

Supplementary Information

Bionic smart recycled paper endowed with amphiphobic, photochromic, repeatedly UV writable utility

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Supplementary Figures

Figure S1. (a-b) FESEM images of *Chenopodium album* L. leaves.

Figure S2. (a) PAR₁₋₇ (long ~ 4.5 cm, width ~ 1.5cm) (b) The tweezers clamped PAR₁₋₇ and ignited in the flame lasting for 3 s, then moved away from the embers that allowed it to burn naturally in the air.

Figure S3. EDS (a) and element mapping (b) of PAR₁. (c) Element mapping of C, O, Ca, Na, and Mg in PAR₇.

Figure S4. Thermogravimetry curves of PAR₁ and PAR₇ samples.

Figure S5 (a) The illustration for mechanical wear test. The WCA (b) and OCA (c) of PAR₇ after different wear length. The PAR₇ surface of was loaded with 294 N (normal direction) and then grind it horizontally with sandpaper (1500 meshes).

Figure S6. The OCA of soybean oil (a), motorcycle oil (b), and arowana oil (c) on the surface of PAR₇.

Figure S7. Homemade simple mold: (a) I♥-shape; (b) 70-shape; (c) SLJ-shape.

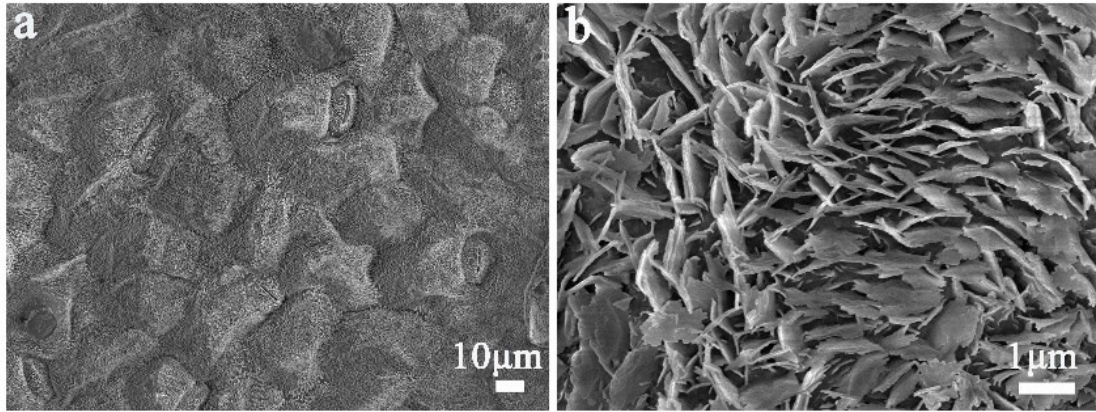


Figure S1 (a-b) FESEM images of *Chenopodium album* L. leaves.



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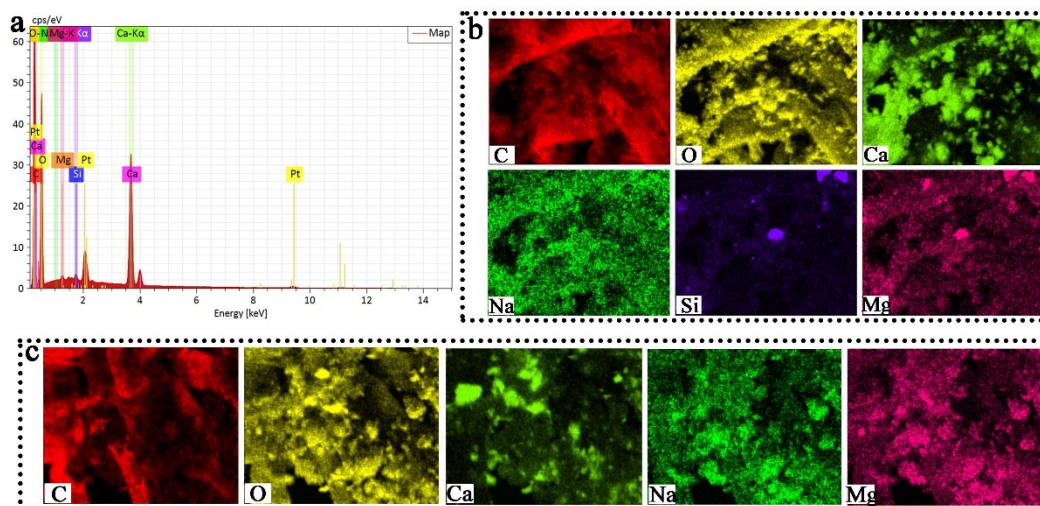


Figure S3 EDS (a) and element mapping (b) of PAR₁. (c) Element mapping of C, O, Ca, Na, and Mg in PAR₇.

