

Supporting Information

Freestanding Electrodes with Polyaniline/Au Derived from Electrospun Carbon Nanofibers for High-Performance Supercapacitors

Yan Bu, Yunwei Zou, Ruibai Cang, Xuejiao Zhou*, Peng Yu and Mingyi Zhang*

*Key Laboratory for Photonic and Electronic Bandgap Materials, Ministry of Education,
School of Physics and Electronic Engineering, Harbin Normal University, Harbin
150025, People's Republic of China*

Corresponding Authors

*E-mail: zhouxj@hrbnu.edu.cn (X. J. Zhou)

*E-mail: zhangmingyi@hrbnu.edu.cn (M. Y. Zhang)

Tel: +86 45188060349

Figure Captions:

Fig. S1 Histograms of diameter of the (a) CNFs, (b) CNFs/PANI, (c) CNFs/PANI/Au, and (d) CNFs/Au nanofibers.

Fig. S2 (a) SEM images of slurry-coating CNFs/PANI/Au electrode after GCD test and (b) GCD curves at different current densities in the 1 M H₂SO₄ electrolyte.

Fig. S3 CV curves of the (a) CNFs, (c) CNFs/PANI, and (e) CNFs/Au nanofiber electrodes at different scan rates in the 1 M H₂SO₄ electrolyte; GCD curves of the (b) CNFs, (d) CNFs/PANI, and (f) CNFs/Au at different current densities in the 1 M H₂SO₄ electrolyte.

Fig. S4 SEM images of CNFs/PANI/Au electrode after 5000 cycles.

