

Supplementary Materials: Omnidirectional Triboelectric Nanogenerator Operated by Weak Wind Towards a Self-Powered Anemoscope

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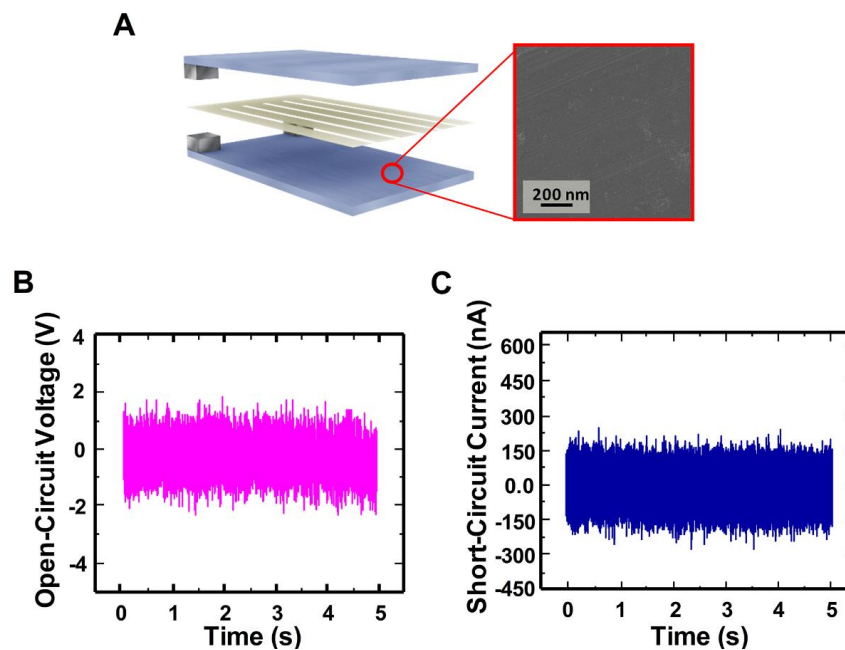


Figure S1. (A) Schematic diagram of the wind-TENG with SEM image showing the surface of bare Al electrode without WAO process. (B) Open-Circuit voltage and (C) Short-Circuit current of wind-TENG comprising bare Al and PTFE at the minimum operating wind pressure of 0.05 MPa.

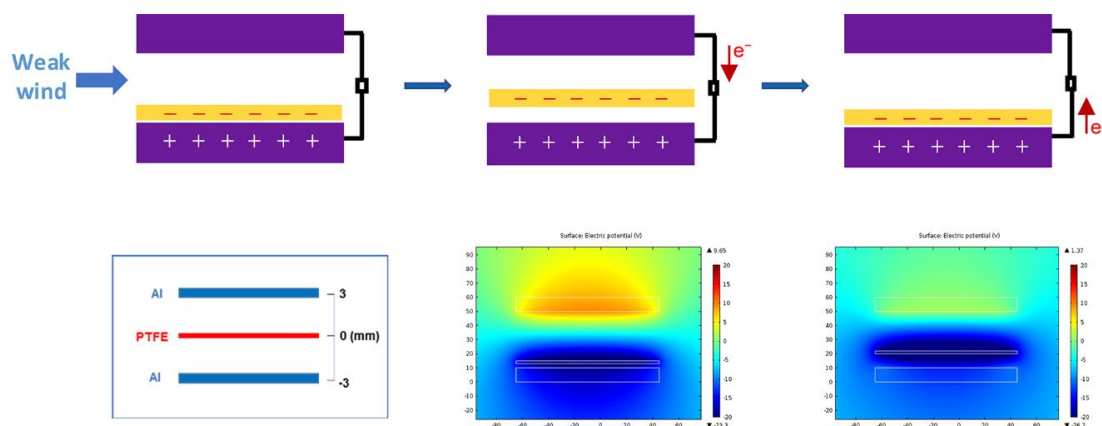


Figure S2. Working mechanism of the wind-TENG with the bulk PTFE under weak wind.

