Electronic Supplementary Material (ESI) for Journal of Materials Chemistry A.

Supporting Information

Self-supported electrodes of $Na_2Ti_3O_7$ nanoribbon arrays/graphene foams and graphene foams for quasi-solid-state Na-ion capacitors

Shengyang Dong, Langyuan Wu, Junjun Wang, Ping Nie, Hui Dou, and Xiaogang Zhang*

S. Y. Dong, L. Y. Wu, J. J. Wang, P. Nie, Prof. H. Dou, Prof. X. G. Zhang
Jiangsu Key Laboratory of Materials and Technology for Energy Conversion
College of Material Science and Engineering
Nanjing University of Aeronautics and Astronautics
Nanjing, 210016, P. R. China
E-mail: azhangxg@nuaa.edu.cn

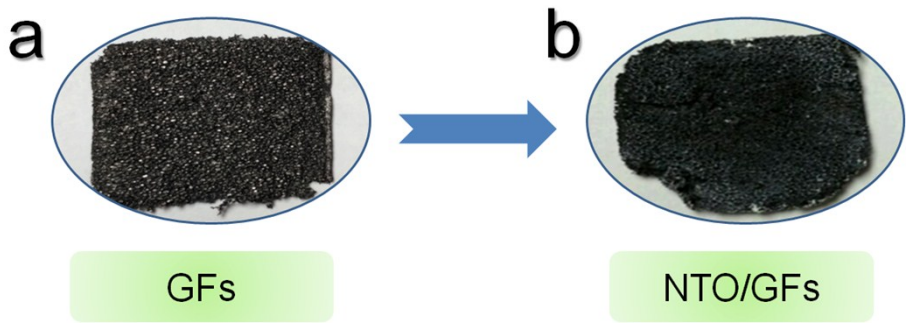

Fig. S1 The digital image of free standing GFs (a) and NTO/GFs (b) electrodes.