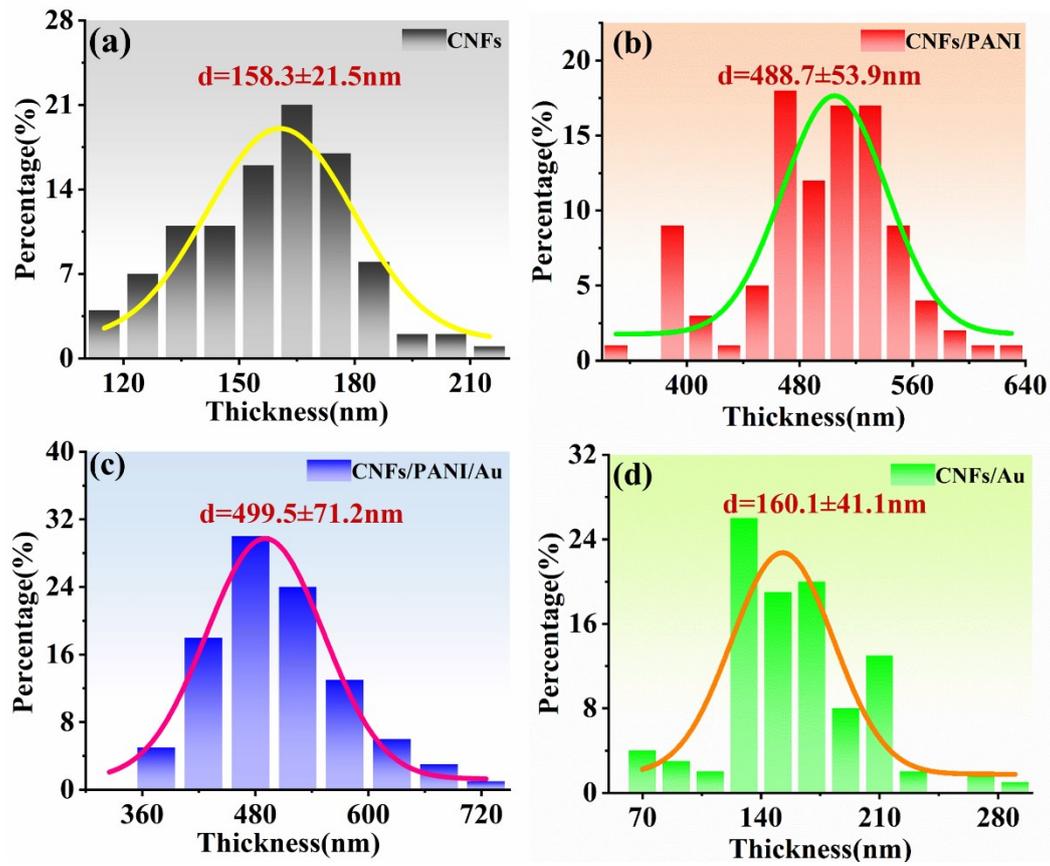


Fig. S1 Histograms of diameter of the (a) CNFs, (b) CNFs/PANI, (c) CNFs/PANI/Au, and (d) CNFs/Au nanofibers.

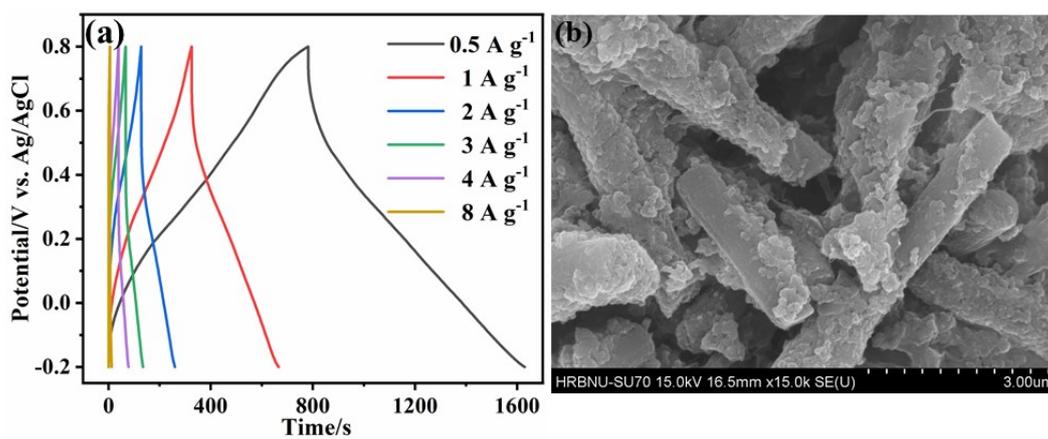


Fig. S2 (a) SEM images of slurry-coating CNFs/PANI/Au electrode after GCD test and (b) GCD curves at different current densities in the 1 M H₂SO₄ electrolyte.

