

## **A self-powered wearable brain-machine-interface system for ceasing action**

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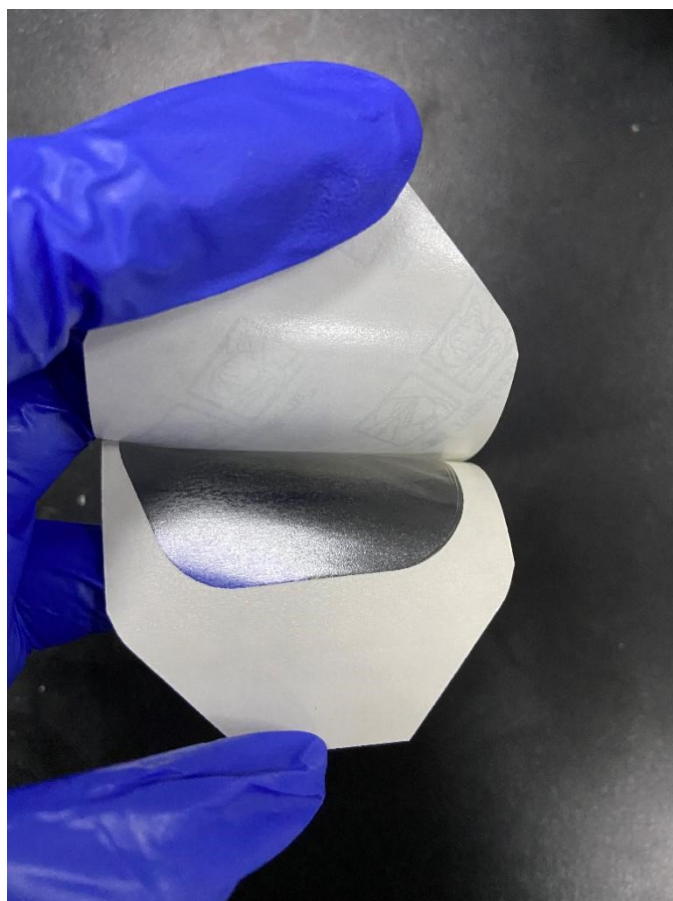
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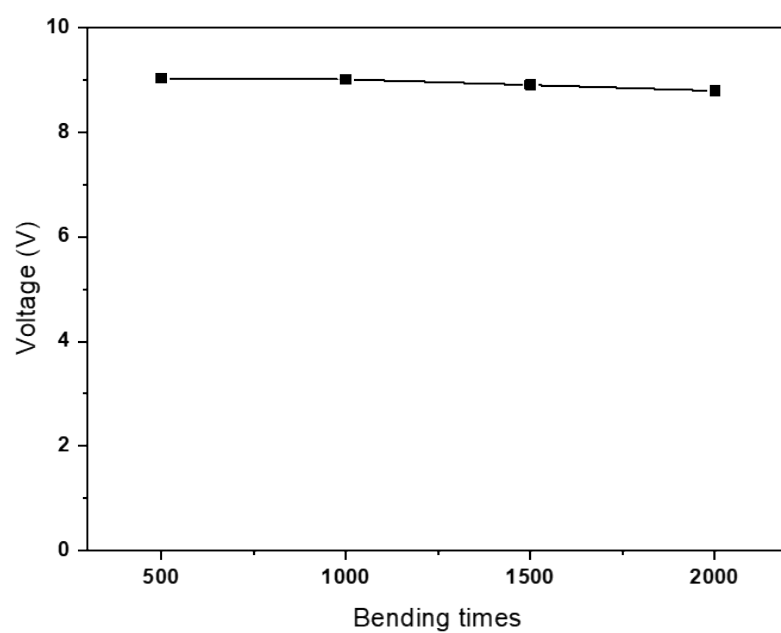
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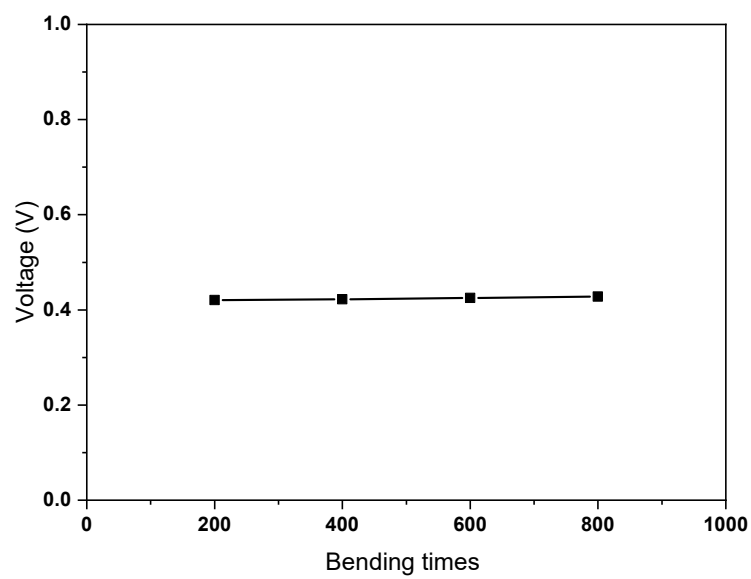
**Figure S1.** The 3D printed mold of photosensitive resin material.