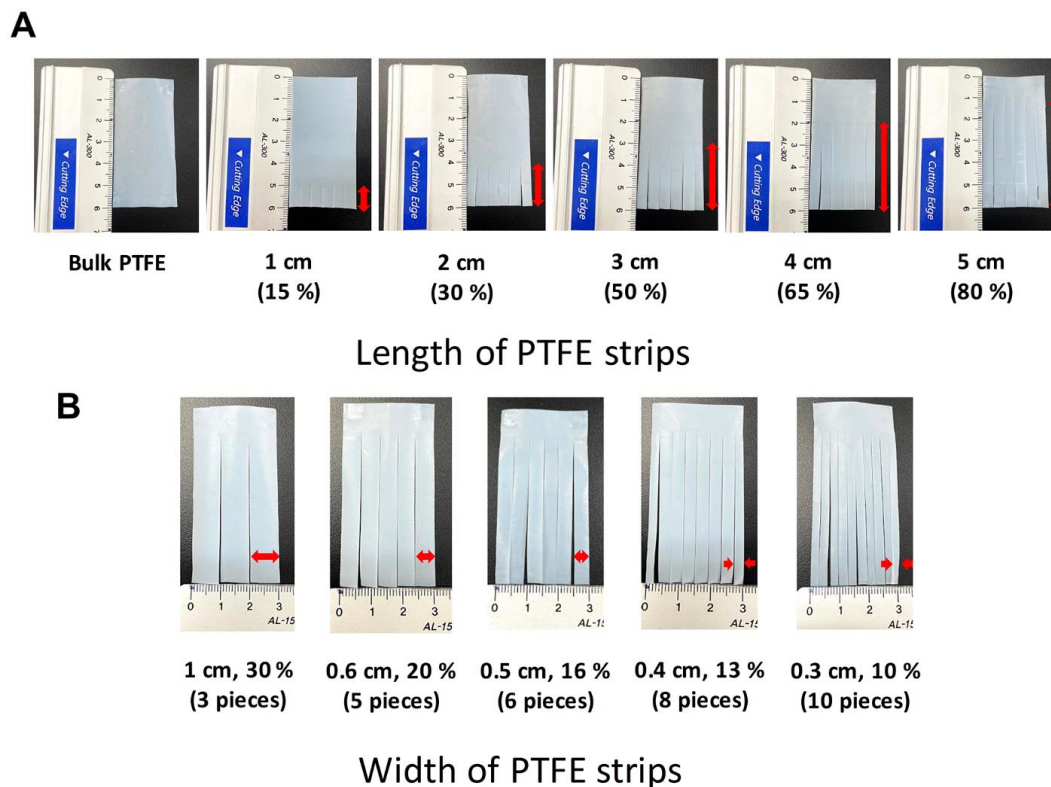


Figure S3. Optical images of PTFE films displaying (A) Length of PTFE strips and (B) Width of PTFE strips.

