

Supplementary Information

Spherical hybrid triboelectric nanogenerator for enhanced water wave energy harvesting

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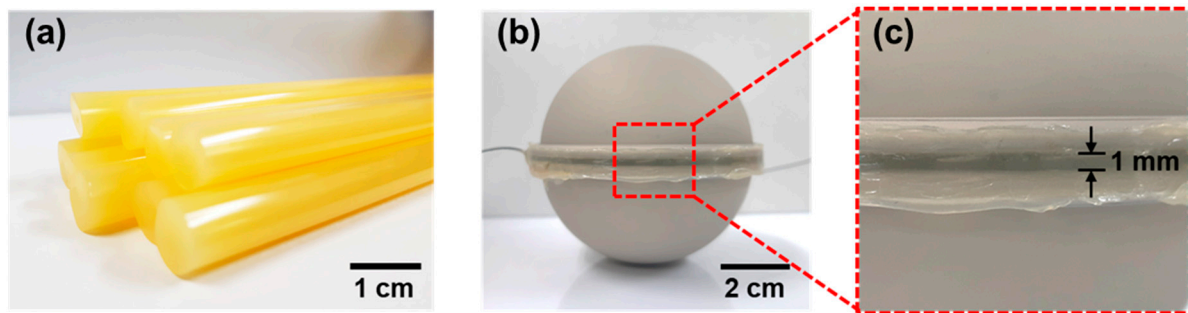


Figure S1 (a) Polyamide hot melt glue stick (b) Picture of the hemisphere shell with polyamide adhesive on the edge (c) Thickness of polyamide adhesive