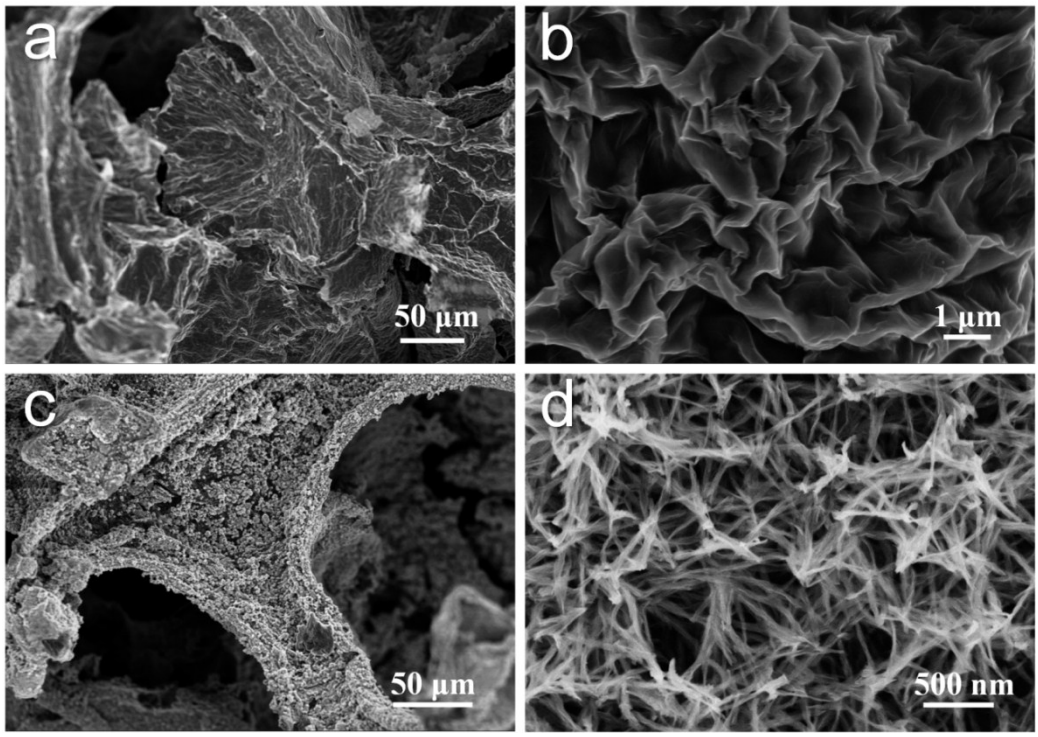

Fig. S2 (a, b) SEM images of graphene foams (GFs). (c, d) SEM images of $Na_2Ti_3O_7$ nanoribbon arrays/graphene foams (NTO/GFs).

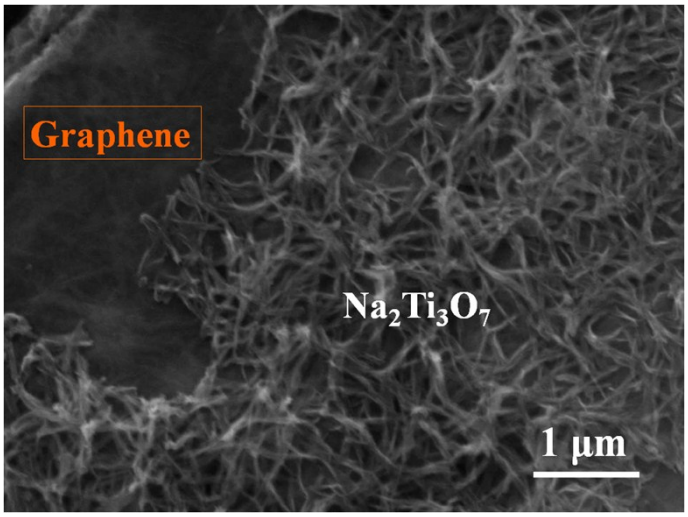

Fig. S3 SEM image of NTO/GFs.

