

## Supporting Information

### **Directional Synthesis of Tin Oxide@Graphene Nanocomposites via a One-Step Up-Scalable Wet-mechanochemical Route for Lithium ion Batteries**

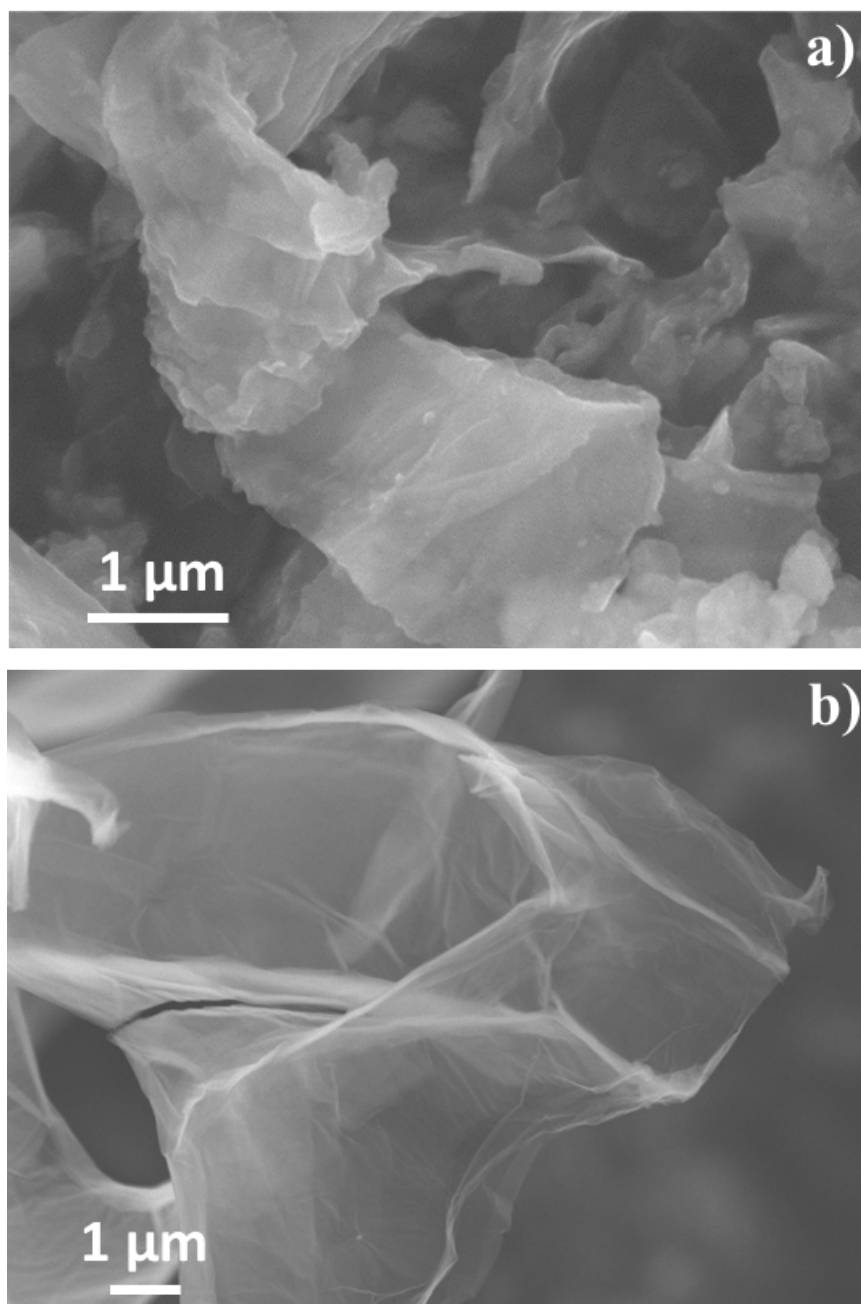
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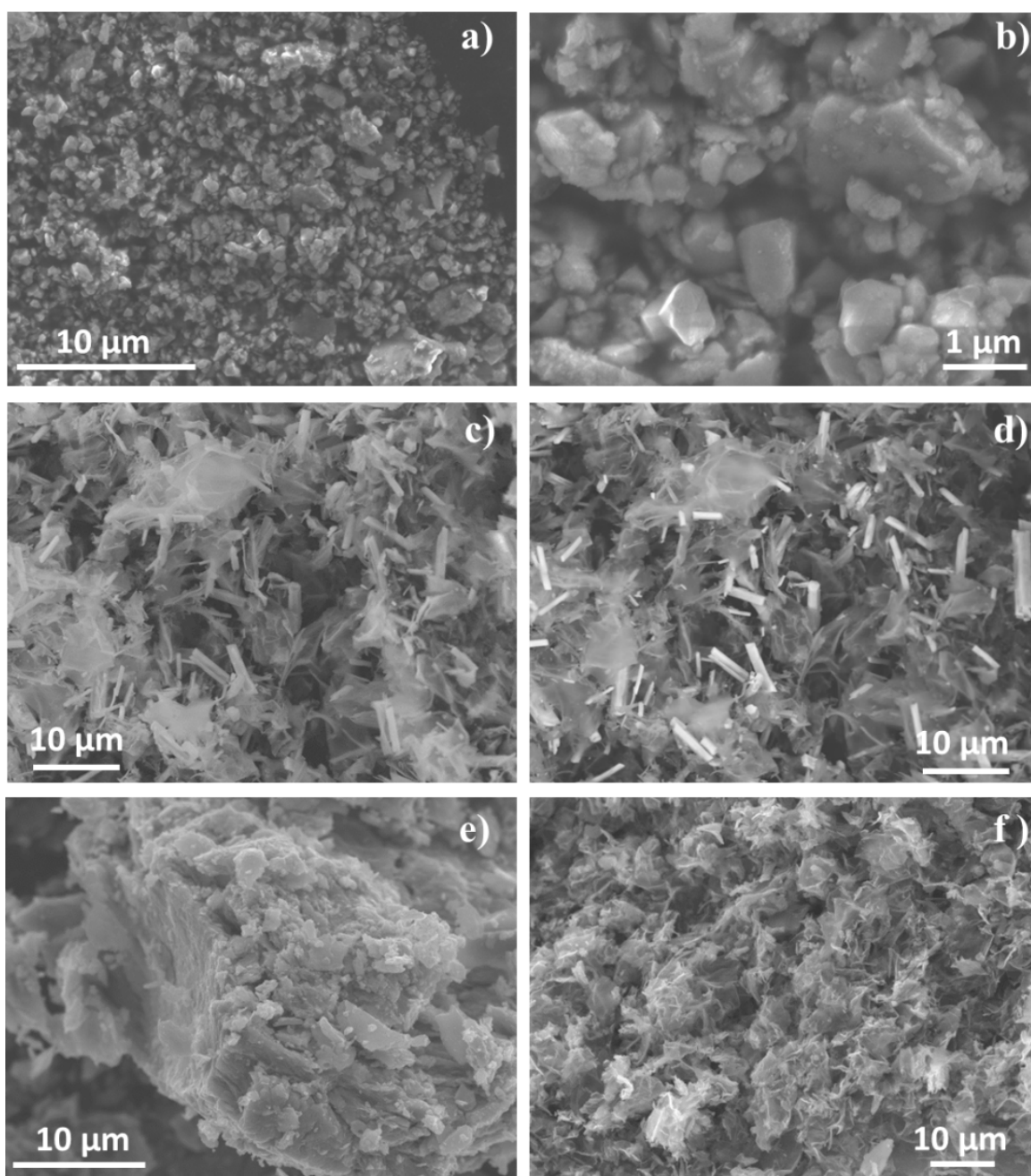
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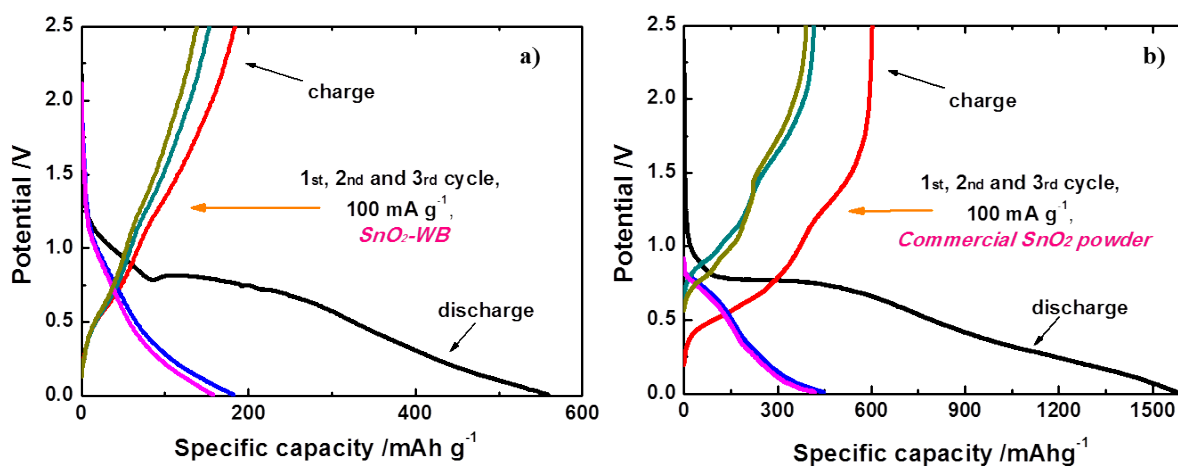
E-mail: [s.zhang@griffith.edu.au](mailto:s.zhang@griffith.edu.au)