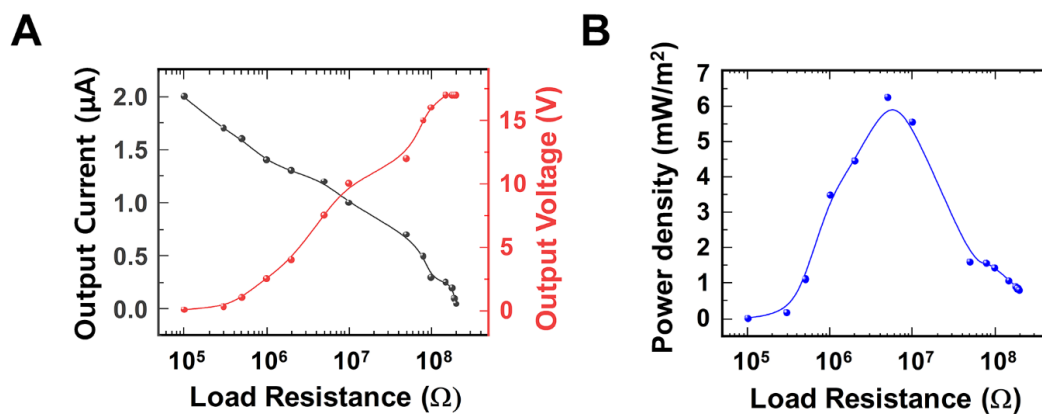


Figure S4. (A) Load resistance dependency of the output voltage and current at wind pressure of 0.2 MPa. (B) Load resistance dependency of the output power at wind pressure of 0.2 MPa.

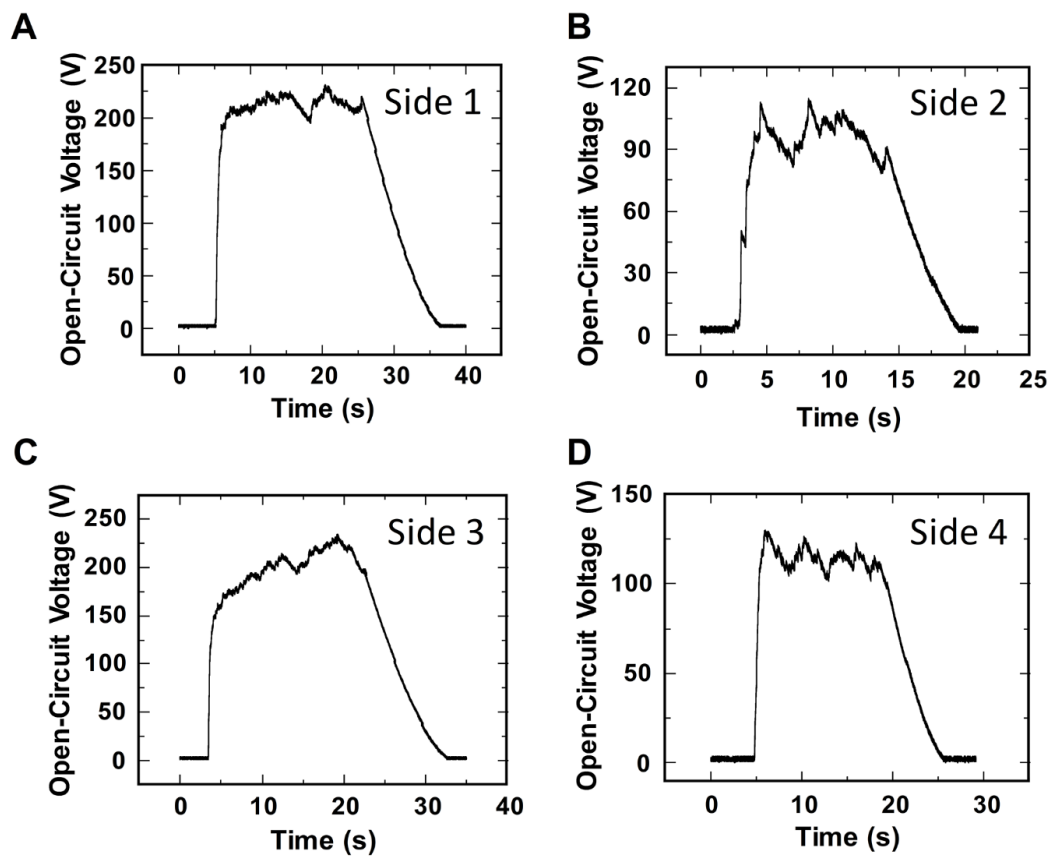


Figure S5. Open-circuit voltages when the wind is injected into (A) Side 1 (B) Side 2 (C) Side 3 and (D) Side 4 of the integrated TENG.