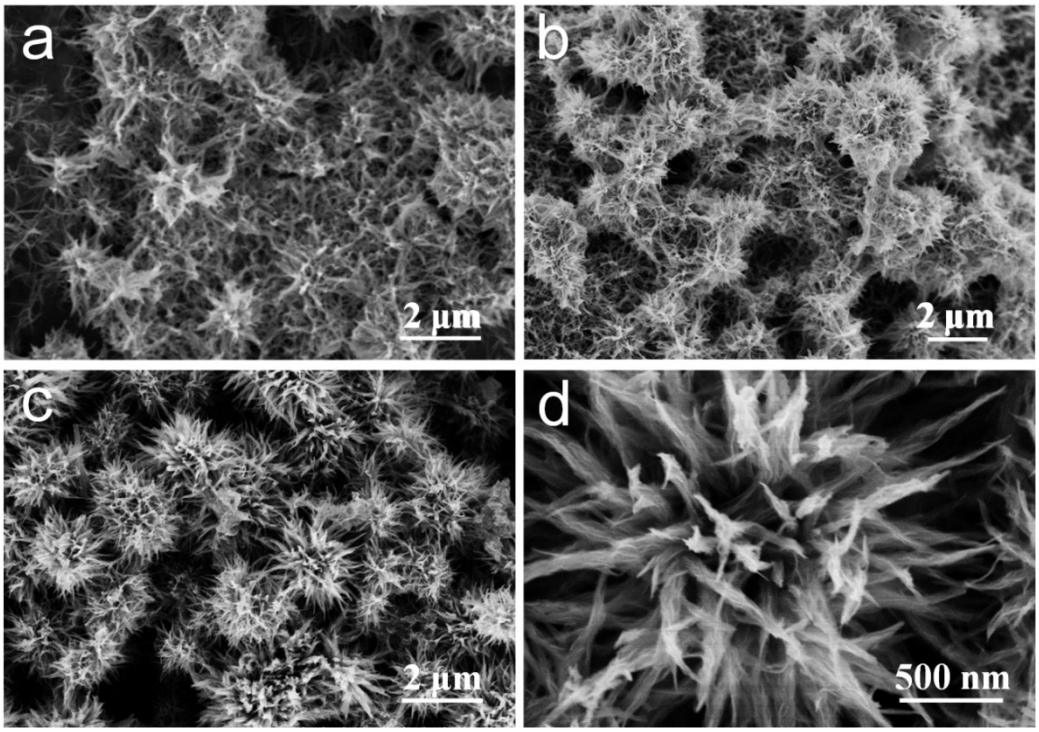

Fig. S4 SEM images of NTO/GFs with different hydrothermal time (a) 9 h, (b) 36h. (c, d) SEM images of urchin-like NTO microspheres.

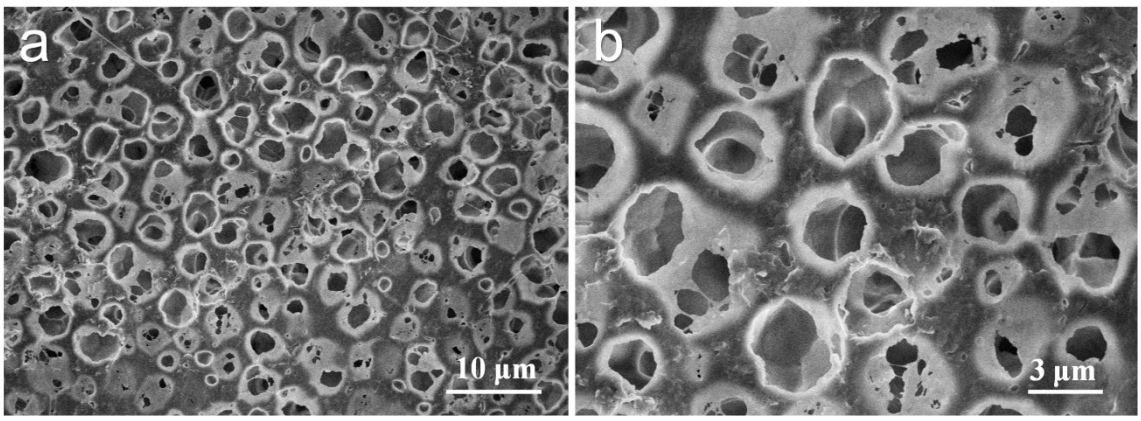

Fig. S5 SEM images of P(VDF-HFP) membrane.

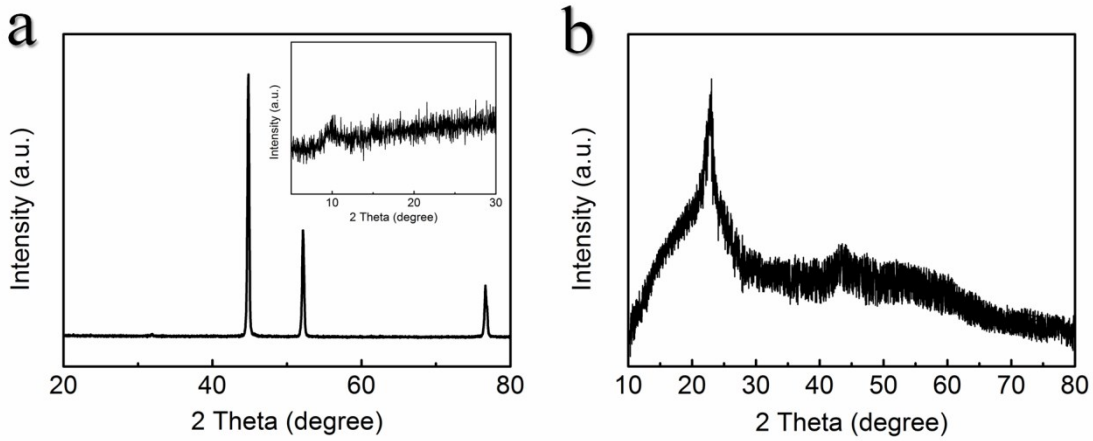

Fig. S6 XRD patterns of Ni-GO (a) and GFs (b).

