

Supporting Information:

MoS₂/ Pt nanocomposites functionalized microneedle for real-time monitoring of hydrogen peroxide release from living cell

Jin-Xiu Zhou^a, Li-Na Tang^{a,b}, Fan Yang^a, Feng-Xia Liang^{b,c}, Hua Wang^{b,c}, Yu-Tao

Li^{*a,b}, Guo-Jun Zhang^{*a,b}

^a School of Laboratory Medicine, Hubei University of Chinese Medicine, 1 Huangjia
Lake West Road, Wuhan 430065, PR China.

^b Hubei Provincial Collaborative Innovation Center of Preventive Treatment, 1
Huangjia Lake West Road, Wuhan 430065, PR China.

^c Department of Acupuncture and Moxibustion, Hubei University of Chinese
Medicine, 1 Huangjia Lake West Road, Wuhan 430065, PR China.

*Corresponding author: Tel: +86-27-68890259, Fax: +86-27-68890259

Email: zhanggj@hbtcu.edu.cn

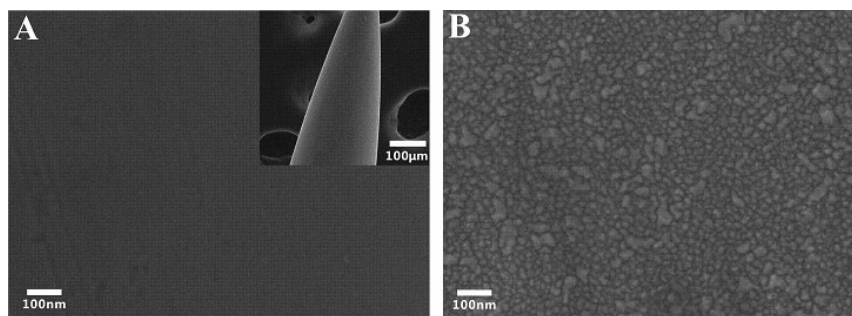


Figure S1. SEM images of (A) bare acupuncture needle (Inset: the whole image of the tip) and (B) AuNPs decorated acupuncture needle.

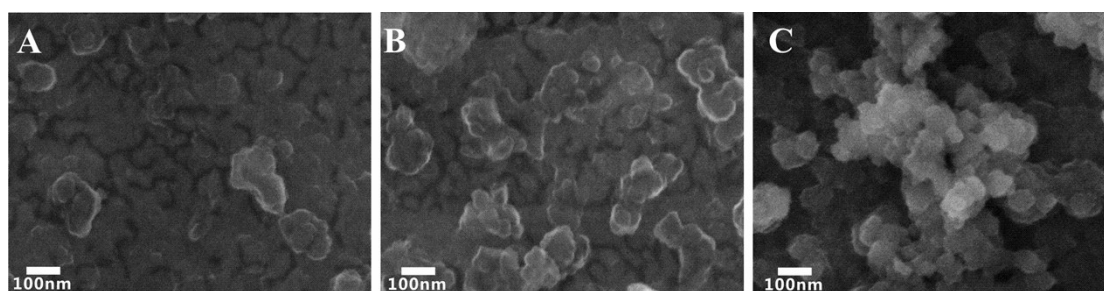


Figure S2. SEM images of MoS₂/AN when the electrochemical polymerization time of MoS₂ is for 15s、30s、 and 45s, respectively.

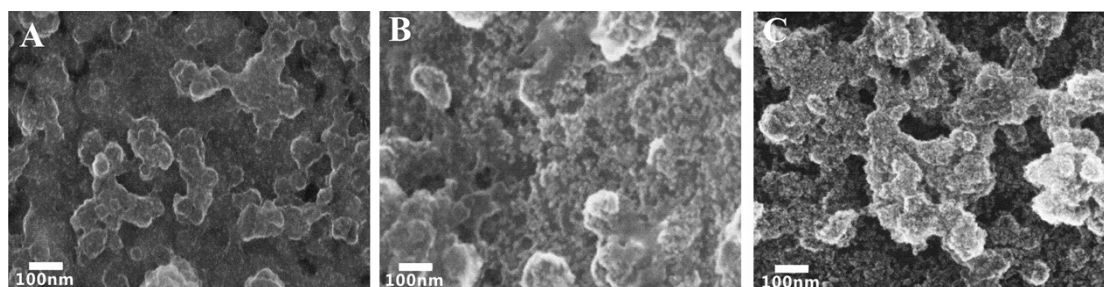


Figure S3. SEM images of MoS₂/PtNPs/AN when the electrochemical polymerization time of PtNPs is for 200s、300s、 and 400s, respectively.

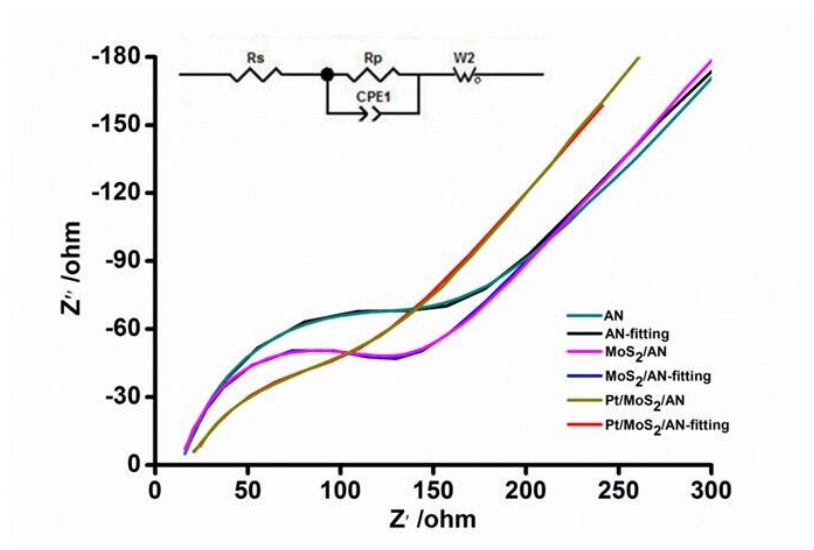


Figure S4. Nyquist plots of EIS and the corresponding fitting curve at the different nanomaterial-modified acupuncture needle in aqueous solution consisting of 5 mmol/L of $K_3[Fe(CN)_6]$ and 0.1 mol/L of KCl.