

## Supplementary Materials

# Shear Thickening Fluid and Sponge-Hybrid Triboelectric Nanogenerator for Motion Sensor Array Based Lying State Detection System

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# 1. Output voltage signals with varying numbers of PET layers

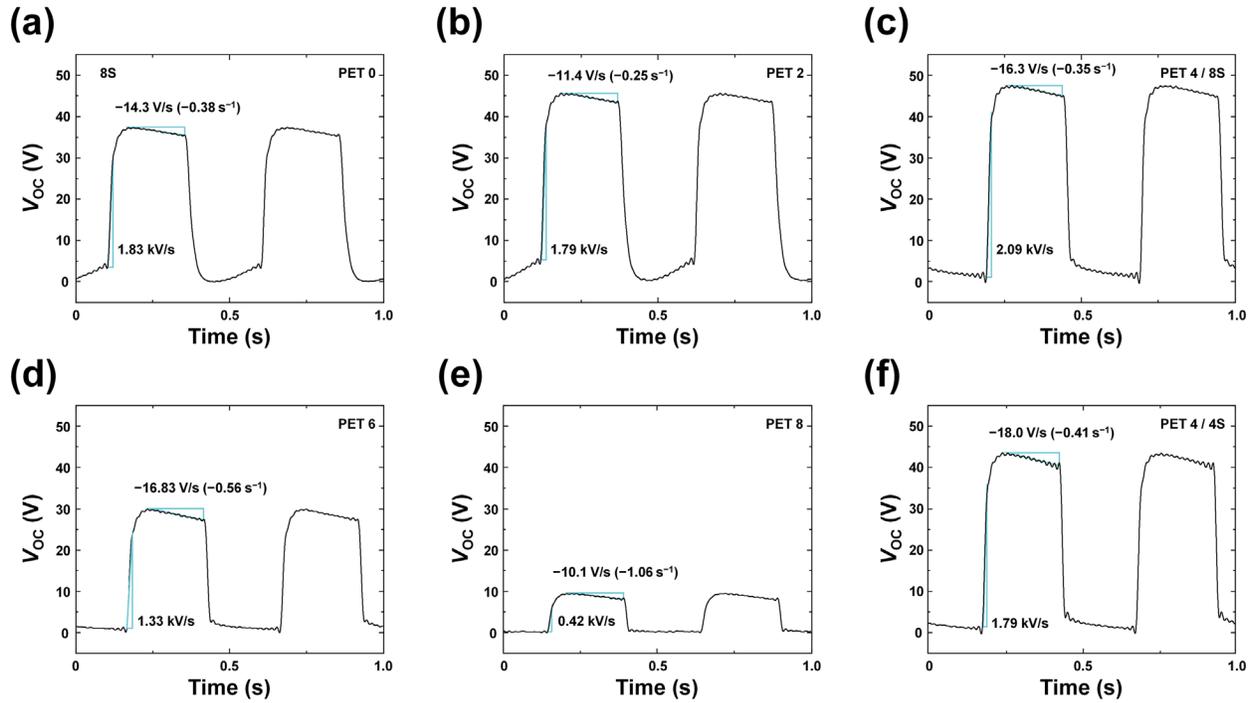
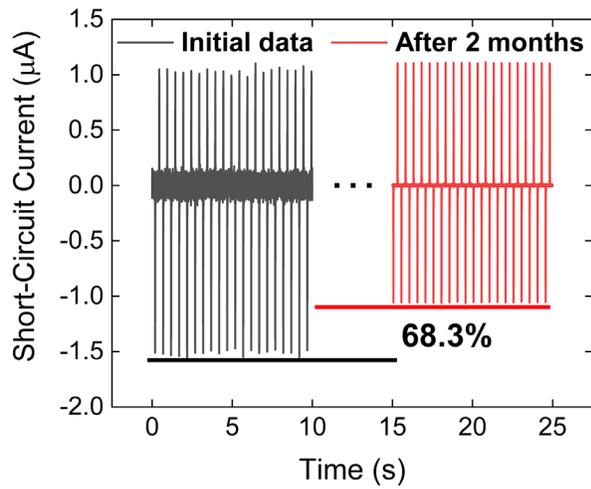


Figure S1. Output voltage signals with changing the numbers of PET: (a) 0, (b) 2, (c) 4 with 8S, (d) 6, (e) 8, and (f) 4 with 4S.

## 2. Durability performance of output current after 2 months



**Figure S2.** Output current signals comparing the initial data and the data attained after 2 months.

## 3. Video demonstrating single channel output detection

**Video S1.** Demonstration of single channel output detection using the HTMS array.

## 4. Video demonstrating multi-channel motion detection

**Video S2.** Demonstration of multi-channel output detection using the HTMS array.