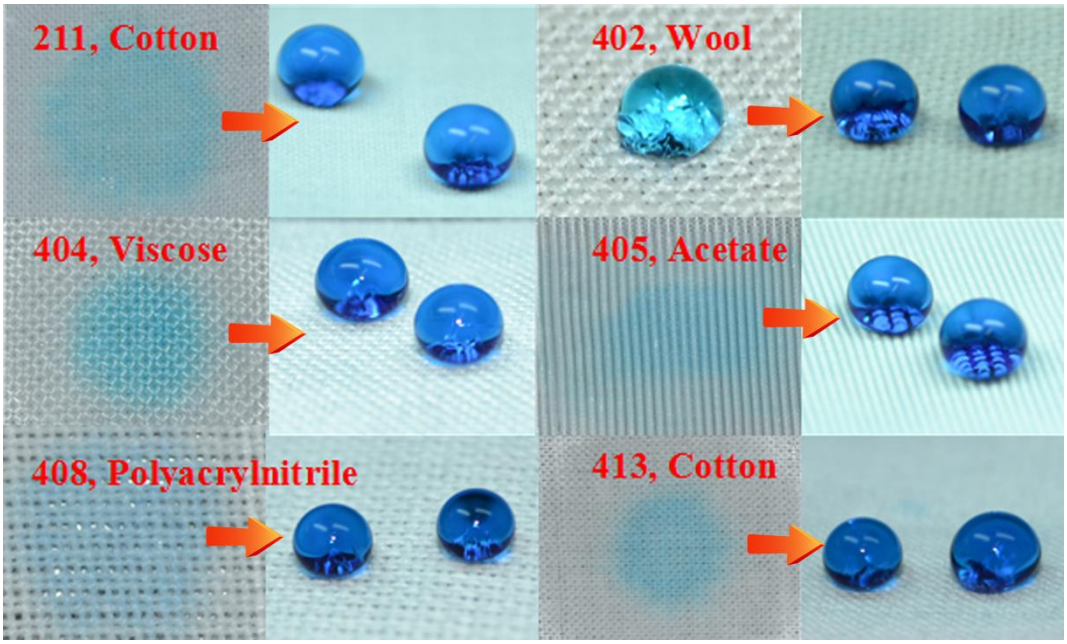

Figure S4. Water drops colored with MB on various textiles before and after coated with the HD-polymer/HD-silica nanocomposite.

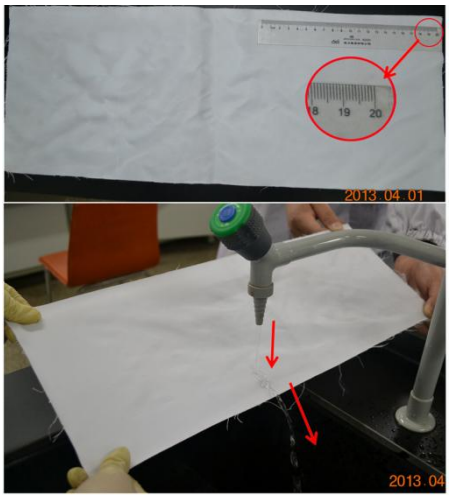

Figure S5. A piece of the coated polyester II textile produced on a 20 × 50cm scale and its superhydrophobicity.

Movie S1. Water drops bounce off the superhydrophobic polyester I textile after 200 cycles of abrasion using A4 paper and sandpaper as the abrasion partners. This video highlights the excellent superhydrophobicity after abrasion even the substrate is seriously damaged.

Movie S2. Water drops bounce off the superhydrophobic polyester I textile after 10 cycles of machine wash. This video highlights the excellent superhydrophobicity after laundering.

Movie S3. Water drops bounce off the superhydrophobic polyester I textiles after scratching with a scalpel, adhesion of double side tape, finger press and twisting by hands. This video highlights the excellent superhydrophobicity after these qualitative tests of the mechanical stability.

Movie S4. Oil/water separation. This video highlights potential application of the stable superhydrophobic polyester I textile for oil/water separation. Oil is colored with OR and water is colored with MB.