Supporting information

Inkjet printing enabled controllable paper superhydrophobization and its applications

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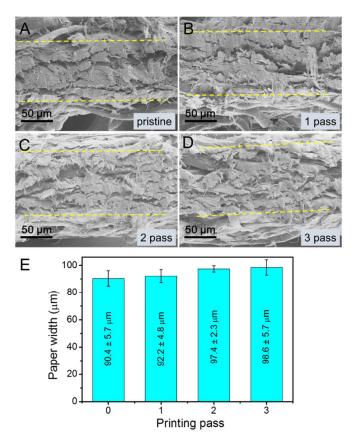


Fig. S1 SEM cross-sectional views of pristine (A) and inkjet-printed paper by (B) one printing pass, (C) two and (D) three printing passes. (E) Thicknesses of each sample based on three measurements.



Fig. S2 Water contact angle of the hydrophilic side of the Janus paper after sand abrasion test.

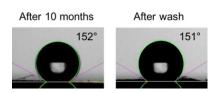


Fig. S3 Water contact angles of the inkjet-printed side of the Janus paper after 10 months storage and washing test.

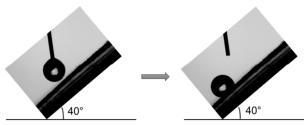


Fig. S4 The water droplet state on the superhydrophobic surface of Janus paper tilted at 40°.

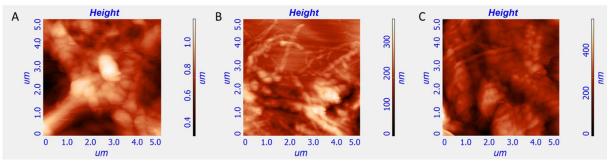


Fig. S5 AFM images of inkjet-printed surfaces by (A) one printing pass, (B) two and(C) three printing passes.

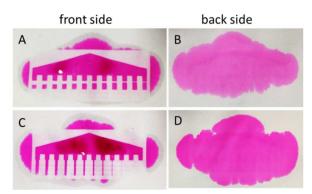


Fig. S6 Hydrophobic barriers (A, B) and hydrophilic channels (C, D) inkjet-printed on pristine paper substrate.