Supporting Information

A bioinspired structured graphene surface with tunable-wetting and high wearable property for efficient fog collection

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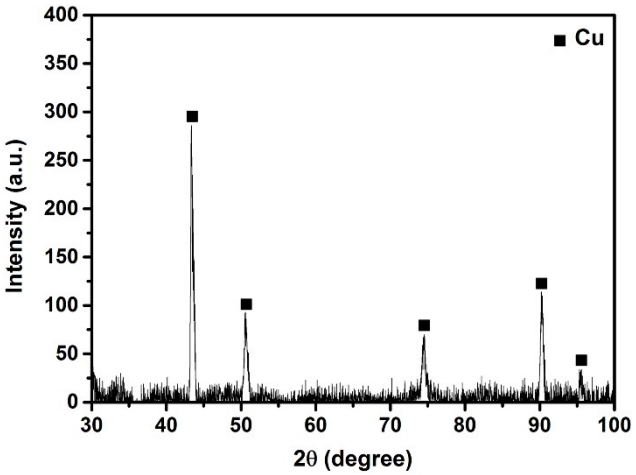

Figure S1. XRD spectra of original Cu mesh sample.

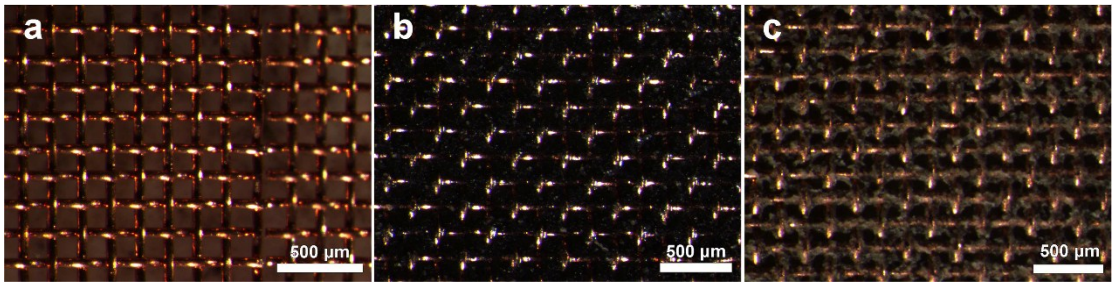

Figure S2. The optical images of (a) printine copper mesh, and copper mesh with PDMS/G coating (b) before and (c) after laser etching process and ultrasonic vibration.

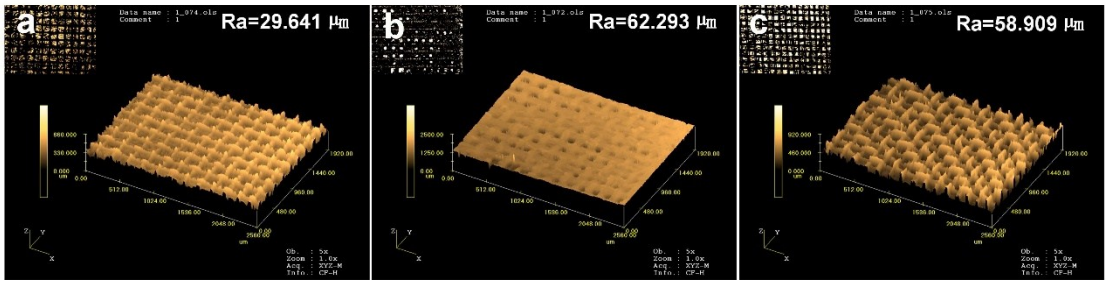

Figure S3. Laser scanning confocal 3D images of copper mesh with different wetting coating. (a) copper mesh with superhydrophilic coating. (b) copper mesh with hybrid wetting coating. (c) Printine copper mesh.

