Electronic Supplementary Information

Enabling output performance of hybrid nanogenerators based on Al-doped BaTiO₃ composite films: A self-powered utility system for portable electronics

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Figure S1. Output voltage and current of the HNG device with smooth surface of ABTO/PDMS film at different external load resistances from 10^3 to $10^9 \Omega$.



Figure S2. Power density of the NG device with pristine PDMS (i.e., TNG with only PDMS) at different external load resistances from 10^3 to $10^9 \Omega$.



Figure S3. (a) Schematic diagram of the rectifying circuit to charge the capacitor by the HNG with rough composite, and further to turn on the LCD screen.



Figure S4. (a) Charge and discharge voltage curves of the 22 μ F capacitor. Herein, the capacitor was charged by the rectified voltage generated from the HNG and further supplied (discharged) to turn on the LCD screen.