Electronic Supplementary Information

Flexible and stretchable triboelectric nanogenerator based on medical conductive hydrogel for biomechanical energy harvesting and electronic switches

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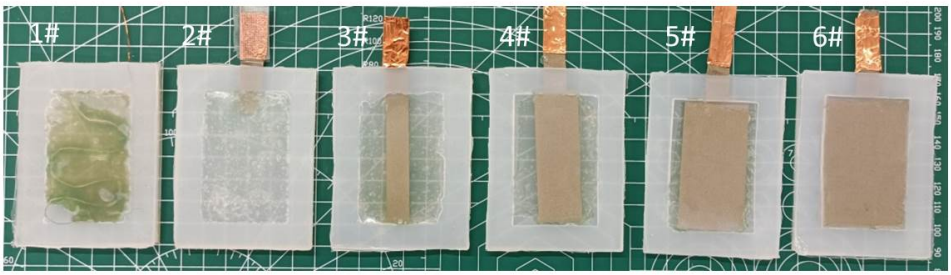

Figure S1. Optical photograph of samples of the 1#-6# MCH-TENGs after being stored for two months.

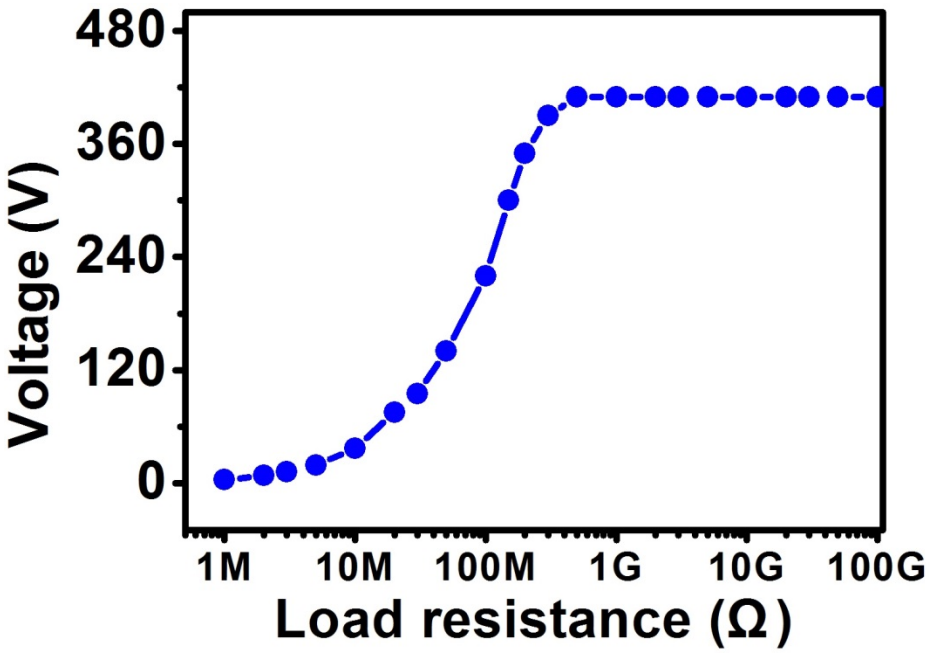

Figure S2. The load resistance dependence of the voltage of the 2# MCH-TENG (2.0 Hz).

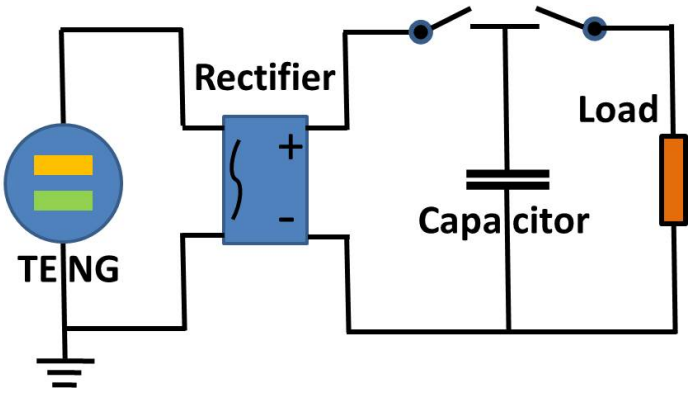

Figure S3. Rectifier equivalent circuit for charge and discharge of small electronic equipment.

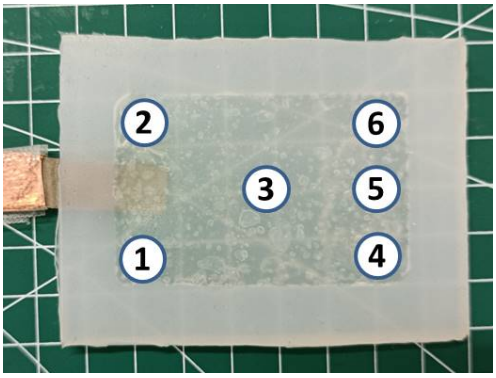

Figure S4. Photograph of the pressed sites 1-6 of the 2# MCH-TENG.

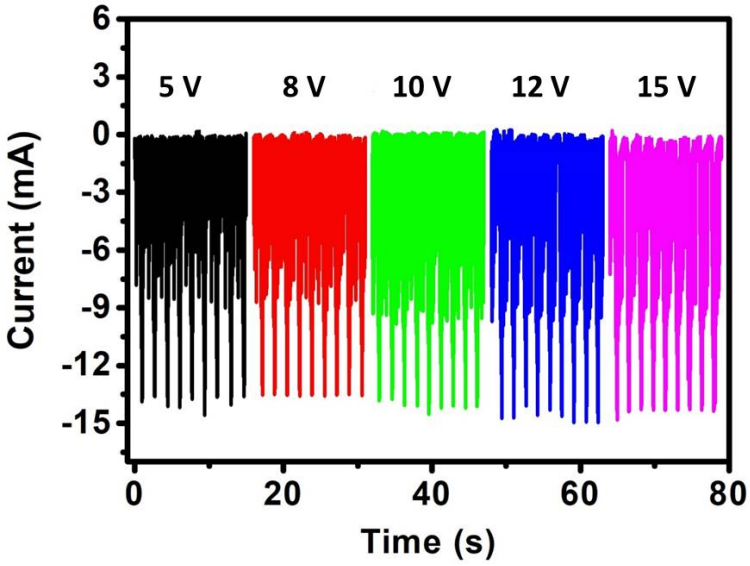

Figure S5. The relationship between the current (I_E) of the Darlington transistor and the voltage (V_{CE} = 5, 8, 10, 12 and 15 V) when the Darlington transistor worked in the amplification state (0.6 Hz).

Supporting Movies

Supporting Movie S1. Demonstration of 240 LEDs in series lighted up by the 2# MCH-TENG (3.0 Hz).

Supporting Movie S2. Sustainably driving an electronic watch with a capacitor (10 μF) charged by the 2# MCH-TENG.

Supporting Movie S3. Sustainably driving a calculator with a capacitor (33 μF) charged by the 2# MCH-TENG.

Supporting Movie S4. Demonstration of the 2# MCH-TENG for stretching energy harvesting.

Supporting Movie S5. The current amplification circuit is connected to electronic counter (V_{cc}=5 V).

Supporting Movie S6. The current amplification circuit is connected to LED light strip (V_{cc}=12 V).

Supporting Movie S7. The current amplification circuit is connected to LED Light board (V_{cc}=18 V).