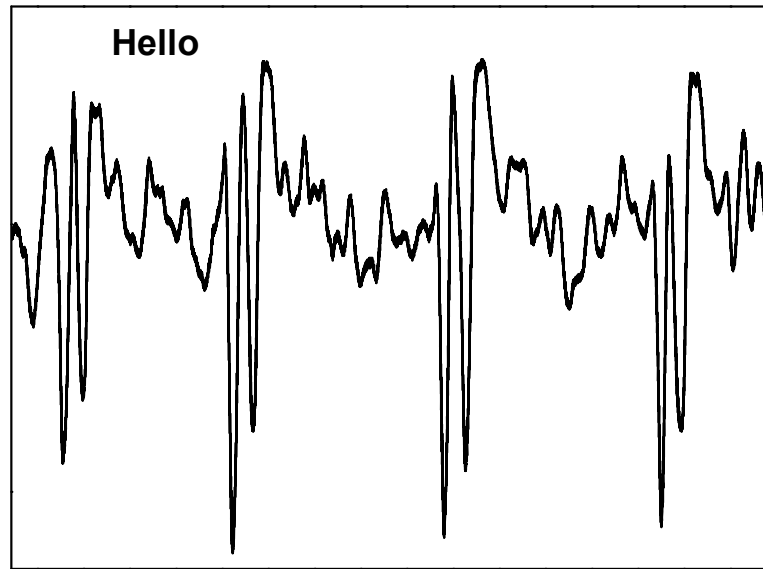
**Figure S2.** The 3M Tegaderm.



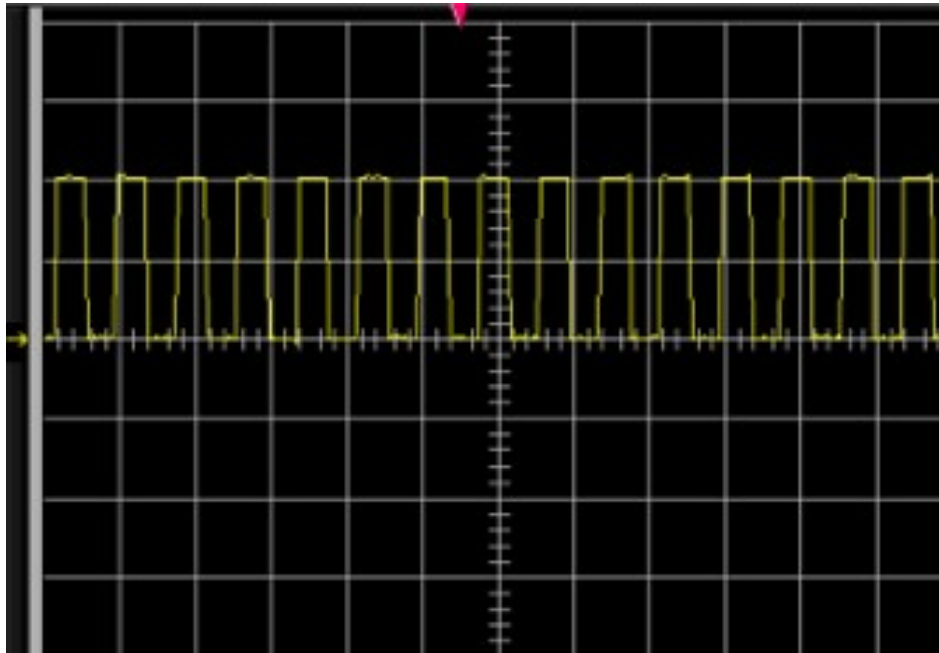
**Figure S3.** 2000 times consecutive impact experiment on PZT with a stepper motor.



**Figure S4.** 800 times impact experiment on the biosensor with a stepper motor.



**Figure S5.** Repeating the test for 4 times on the word “hello”.



**Figure S6.** Stimulus signal output by oscilloscope.

### **Supplementary Video**

**Supplementary Movie S1** demonstrates the process of mice experiments. Whenever the mouse starts to run, input signals (typically 25 biphasic pulses with adjustable amplitude, each 2ms, 250 Hz) to stimulate it, and it can be observed that the mouse stops moving immediately.



## **Supplementary document**

**Supplementary Document S1** shows movement data of the mice.