

1 Supporting Information

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3 **TiO<sub>2</sub>/Cu<sub>2</sub>O Heterojunction Embedded PDMS Composite with**  
4 **Superhydrophobic Surface for Efficient Raindrop Energy Harvesting**

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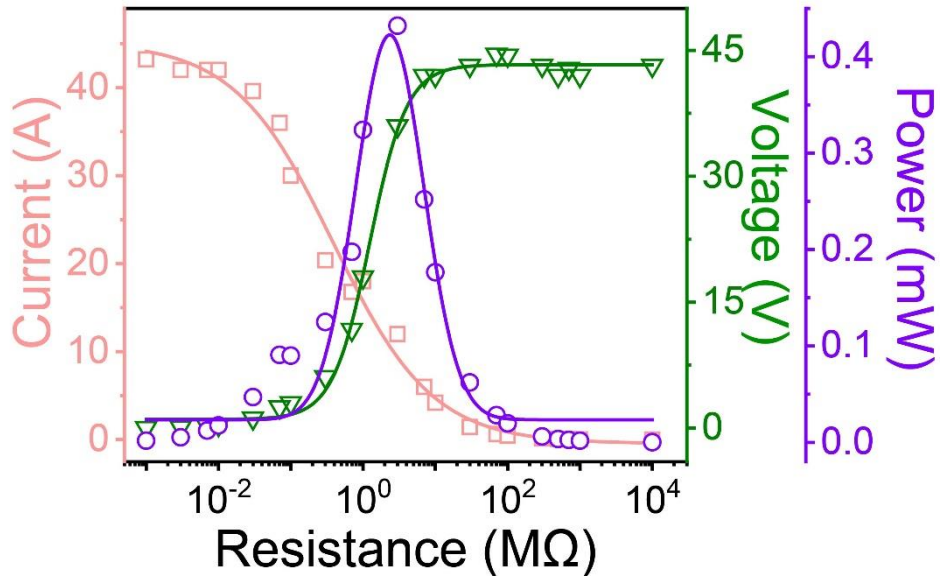
10 b. Key Lab for Special Functional Materials of Ministry of Education, National & Local  
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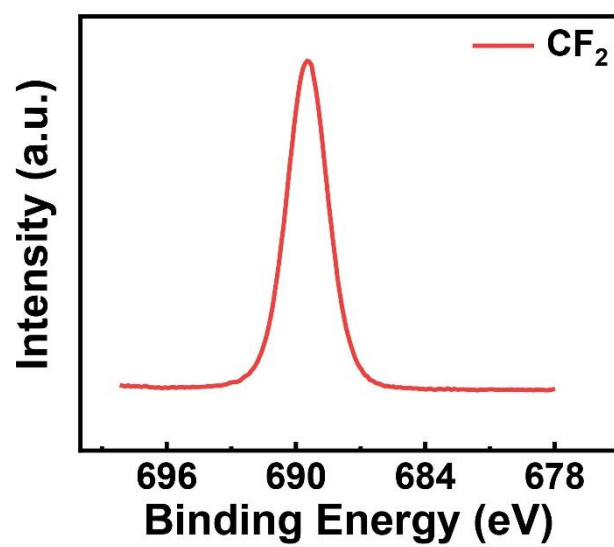
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20 **Figure S1.** Dependences of voltage, current, and power on load resistance for traditional D-TENG.

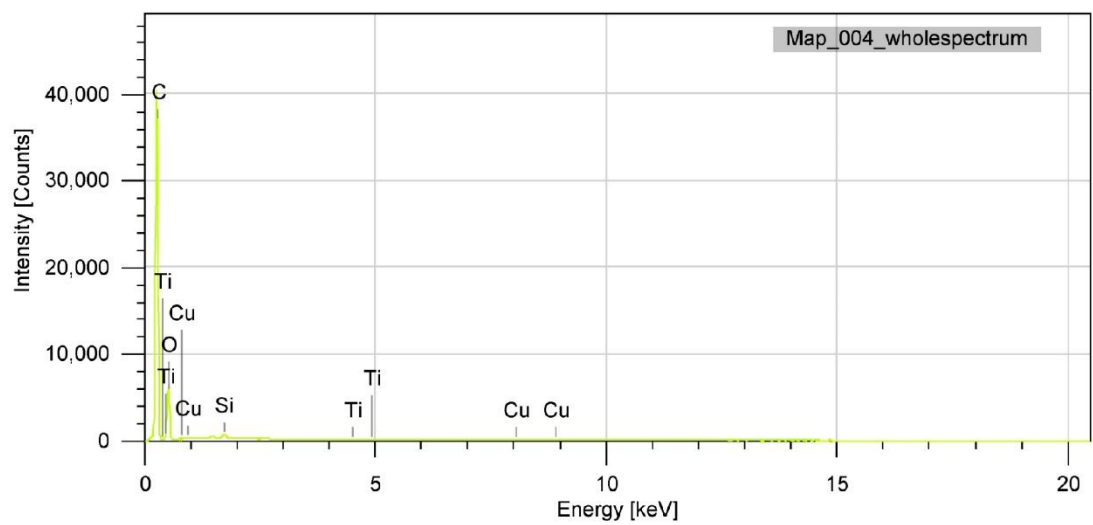
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23 **Figure S2.** The F1s spectrum of the F-silica-coated PDMS.

