

Supplementary Information

Energy Harvesting and Wireless Power Transmission by a Hybridized Electromagnetic-triboelectric Nanogenerator

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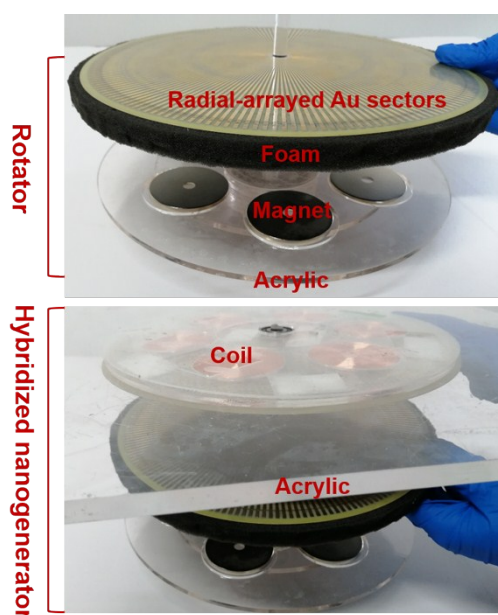


Figure S1. The corresponding photographs of the hybridized nanogenerator device. (a) The composition of the rotator. (b) Hybridized nanogenerator device for the experiment.

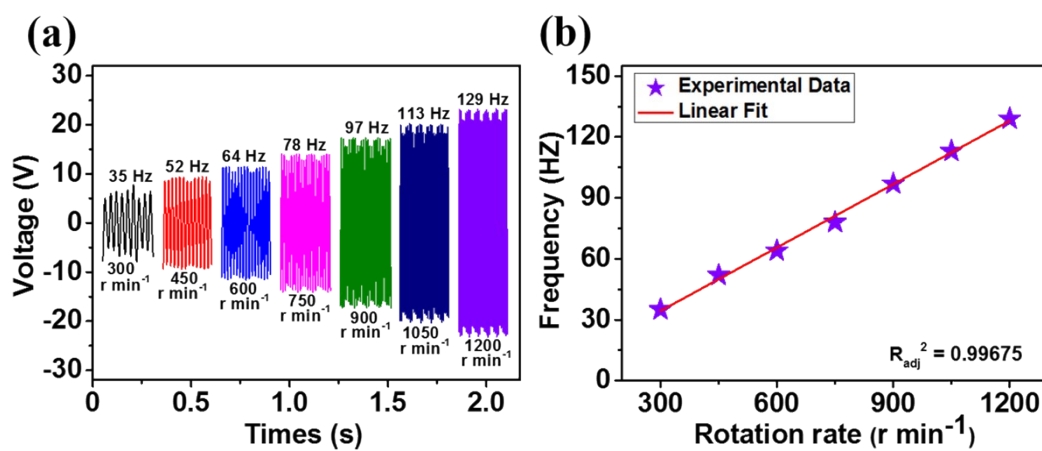


Figure S2. The relation between the rotational speed and the electrical output frequency of EMG. (a) Frequency response of open-circuit voltage with different speed. (b) Analysis for linear fitting results between rotational speed and working frequency of EMG.