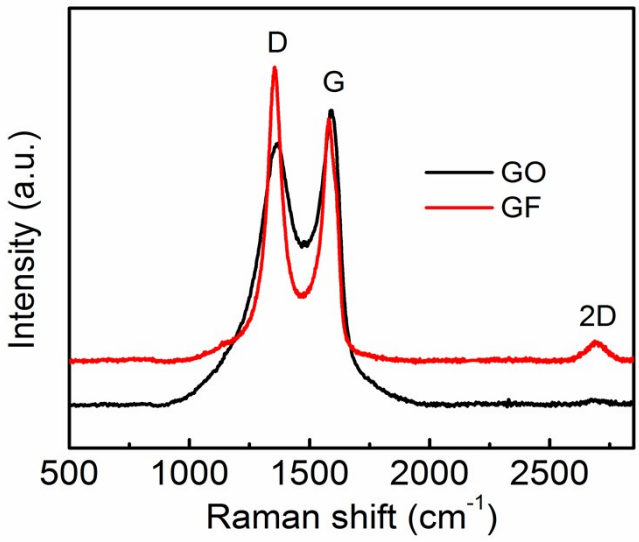

Fig. S7 Raman spectra of GO and GF.

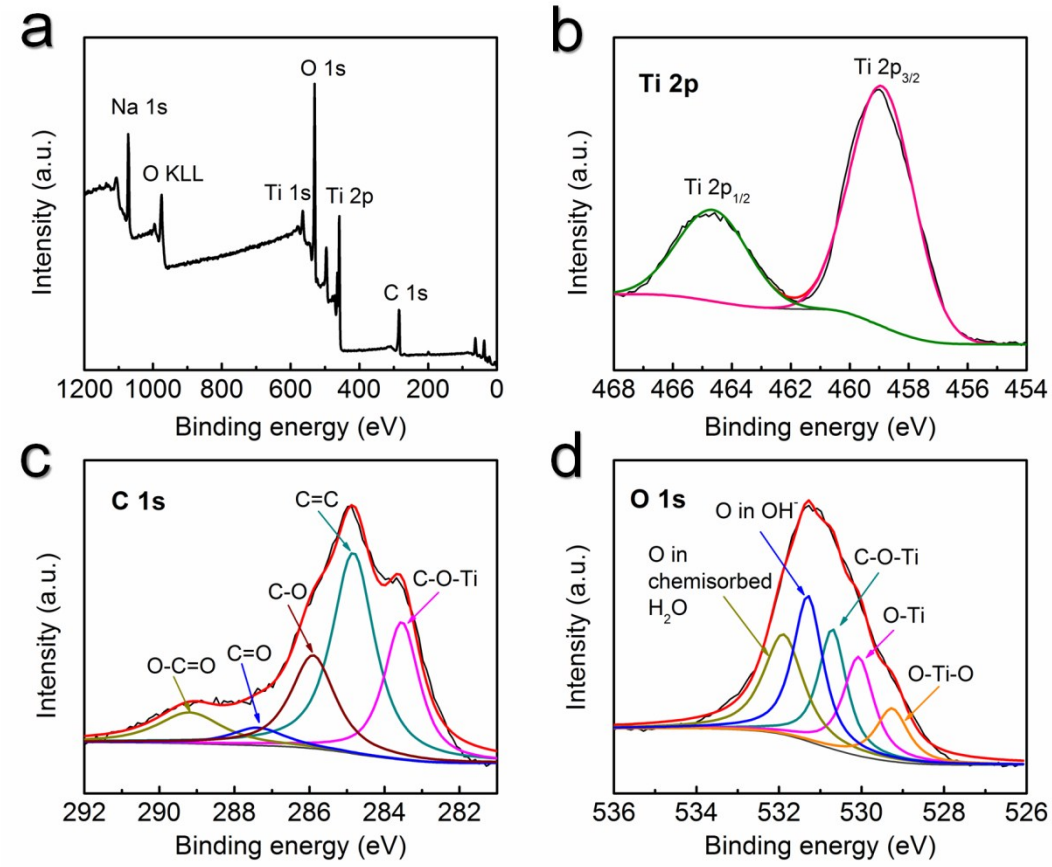

Fig. S8 (a) XPS survey spectrum of NTO/GFs. High resolution XPS spectra of (b) Ti 2p, (c) C 1s and (d) O 1s.