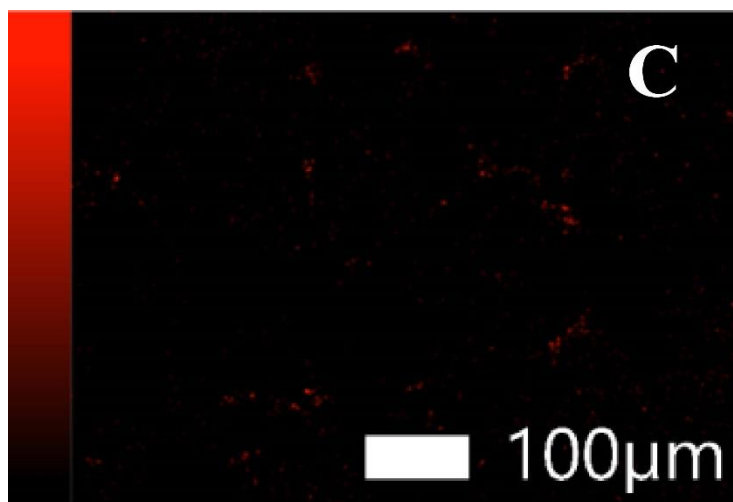
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26 **Figure S3.** EDS spectra of the HC-PDMS.

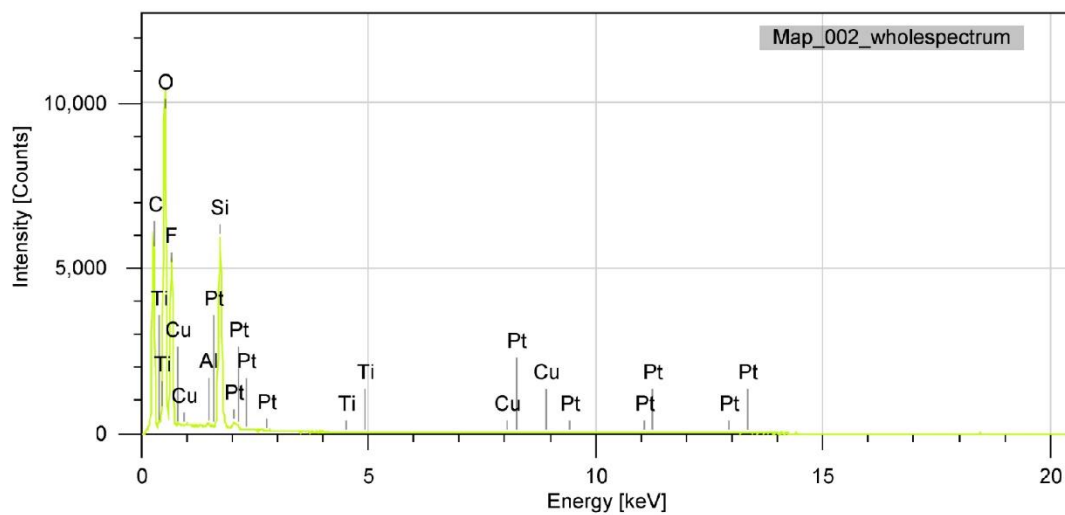
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29 **Figure S4.** Elemental distribution images of the F-silica-coated HC-PDMS.

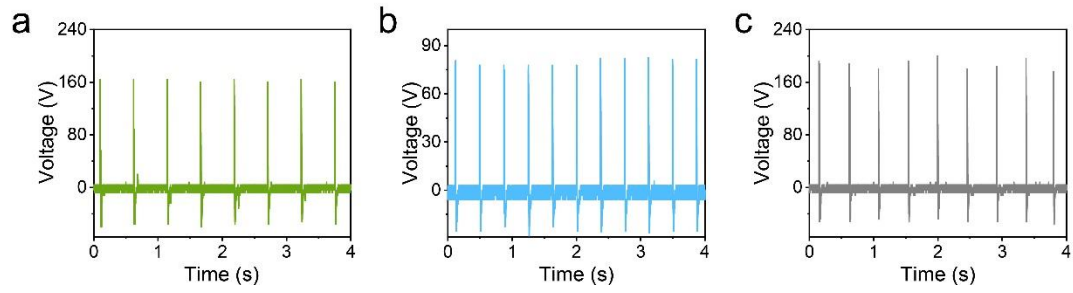
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32 **Figure S5.** EDS spectra of the F-silica-coated HC-PDMS.

