

Supplementary materials

Ergonomically Designed Replaceable and Multifunctional Triboelectric Nanogenerator for Uniform Contact

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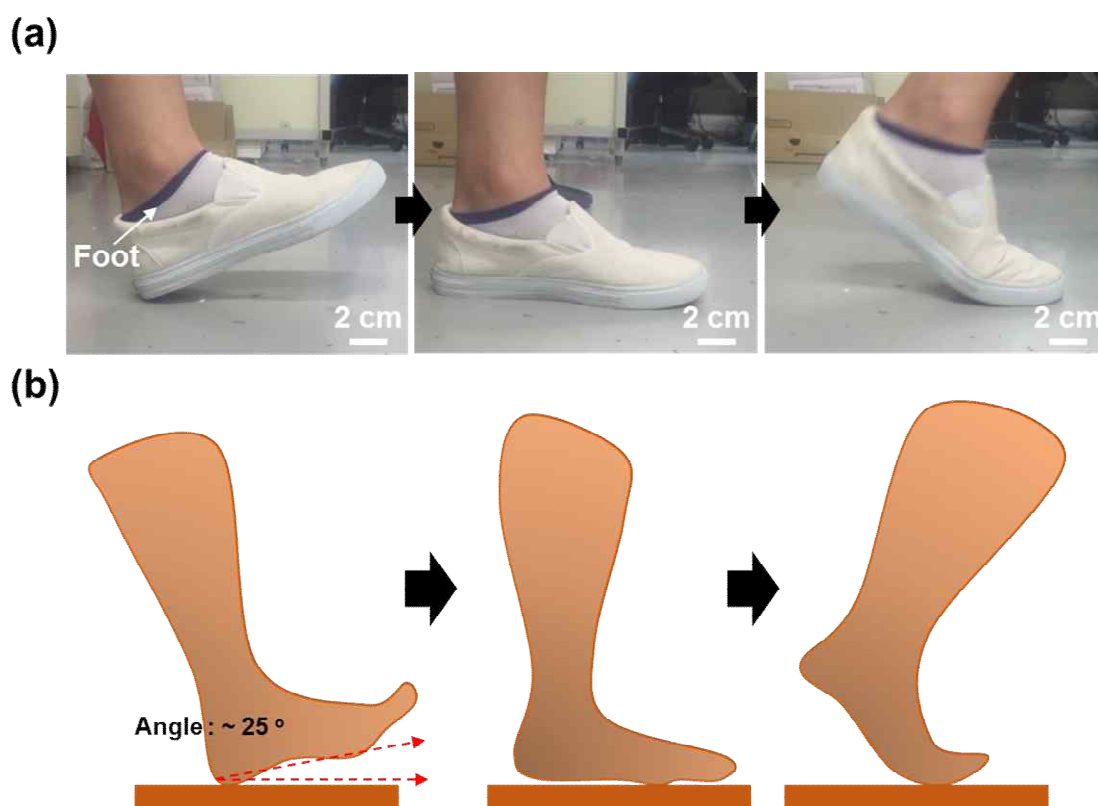


Figure S1 (a) The real photos and pictures when human walks on the rigid surface showing that the steps start with an angle of approximately 25 °.

