Supporting Information for

Simultaneously Harvesting Mechanical and Chemical Energies by a Hybrid Cell for Self-Powered Biosensors and Personal Electronics

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Figure S1 Photograph of the fabricated hybrid energy cell.



Figure S2 SEM image of the Si micropyramid template.



Figure S3 Cross-sectional SEM image of the fabricated PDMS film.



Figure S4 XRD patterns of BaTiO₃ nanoparticles.



Figure S5 Measured output voltage and current density of the $BaTiO_3$ -PDMS composite film with the volume ratio of the $BaTiO_3$ nanoparticles (33.3%).



Figure S6 Enlarged output current of the electrochemical cell.



Figure S7 Schematic diagram of the self-powered H_2O_2 biosensor.



Figure S8 Photograph of the H_2O_2 biosensor.



Figure S9 SEM image of the fabricated Pt electrode.



Figure S10 Enlarged discharging curve of the Li-ion battery charged by the hybrid energy cell.