Supporting Information

A post-oxidation strategy for the synthesis of graphene/carbon nanotube-supported polyaniline nanocomposites as advanced supercapacitor electrodes

Dechao Lv,† aJiali Shen,† aGengchao Wang*a

^aShanghai Key Laboratory of Advanced Polymeric Materials, Key Laboratory for Ultrafine Materials of Ministry of Education, School of Materials Science and Engineering, East China University of Science and Technology, Shanghai 200237, P.R.China.

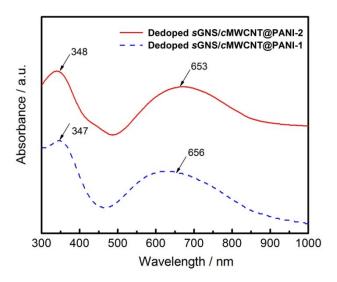


Fig. S1 UV-Vis spectra of dedoped form sGNS/cMWCNT@PANI composites

In the UV-Vis curve of dedoped ternary composites with 10 wt% ammonium hydroxide for 24 h at room temperature, there are only two bands at about 348 nm and 653 nm, which are attributed to π - π * transition of the benzenoid rings and π - π * transition of the quinoid rings. ¹⁻³ It is obviously that intensity of the band at about 347 nm compared with that at about 653 nm increases for *s*GNS/*c*MWCNT@PANI-2 ternary composite after post-oxidation process, which could indicate higher content of quinoid structure in PANI chains.

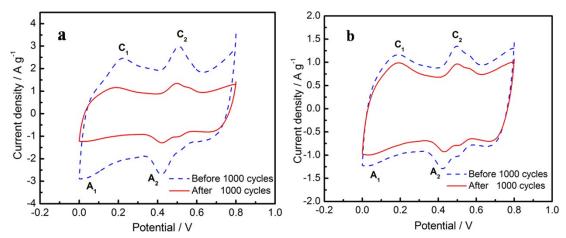


Fig. S2 CV curves of (a) *s*GNS/*c*MWCNT@PANI-1 and (b) *s*GNS/*c*MWCNT@ PANI-2 ternary composite before and after 1000 cycles.

References:

- S1 Q. Huang, G. Chen and J. Liu, *Polym. Adv. Technol*, 2014, **25**, 1391.
- S2 Y. C. Liu, F. H. Hsu and T. M. Wu, Synthetic Metals, 2013, 184, 29.
- S3 X. J. Lu, S. D. Yang, L. Hao, L. J. Zhang and L. F. Shen, *Electrochimica Acta*, 2011, **56**, 9224.