

## Supporting Information

### **Bioinspired self-cleaning surface with microflower-like structures constructed by electrochemically corrosion mediated self-assembly**

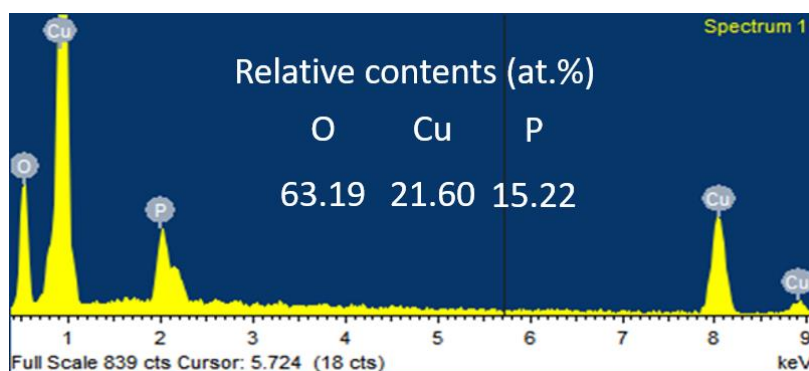
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330022, P.R. China.

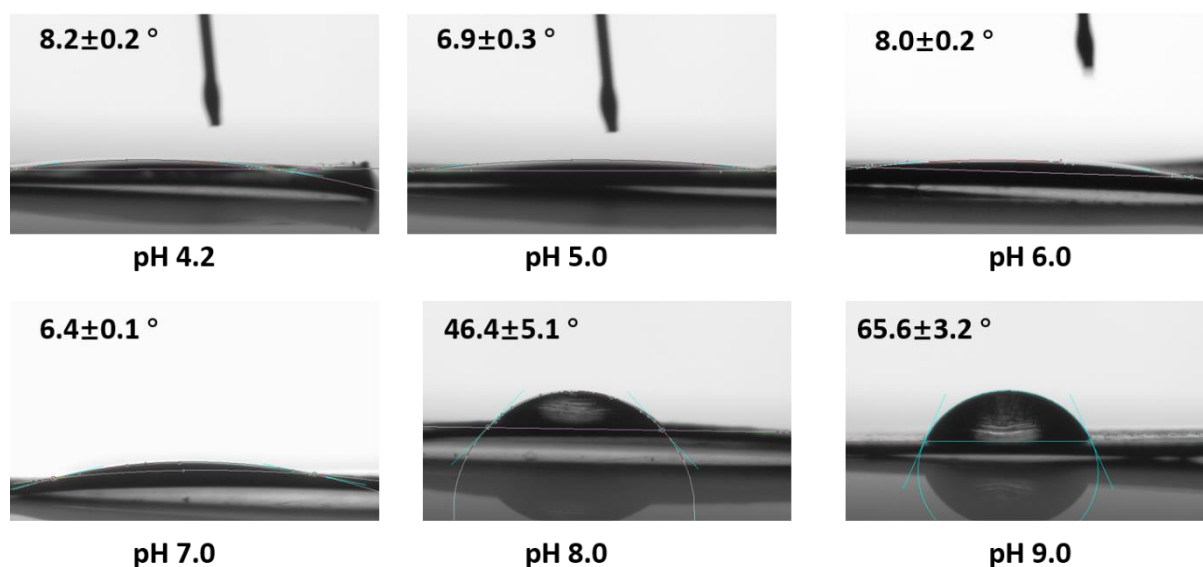
<sup>1</sup> These authors contributed equally.