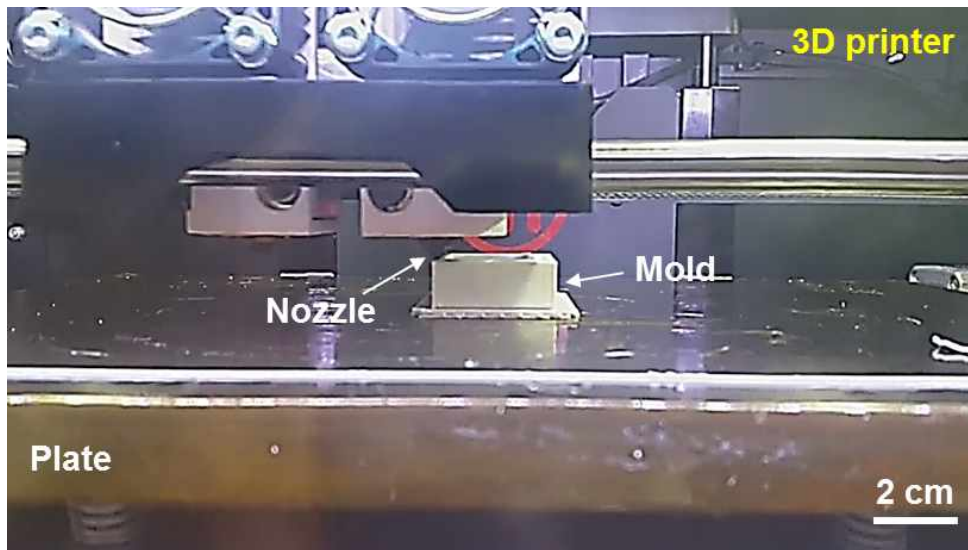


Figure S2 The video shows a fabrication of mold using FDM 3D printer for casting a sponge-like mesoporous PDMS which is inclined supporter.

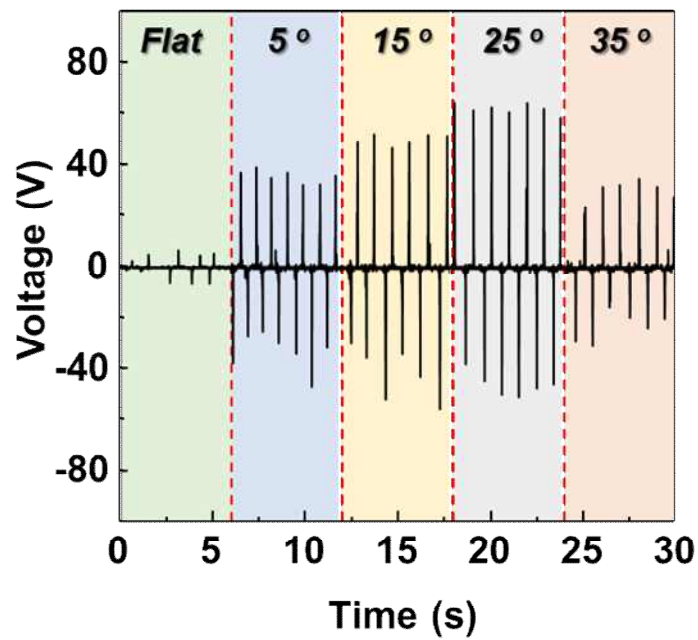


Figure S3 Output voltage of TENG with various angles of inclined supporter.

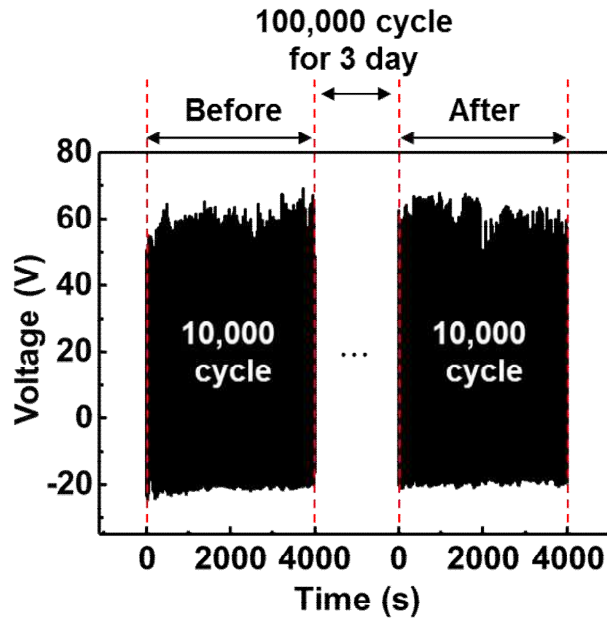


Figure S4. The stability test of TENG as a function of time.

