Supporting Information for

## Wearable Battery-Free Perspiration Analyzing Sites Based on Sweat Flowing on ZnO Nanoarrays

Wanglinhan Zhang<sup>1, 2</sup>, Hongye Guan<sup>1</sup>, Tianyan Zhong<sup>1</sup>, Tianming Zhao<sup>1, 2</sup>, Lili Xing<sup>1</sup>, Xinyu Xue<sup>1, 2, \*</sup>

<sup>1</sup>School of Physics, University of Electronic Science and Technology of China, Chengdu 610054, People's Republic of China

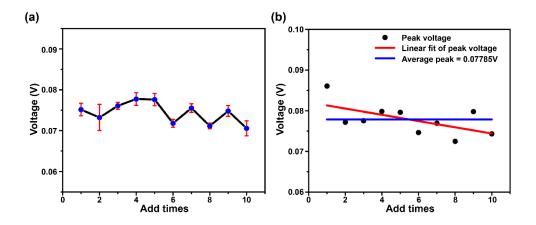
<sup>2</sup>College of Sciences, Northeastern University, Shenyang 110004, People's Republic of China

\*Corresponding author. E-mail: <a href="mailto:xuexinyu@mail.neu.edu.cn">xuexinyu@mail.neu.edu.cn</a> (Xinyu Xue)

**Supplementary Movie S1** Practical applications to control the flow direction of the solution

**Supplementary Movie S2** A commercial piezoelectric device is used to power the wireless transmitter, and the perspiration analyzing sites can be used as a switch of the system

## **Supplementary Figure**



**Fig. S1 a** Distribution of average voltage in 100 seconds near the peak value. **b** Linear fit of peak voltage during constant experiments