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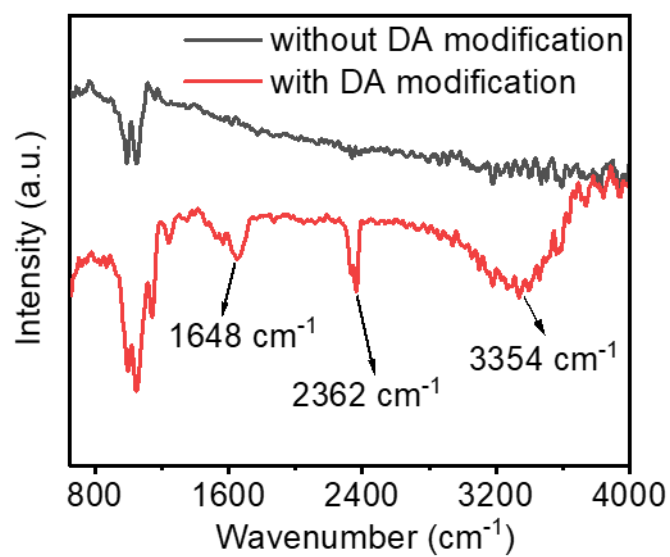
H.Z. Email: hzhang911220@gmail.com; S.C. Email: slchenjxnu@jxnu.edu.cn



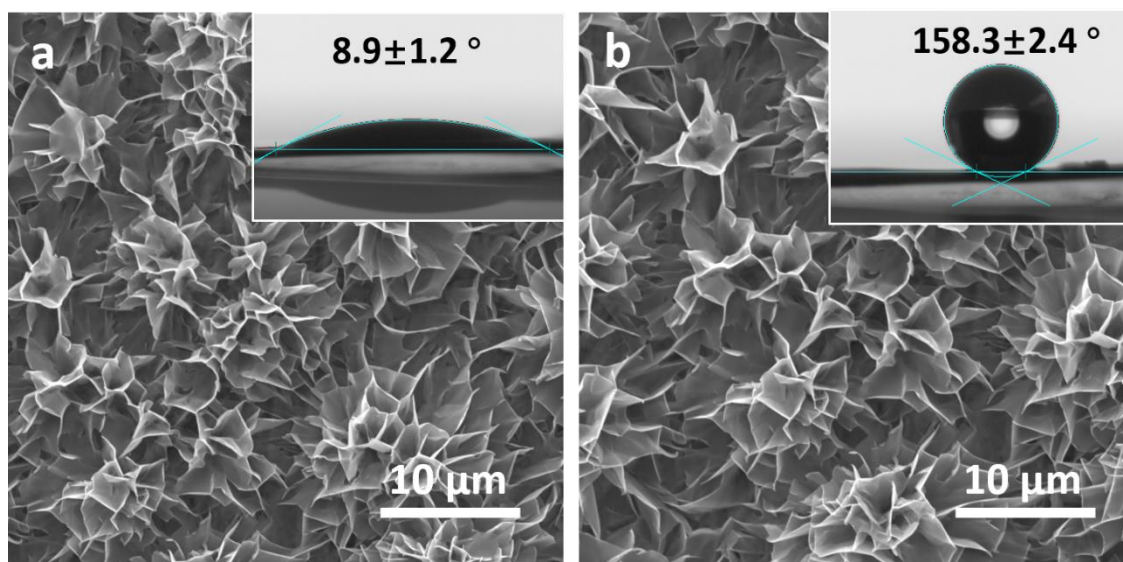
**Figure S1.** Typical EDS pattern of the microflower-like structures. The inset are the relative contents of O, Cu and P elements, respectively. The atom ratio of Cu/P is calculated to be about 1.4:1, close to that of  $\text{Cu}_3(\text{PO}_4)_2$ .



**Figure S2.** Captured photos of water droplet on the surfaces prepared at different pH values. (Phosphate concentration: 50 mM; applied potential: 0.2 V; reaction time: 2 h)



**Figure S3.** FTIR spectra of microflower-like surfaces before and after DA modification.



**Figure S4.** SEM images of the microflower-like surfaces after (a) ethanol treatment and (b) DA re-coating.



**Figure S5.** Photograph of various common liquid droplets in our daily life on the microflower-like superhydrophobic surface. indicating that the microflower-like surface possesses a strong resistance to the contaminant.