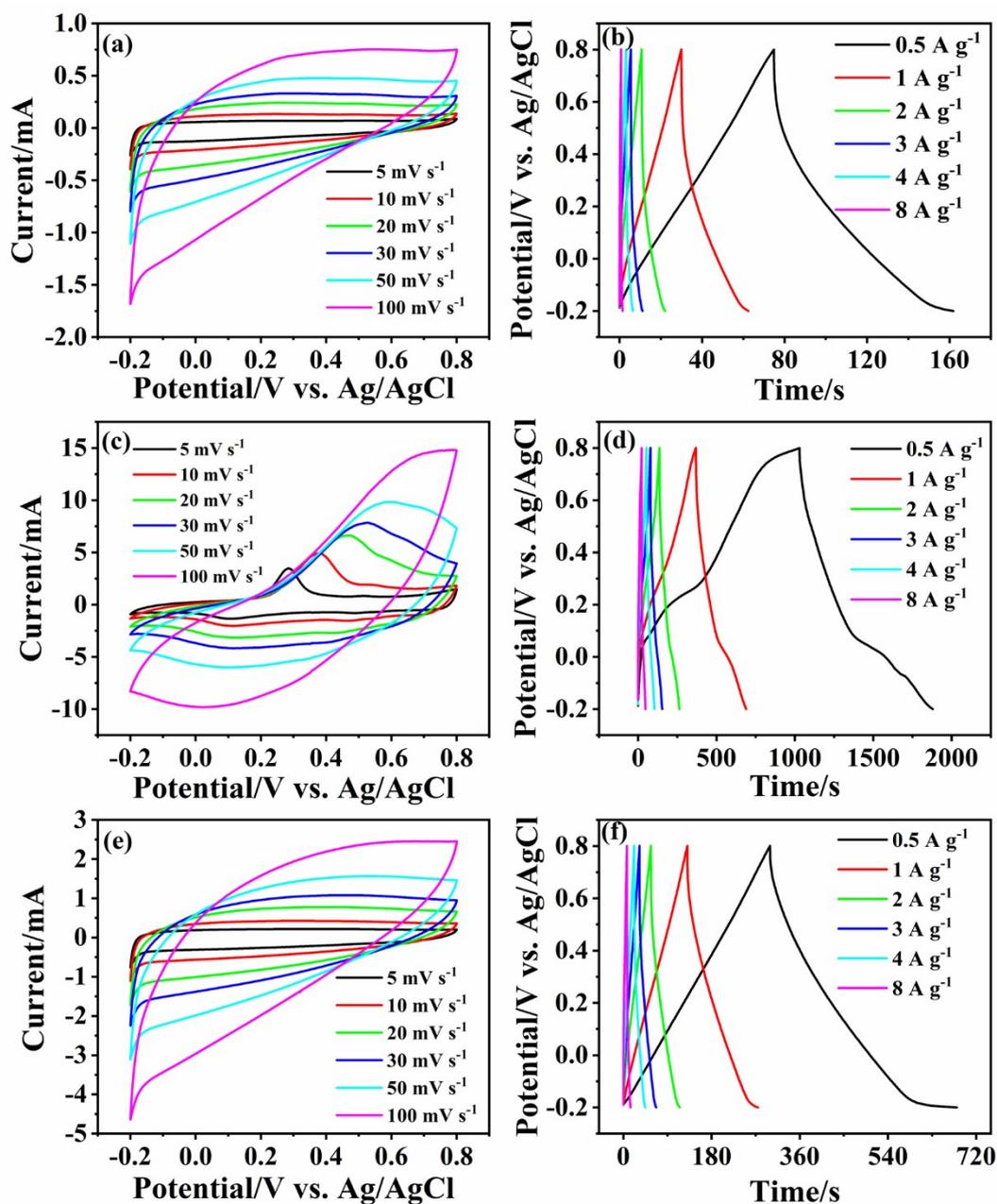


Fig. S3 CV curves of the (a) CNFs, (c) CNFs/PANI, and (e) CNFs/Au nanofiber electrodes at different scan rates in the 1 M H₂SO₄ electrolyte; GCD curves of the (b) CNFs, (d) CNFs/PANI, and (f) CNFs/Au at different current densities in the 1 M H₂SO₄ electrolyte.

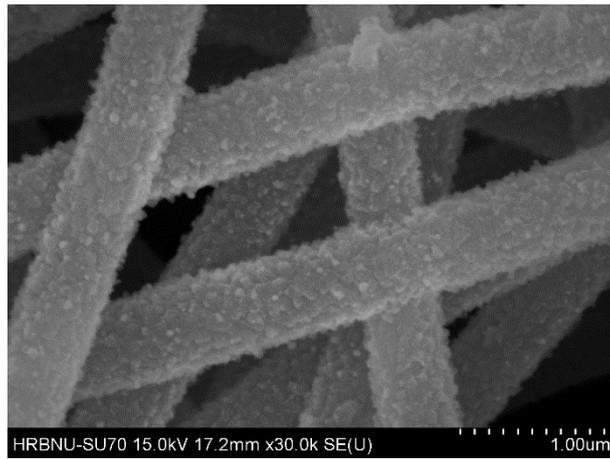


Fig. S4 SEM images of CNFs/PANI/Au electrode after 5000 cycles.