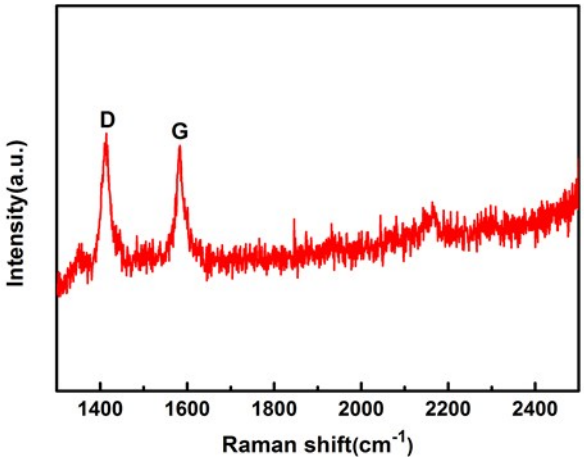

Figure S4. Raman spectra of as–prepared bioinspired copper mesh sample.

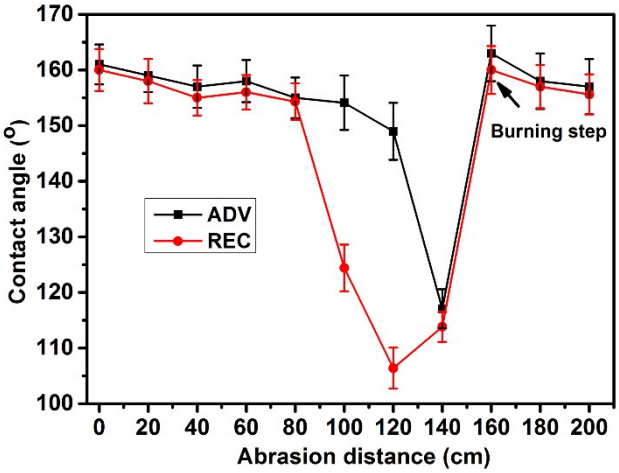

Figure S5. The ADV and REC of this as-prepared sample worn different distance.

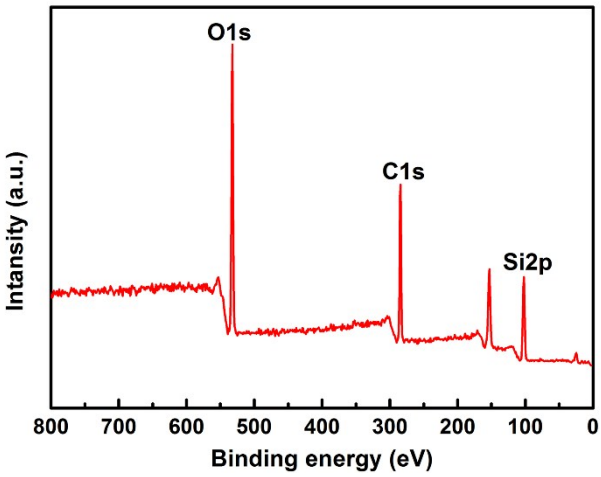

Figure S6. XPS spectra of self-healing mesh sample.

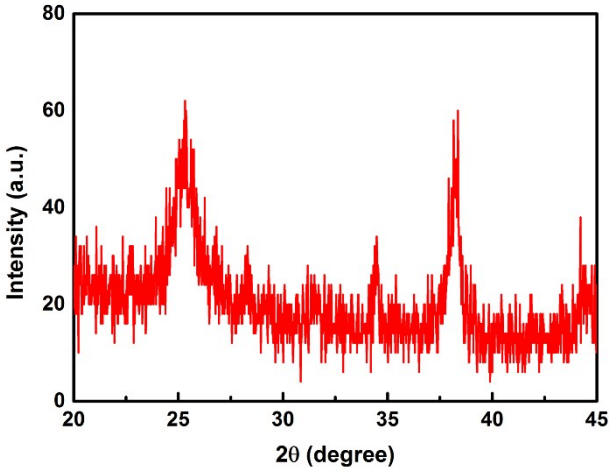

Figure S7. XRD spectra of seal-healing copper mesh sample.

Video 1. The self-cleaning process on the foldable surface.