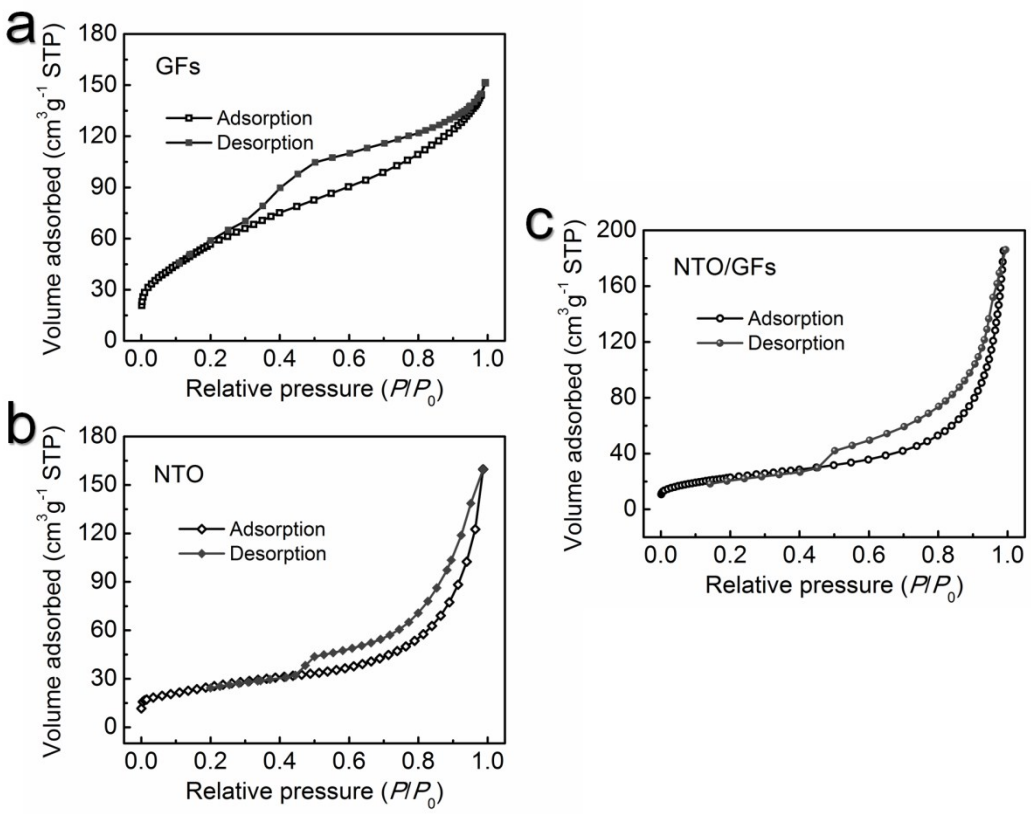

Fig. S9 Nitrogen adsorption–desorption isotherms of (a) GFs, (b) NTO and (c) NTO/GFs.

