

Supplementary Information

A stacked polymer film for robust superhydrophobic fabrics

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1. Schematic image of entrapped air pocket (Fig. S1)
2. SEM and EDS mapping images (Fig. S2)
3. Contact angle and SEM images after soaking in acid, base and oxidant (Fig. S3)

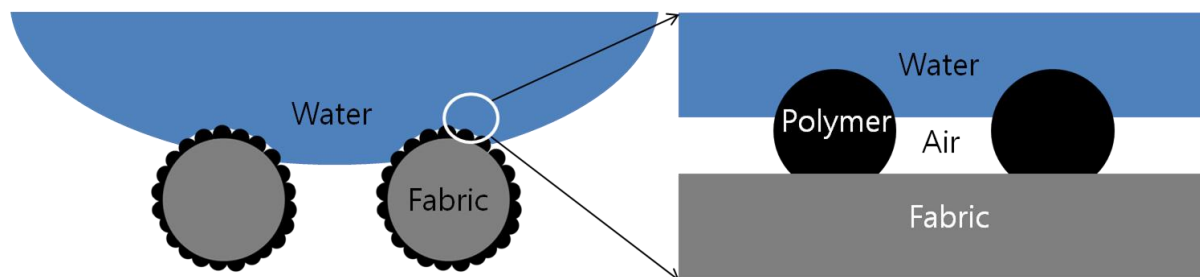


Fig. S1 A schematic image of entrapped air pocket between the coated fabric and water droplet.

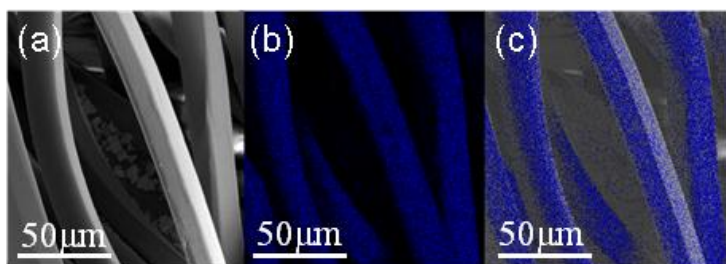


Fig. S2 (a) SEM image of p(V4D4-L-PFDA) stacked polymer-coated fabric. (b) EDS elemental mapping of fluorine on the same fabric. (c) Merged image of SEM and EDS elemental mapping images.

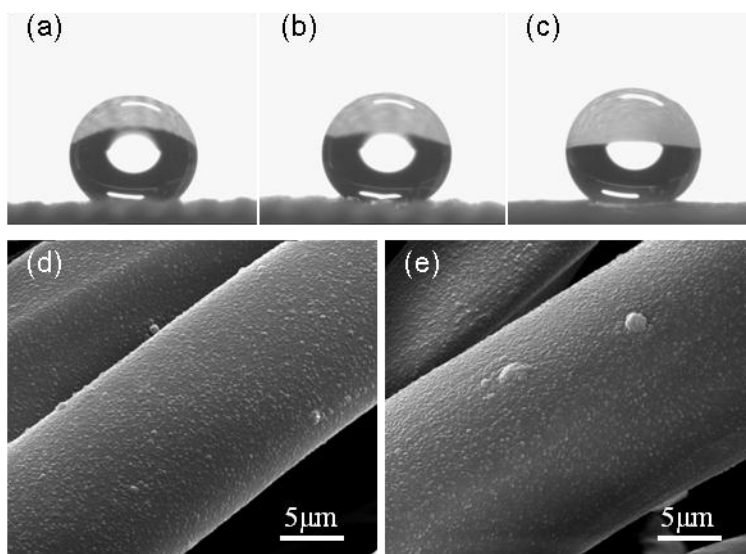


Fig. S3 (a), (b), (c) Contact angle images of p(V4D4-L-PFDA) coated-polyester fabric after soaking in H₂SO₄ (pH 2), KOH (pH 12), and H₂O₂ for a period of 24 hrs, respectively. (d), (e) SEM images of p(V4D4-L-PFDA) polyester fabric after soaking in H₂SO₄ (pH 2) and KOH (pH 12), respectively.