Supporting Information

Boosting the output performance of triboelectric nanogenerator through the nonlinear oscillator

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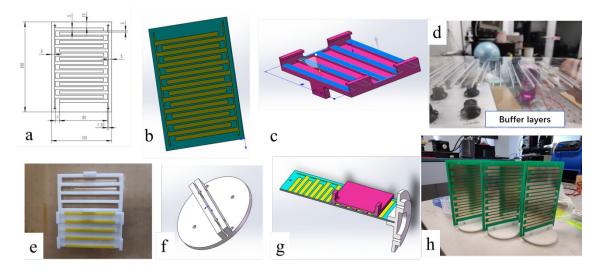


Figure S1. (a) The drawing of PCB. (b) The 3D plot of PCB. (c)The 3D plot of slider. (d) The fabricated slider with FEP membrane. (e) The 3D printed slider. (f) The 3D plot of mount base. (g) The schematic of NL-TENG. (h) The fabricated PCB and mount base.

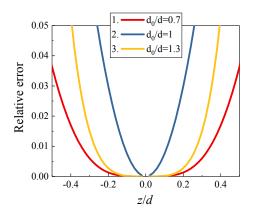


Figure S2. Relative error.

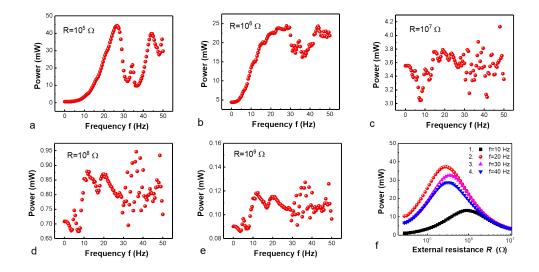


Figure S3 Output power response under different excitation frequencies and external resistance R is (a)10⁵, (b)10⁶, (c)10⁷, (d)10⁸, (e)10⁹, (f)10⁴-10⁷, Unit: Ohm.

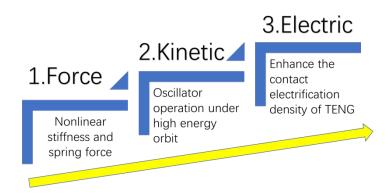


Figure S4. Mechanism for improving output of the nonlinear oscillator.

Video S1: Power the calculator (MP4).

Video S2: Lighting up 80 yellow LEDs in series connection by shaker (MP4).