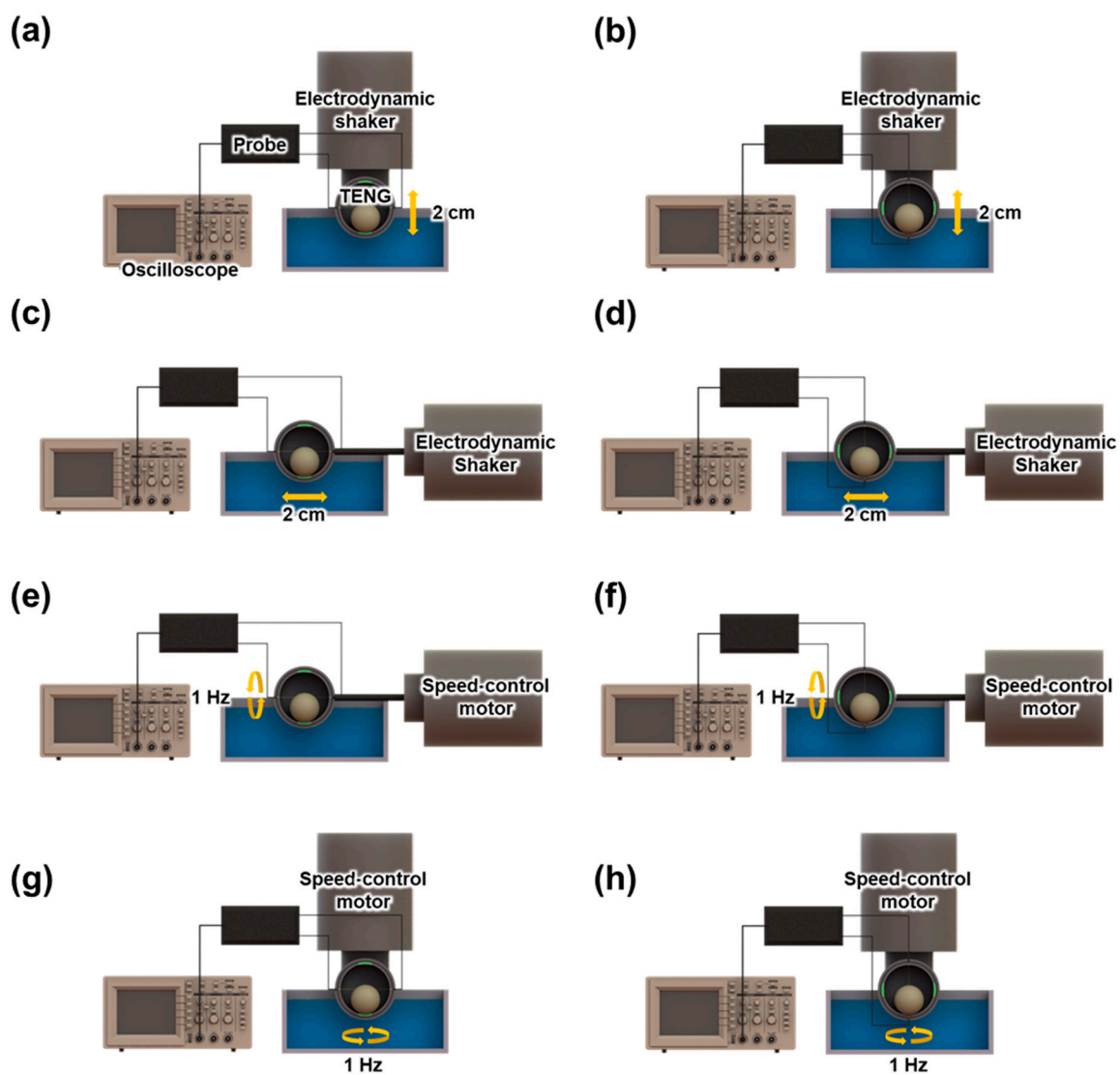


Figure S2 Schematic diagram of the experiments: (a,b) during vertical vibration with respect to the (a) z and (b) x axes; (c,d) during horizontal vibration with respect to the (c) x and (b) z axes; (e,f) during rotation with respect to the (e) x axis and (f) z axis parallel to the water surface; (g,h) during rotation with respect to the (g) z axis and (h) x axis perpendicular to the water surface.

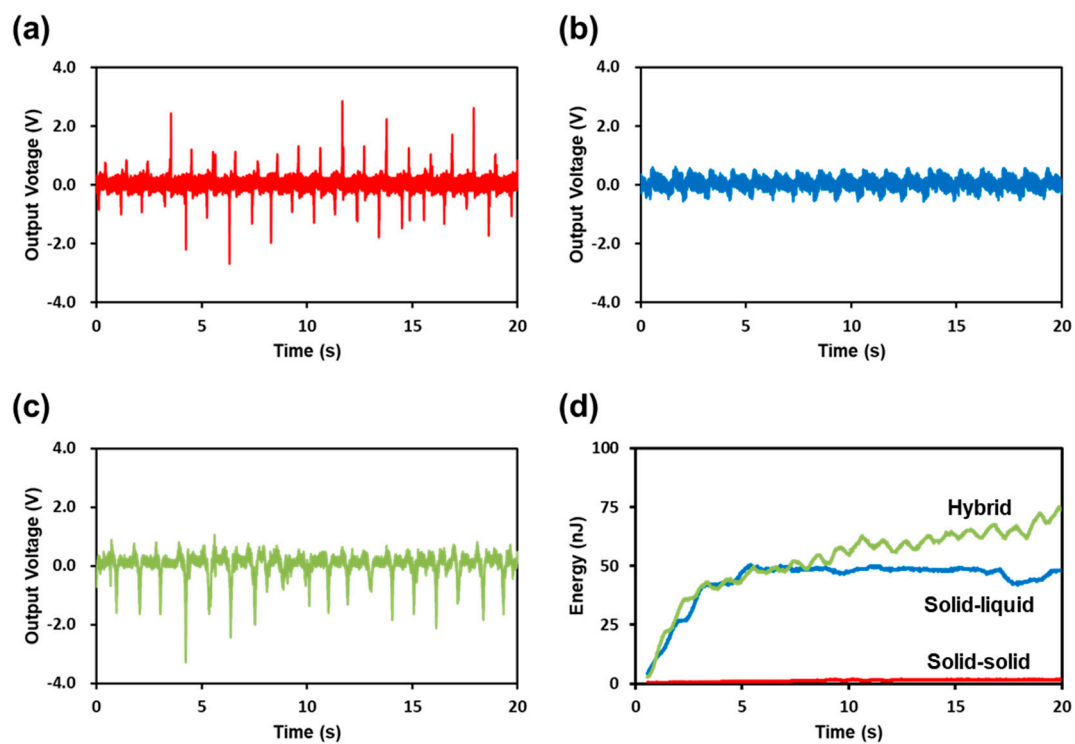


Figure S3 Electrical output of the TENG under wave motion with a frequency of 1 Hz in (a) solid-solid, (b) solid-liquid, and (c) hybrid triboelectrification. (d) Charged energy of the 1 μ F capacitor with a 1 Hz wave frequency