

Electronic Supplementary Information

Graphene-V₂O₅·nH₂O xerogel composite cathodes for lithium ion batteries

Guodong Du,^a Kuok Hau Seng,^a Zaiping Guo^{*ab}, Jun Liu,^{*c} Wenxian Li,^a Dianzeng Jia,^{*d} Chris Cook,^b

Zongwen Liu^e and Huakun Liu^a

^aInstitute for Superconducting and Electronic Materials, University of Wollongong, NSW 2522, Australia

^bSchool of Mechanical, Materials and Mechatronics Engineering, University of Wollongong, NSW 2522, Australia

^cDepartment of Materials Science and Engineering, Central South University, Hunan 410083, P.R.China

^dInstitute of Applied Chemistry, Xinjiang University, Urumqi 830046, P.R.China

*Email: zguo@uow.edu.au, Fax: +61 2 4221 5731; liujun4982004@yahoo.com.cn; jdz@xju.edu.cn

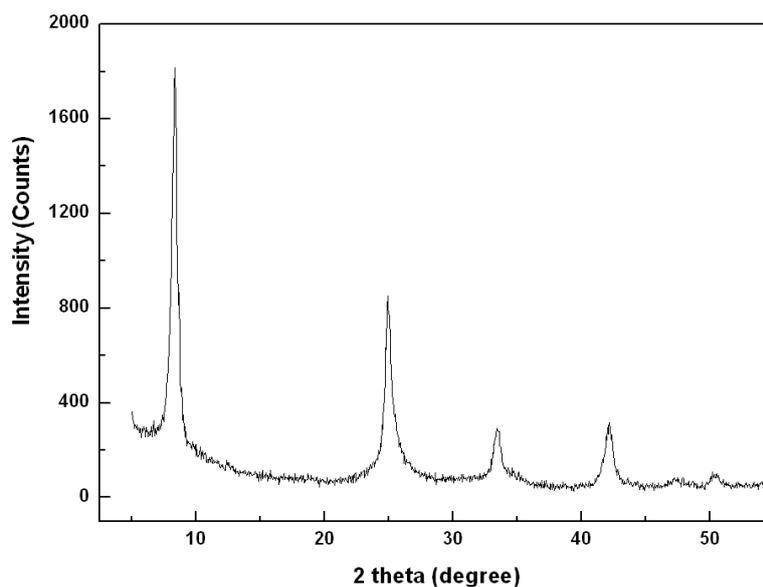


Fig. S1 XRD pattern of composite 2 dried at 300 °C for 2 hrs.