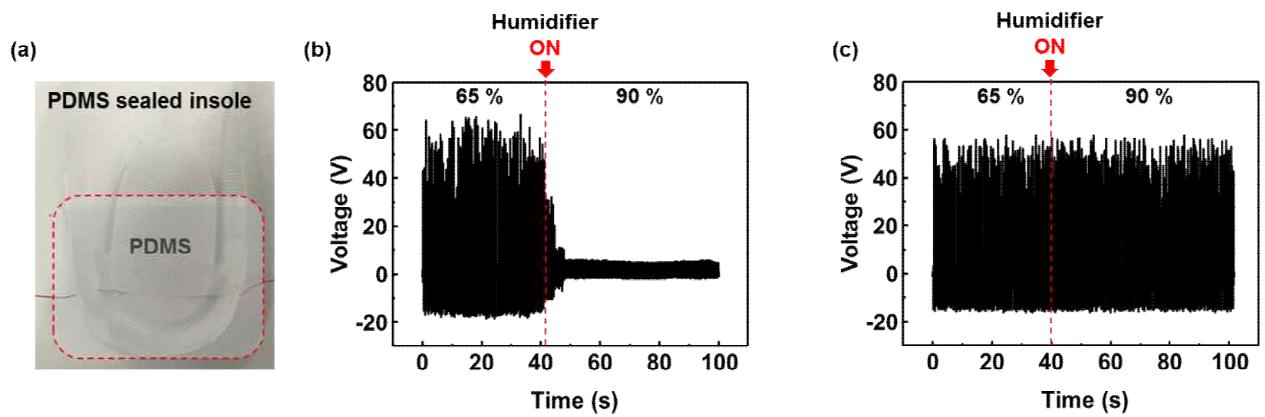


Figure S5. (a) The photograph of the sealed TENG. The output voltage of unsealed (b) and sealed (c) TENGs when the humidity is increased from 65 % to 90 %.

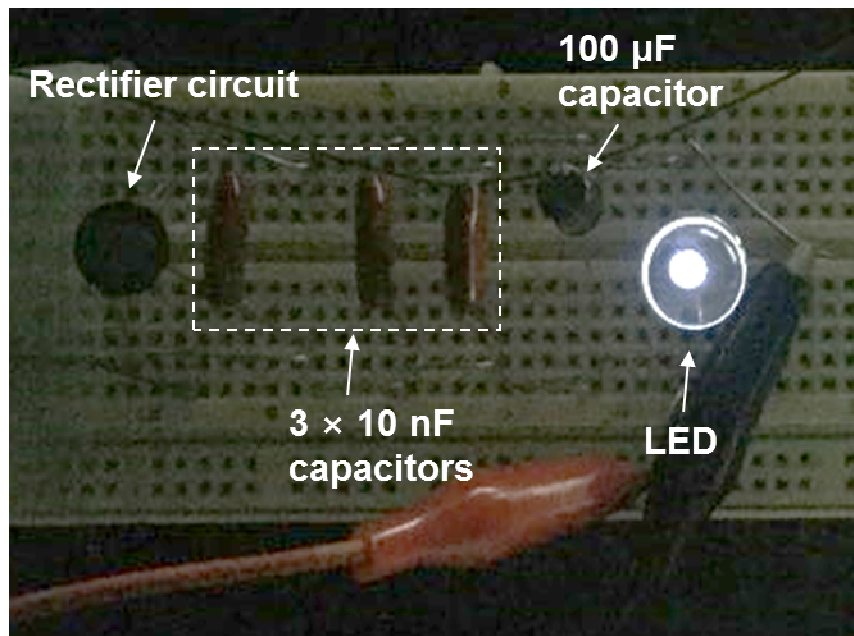


Figure S6 A circuit of charging system which is composed of the rectifier circuit, 3×10 nF, $100 \mu\text{F}$ capacitors and 1 white LED.

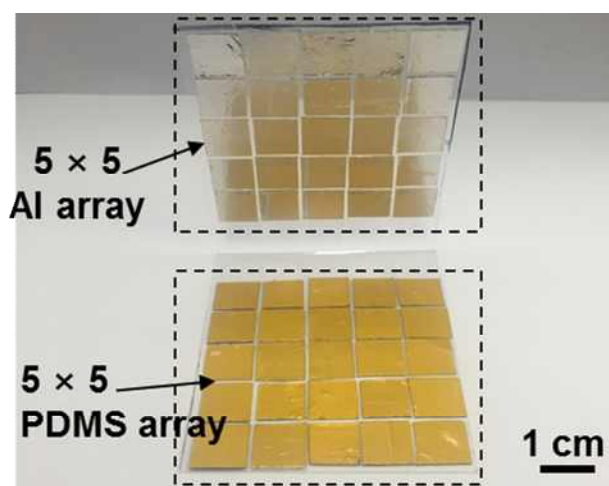


Figure S7 The photograph of 5×5 TENG array consisting of Al and PDMS array.