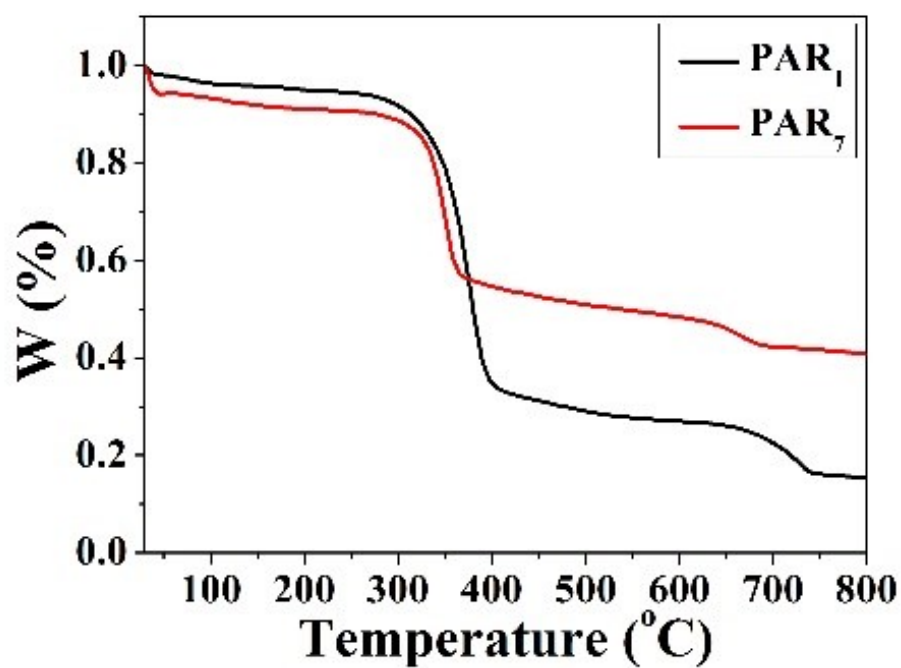


Figure S4 Thermogravimetry curves of PAR₁ and PAR₇ samples.

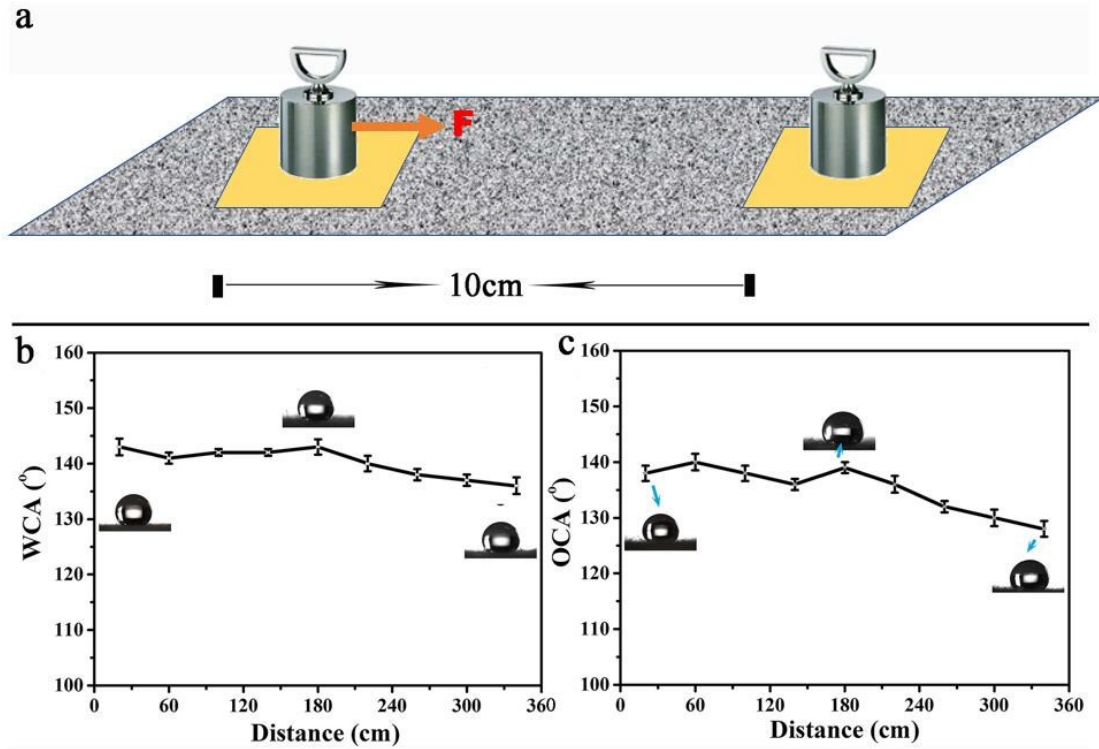


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Figure S6 The OCA of soybean oil (a), motorcycle oil (b), and arowana oil (c) on the surface of PAR₇.

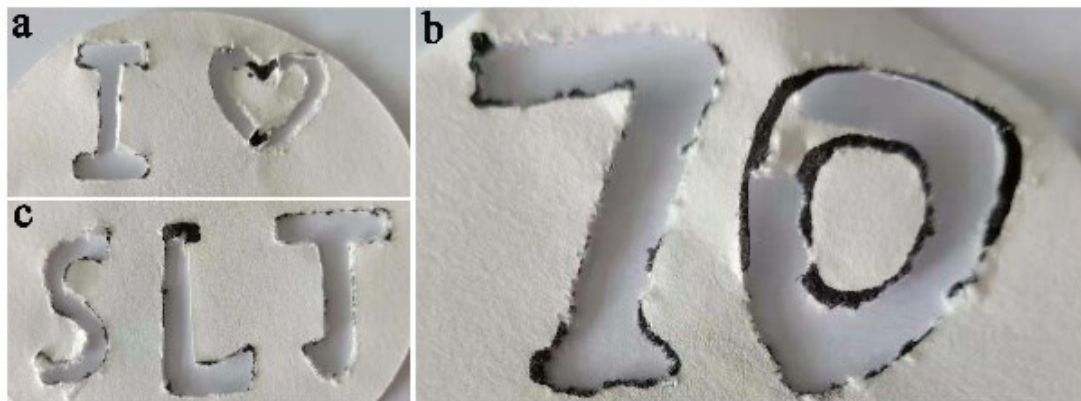


Figure S7 Homemade simple mold: (a) I♥-shape; (b) 70-shape; (c) SLJ-shape.