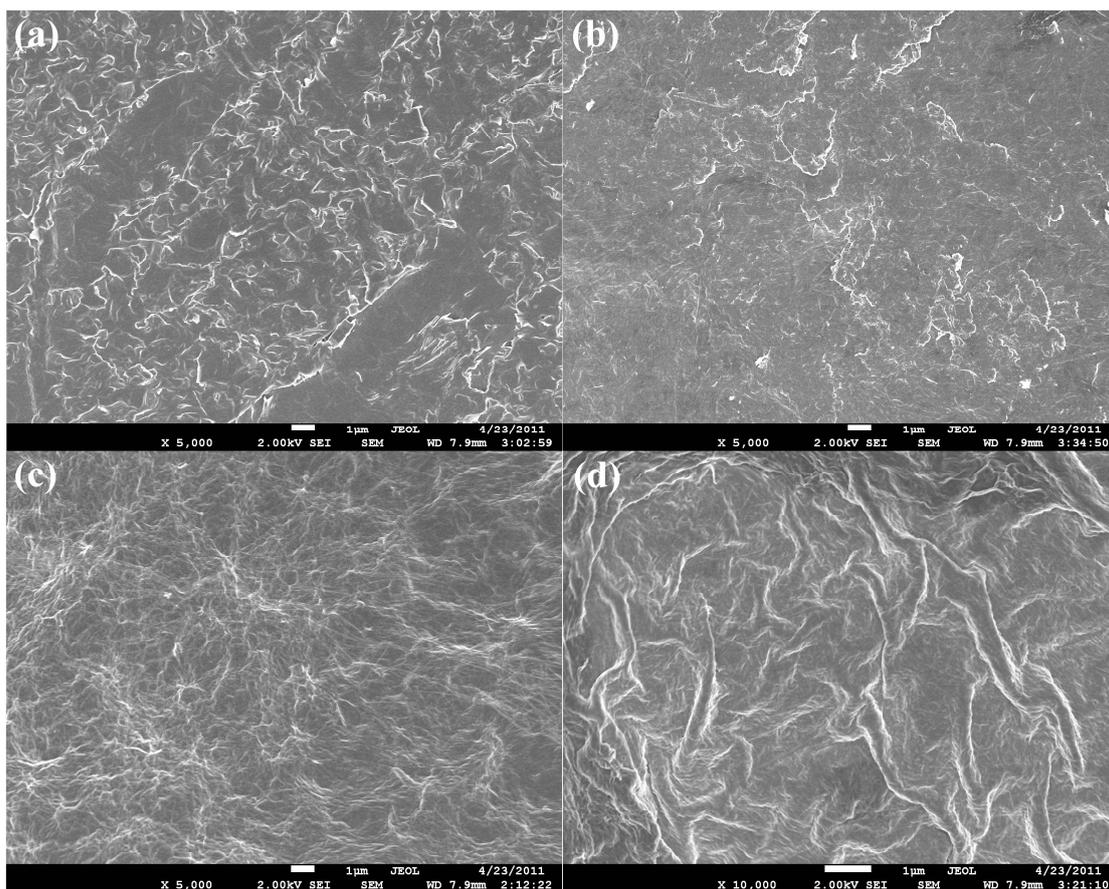


Fig. S2 FESEM images of samples dried at 200 °C: (a) $V_2O_5 \cdot nH_2O$ xerogel, (b) composite 1, (c) composite 2, and (d) composite 3.

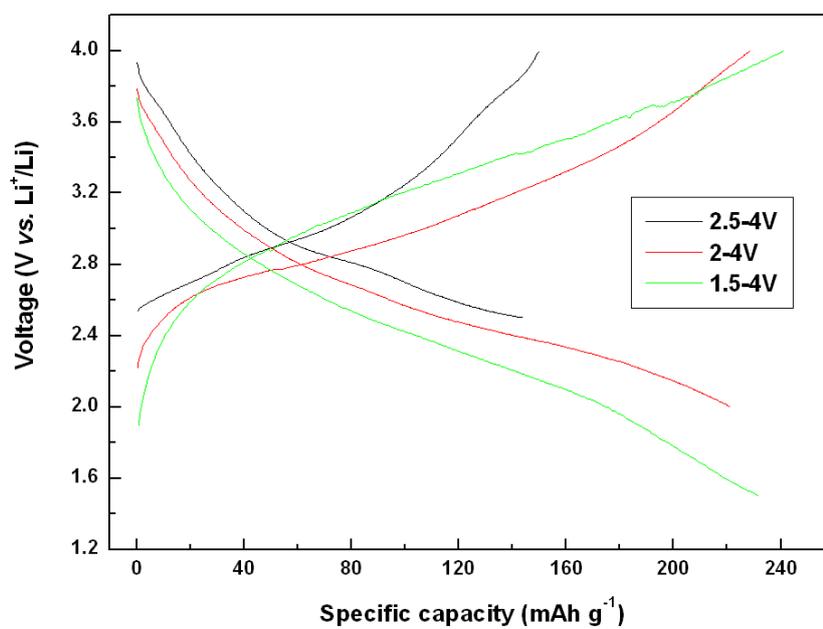


Fig. S3 Galvanostatic charge/discharge curves of composite 2 for the 10th cycle in different voltage ranges.