Supporting Information

A Reversible Gel-Free Electrode for Continuous Noninvasive Electrophysiological Signals Monitoring

Qing Liu^a, Jie Zhou^{a, b}, Liangtao Yang^{a,*}, Jiajia Xie^{a, b}, Chenhui Guo^{a, c}, Zimo Li^d, Jun Qi^e, Shuo Shi^f, Zhilin Zhang^a, Hui Yang^a, Jinlian Hu^f, Jinglong Wu^a, Yi Zhang^{a,*}.

^a Shenzhen Institute of Advanced Technology, Chinese Academy of Sciences, Shenzhen, 518055, China.

^b College of Optoelectronic Engineering, Chengdu University of Information Technology, Chengdu, 610225, China.

^c Department of Nano Science and Technology Institute, University of Science and Technology of China, Suzhou, 215127, China.

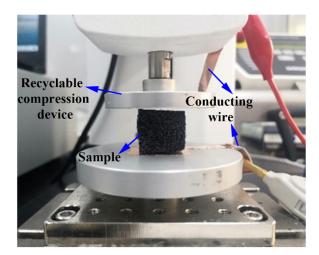
^d Graduate School of Interdisciplinary Science and Engineering in Health Systems, Okayama University, Okayama, Japan.

^e Lu'an Branch, Anhui Institute of Innovation for Industrial Technology, Lu'an, 237100, China.

^f Department of Biomedical Engineering, City University of Hong Kong, Hong Kong S.A.R, 999077, China.

* Corresponding author. Shenzhen Institute of Advanced Technology, Chinese Academy of Sciences, Shenzhen, 518055, China.

E-mail: liangtao.yang@siat.ac.cn (L. Yang), yi.zhang3@siat.ac.cn (Y. Zhang).



Test setup diagram

Fig S1. Illustration of mechanical and impedance measurement setup

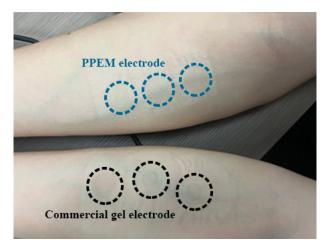


Fig S2. Skin condition after continuous monitoring of EMG signals for 8 hours.

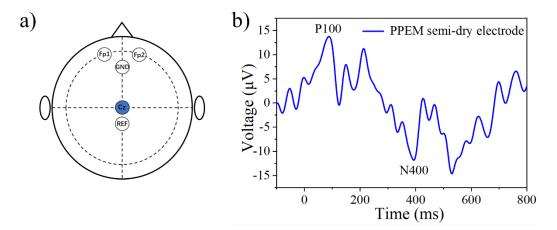


Fig S3. a) Schematic diagram of electrode placement for EEG monitoring at Cz; b) P, N signal monitoring of PPEM semi-dry electrode.