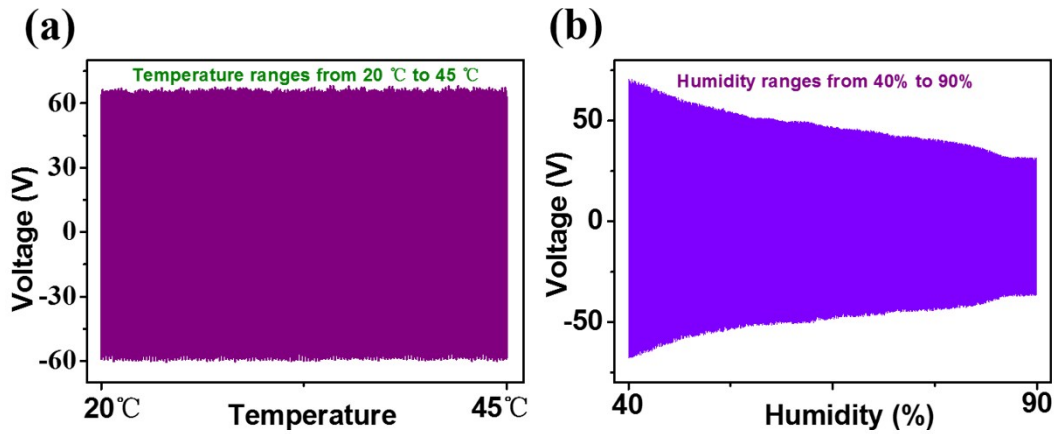


Figure S3. The output voltage of TENG variation with humidity and temperature. (a) The little effect of temperature on the output voltage. (b) The output voltage declines with the increase of humidity.

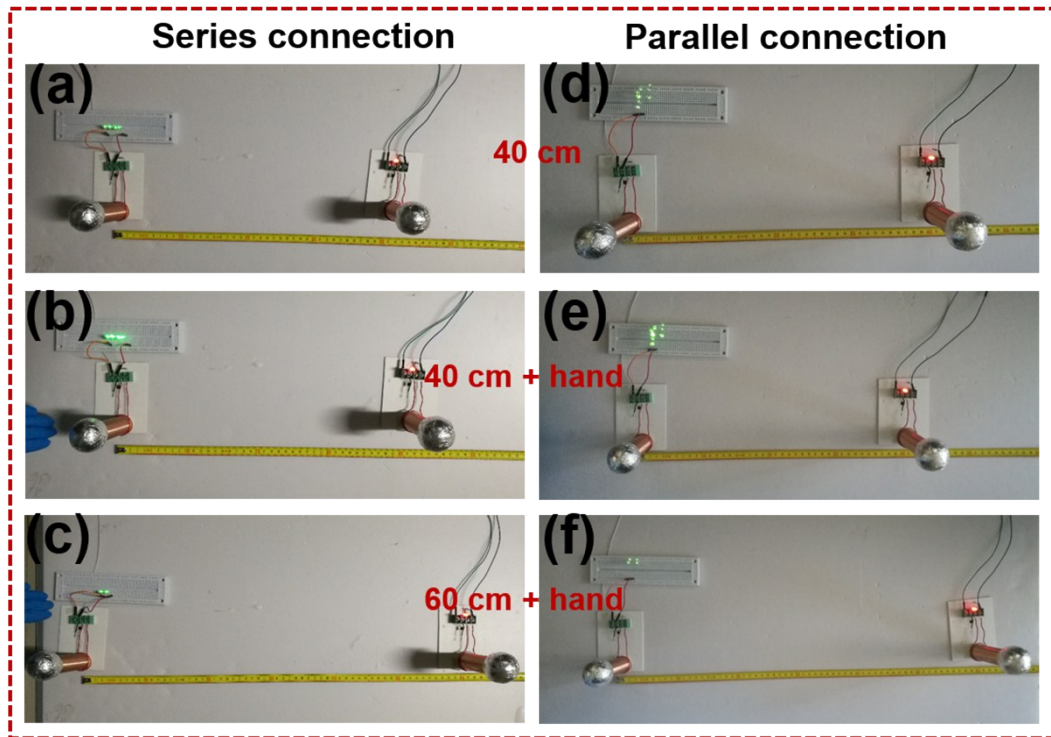


Figure S4. The transmission distance of the WPT system for driving LEDs in series and parallel. (a,d) 40 cm.(b,e) 40 cm with hand beside the receiver. (c,f) 60 cm with hand beside the receiver.

Supporting Videos:

Movie S1. A super capacitor bank was used to store the electric energy produced by the hybridized nanogenerator.

Movie S2. The receiver output of voltage at a distance of 80 cm.