Supporting Information

Biocompatibility and In Vivo Operation of Implantable Mesoporous PVDF-Based Nanogenerators

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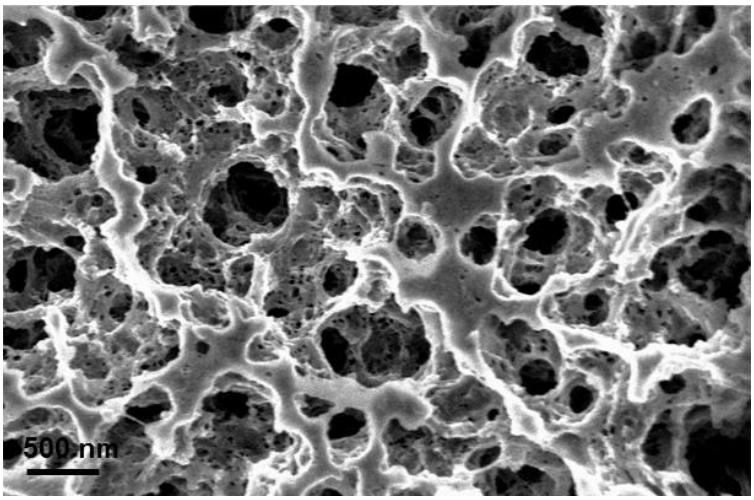

Figure S1. SEM image of the mesoporous PVDF film with pore sizes ranging from 30-500 nm.

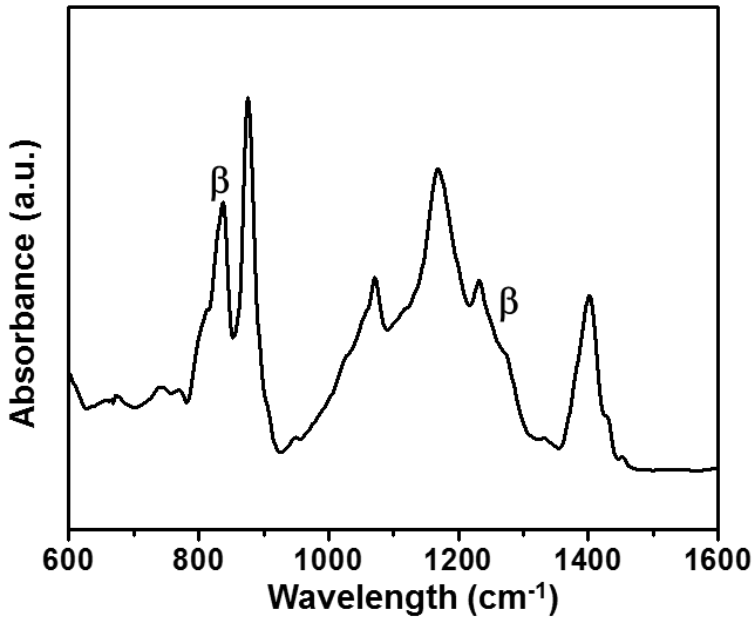

Figure S2. Fourier transform infrared (FTIR) spectrum of the mesoporous PVDF film, where representative peaks of the piezoelectric β-phase at 840 and 1280 cm^{-1} could be clearly identified.

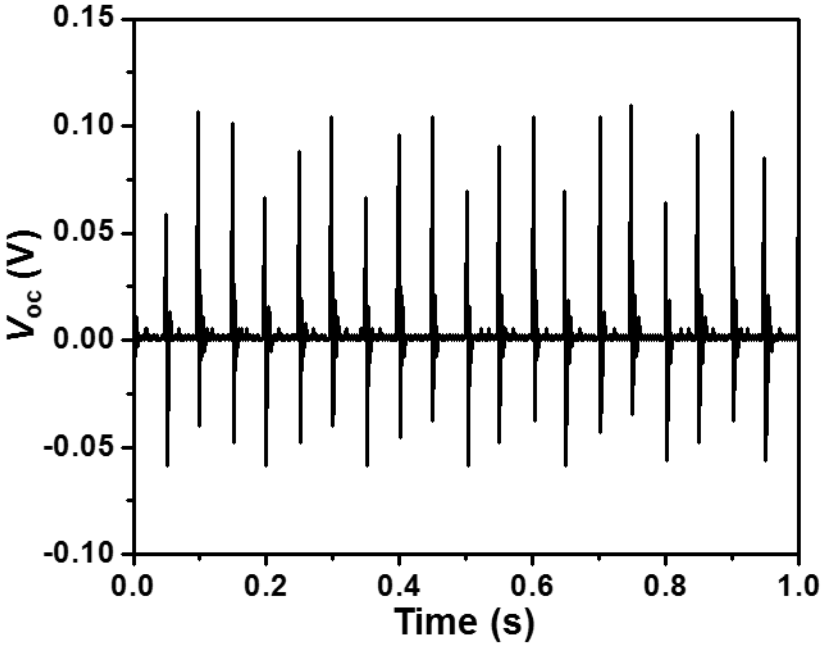

Figure S3. The voltage output of the PDMS NG responding to a 20 Hz periodical deflection in a cantilever mode.