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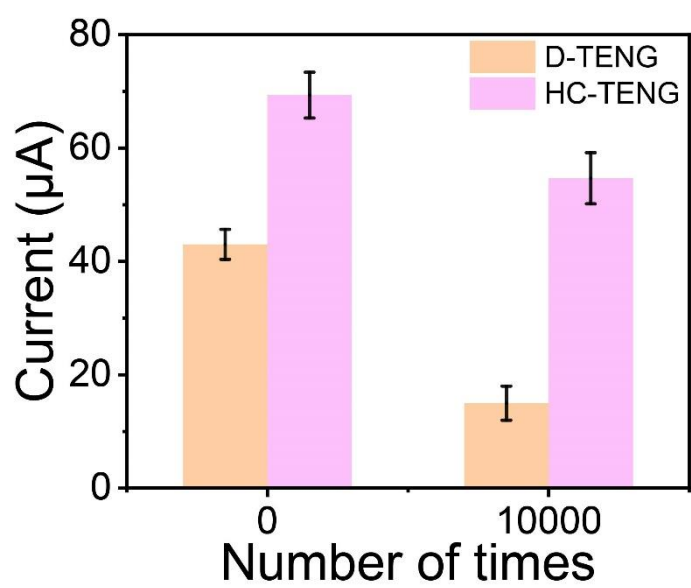
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35 **Figure S6.** The output voltage of D-TENGs based on a)  $\text{TiO}_2$ -PDMS, b)  $\text{Cu}_2\text{O}$ -PDMS, and c) PDMS

36 coated solely with F-silica.

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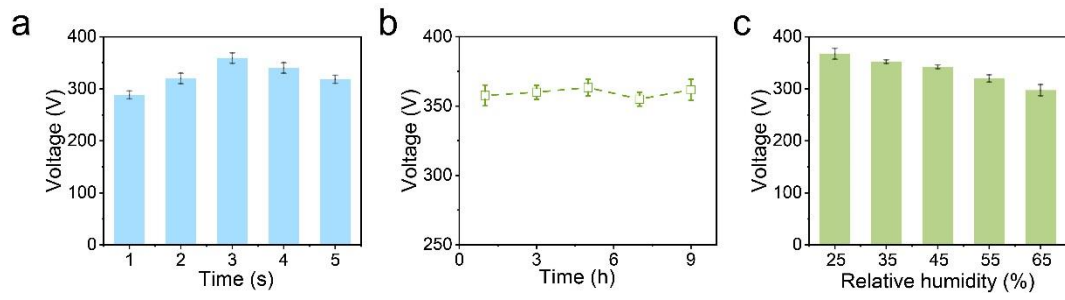
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40 **Figure S7.** Transferred charge of the traditional D-TENG and the HC-TENG before and after 10,000  
41 droplet impacts.

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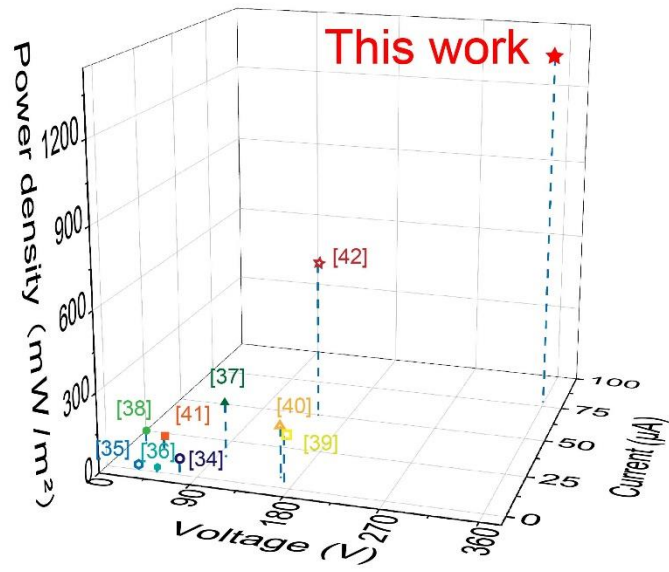


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44 **Figure S8.** The output voltage of the HC-TENG at different a) thicknesses, b) UV exposure

45 durations, and c) relative humidity levels.

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48 **Figure S9.** Comparison of output current, voltage, and power between the HC-TENG  
 49 and previously reported works.

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