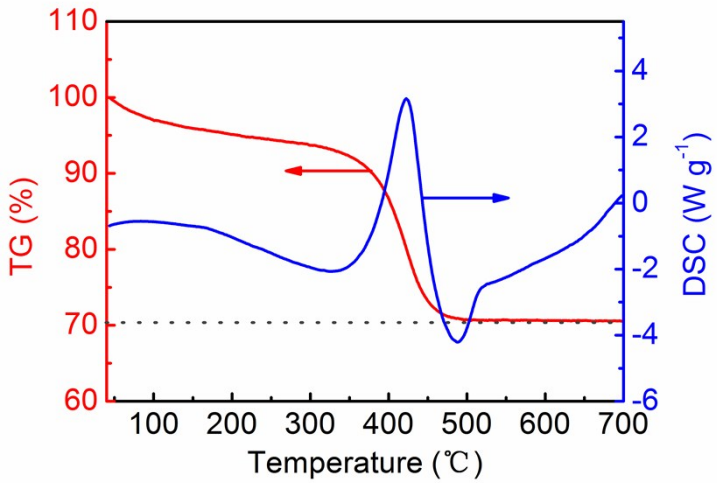

Fig. S10 TG/DSC profile of NTO/GFs.

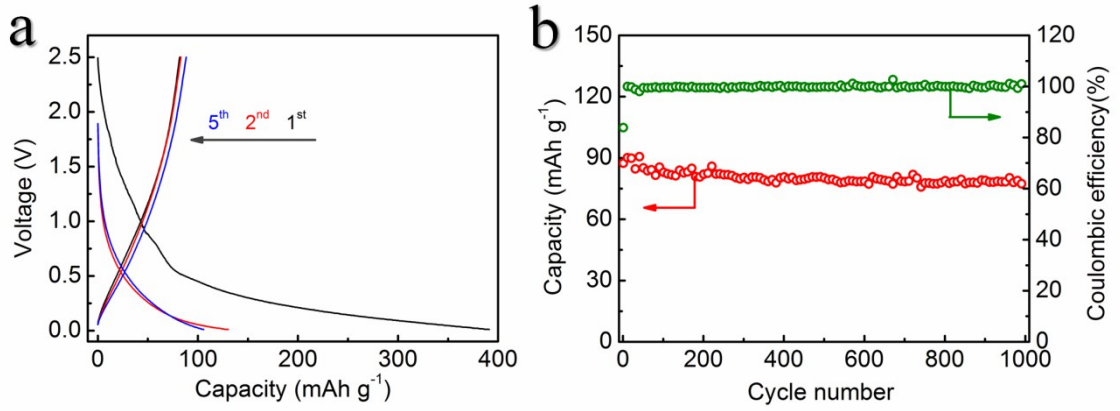

Fig. S11 Galvanostatic charge/discharge profiles (a) and long-term cycle property of GFs as anode in NIB at 0.1 A g^{-1}.

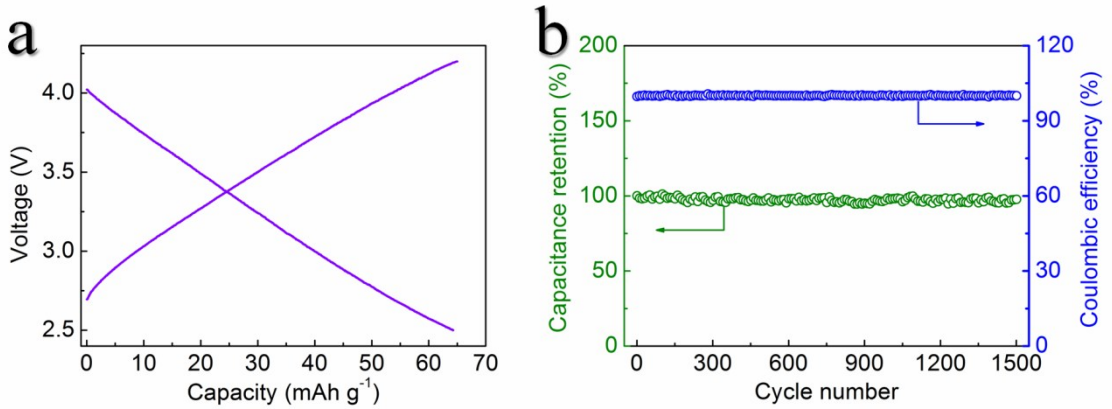

Fig. S12 Galvanostatic charge/discharge profiles (a) and long-term cycle property of GFs as cathode in NIB at 0.1 A g^{-1}.