

Supporting Information

Ti-Sn-O Composite Oxides Coated with N-doped Carbon Exhibiting Enhanced Lithium Storage Performance

Liu-Xia Zhang¹, Tao Li¹, Rui-Lin Bai², Yong-Xin Qi¹, Ning Lun^{*1}, Yu-Jun Bai^{*1}

¹Key Laboratory for Liquid–Solid Structural Evolution and Processing of Materials
(Ministry of Education), Shandong University, Jinan 250061, People's Republic of
China

² Shandong Experimental High School, Jinan 250001, People's Republic of China

* Corresponding author. Tel/Fax: +86 531 88392315. E-mail address:
bj97@126.com (Y.-J. Bai); lunning66@sdu.edu.cn (N. Lun).

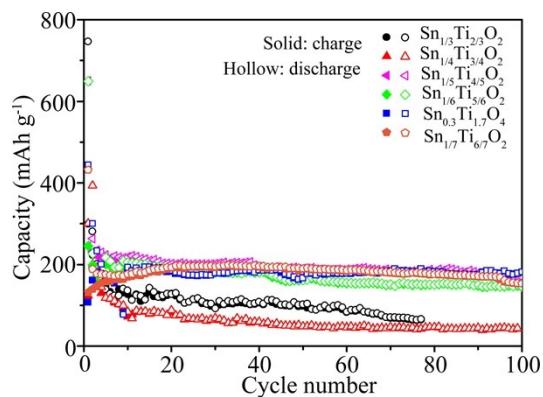


Fig. S1 Cycling performance at 100 mA g⁻¹ for the carbon-coated $\text{Sn}_{1/3}\text{Ti}_{2/3}\text{O}_2$, $\text{Sn}_{1/4}\text{Ti}_{3/4}\text{O}_2$, $\text{Sn}_{1/5}\text{Ti}_{4/5}\text{O}_2$, $\text{Sn}_{1/6}\text{Ti}_{5/6}\text{O}_2$, $\text{Sn}_{0.3}\text{Ti}_{1.7}\text{O}_4$ and $\text{Sn}_{1/7}\text{Ti}_{6/7}\text{O}_2$ using glucose as the carbon source.

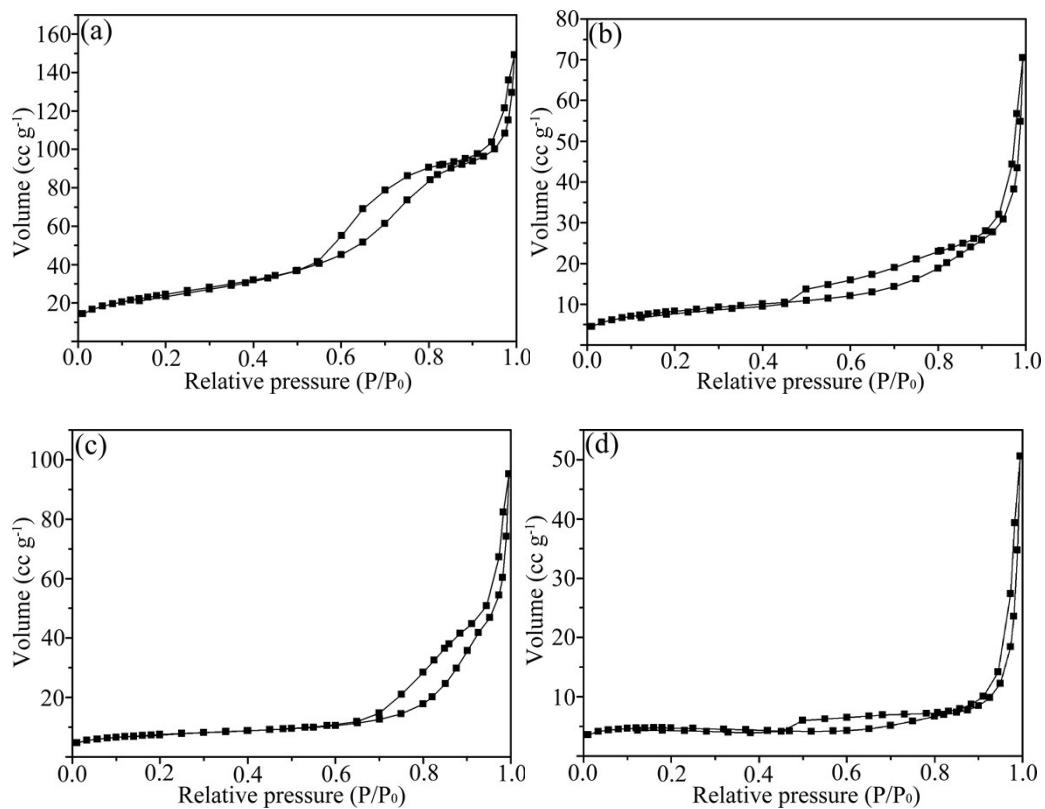


Fig. S2 Nitrogen adsorption/desorption isotherms of (a) S1-400, (b) S1-400C1, (c) S1-600C1, (d) S1-400C2.

Table S1 The R_{ct} values of S1-400C1 charging at 100 mA g⁻¹ and 500 mA g⁻¹ for different cycles.

Current density / mA g ⁻¹	R_{ct} (Ω) after various cycles					
	0	5	25	50	100	200
100	—	153.	264.	624.	364.	57.5
500	107	101.	78.7	74.2	62.9	67.1