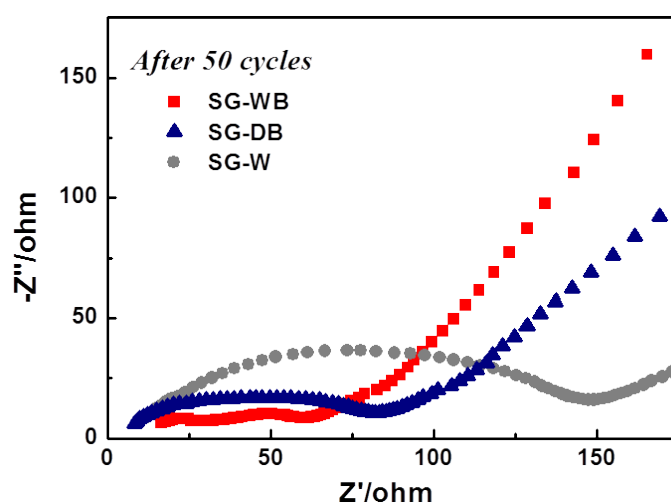
**Fig. S1** SEM images of SG-WB (a) and GO (b).



**Fig S2.** SEM images of SnO<sub>2</sub>-WB (a), (b), SG-W (c), the back-scattered electron analysis image of SG-W (d), SG-DB (e), and SG-WB (f).



**Fig S3.** the 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> cycle charge-discharge profiles at a current density of 100 mA g<sup>-1</sup> in the voltage range 0.01~2.5 V for SnO<sub>2</sub>-WB (a), and commercial SnO<sub>2</sub> powder (b), respectively.



**Fig S4.** Nyquist plots of SG-WB electrode (a), SG-DB electrode (b), and SG-W electrode (c) after 50 cycles.