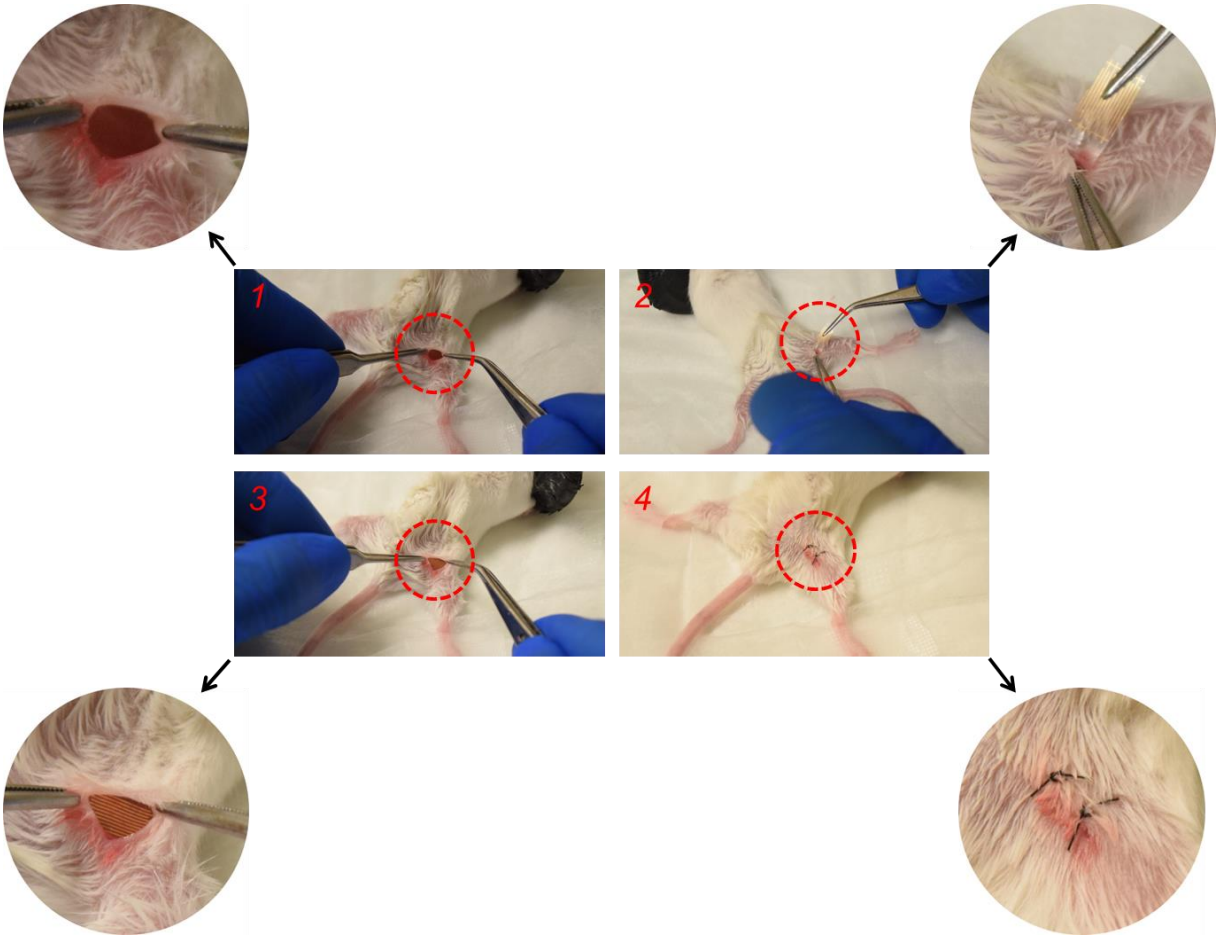

Figure S4. The surgery process of NG implantation into mouse's right leg. Enlarged pictures of 1-4 present a closer look of the surgical incision (1), NG device (2), NG inside the body (3) and incision suturing step (4), respectively.

Video 1. In vivo and instantaneous electrical output of the implanted PVDF NG responding to movement of the rat's leg.