

## Supporting Information of

### **Boosting the charge transfer of Li<sub>2</sub>TiSiO<sub>5</sub> by Nitrogen-Doped Carbon Nanofibers: Towards High-rate, Long-life Lithium-ion Batteries**

Junfang Liu <sup>1,#</sup>, Die Su <sup>1,#</sup>, Li Liu <sup>1,\*</sup>, Zhixiao Liu <sup>2,\*</sup>, Su Nie <sup>1</sup>, Yue Zhang <sup>1</sup>, Jing Xia <sup>1</sup>,  
Huiqiu Deng <sup>3</sup>, Xianyou Wang <sup>1</sup>

<sup>1</sup> National Base for International Science & Technology Cooperation, National Local Joint

Engineering Laboratory for Key materials of New Energy Storage Battery, Hunan Province Key

Laboratory of Electrochemical Energy Storage and Conversion, School of Chemistry, Xiangtan

University, Xiangtan 411105, People's Republic of China

<sup>2</sup> College of Materials Science and engineering, Hunan University, Changsha 410082, Peoples' Republic of China

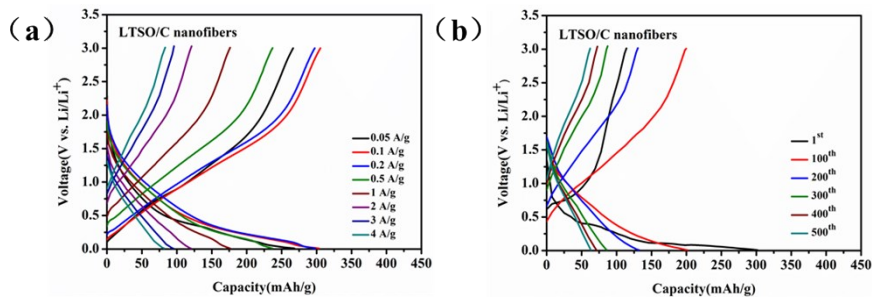
<sup>3</sup> School of Physics and Electronics, Hunan University, Changsha 410082, Peoples' Republic of China

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#Co-first author: contributed equally to this work

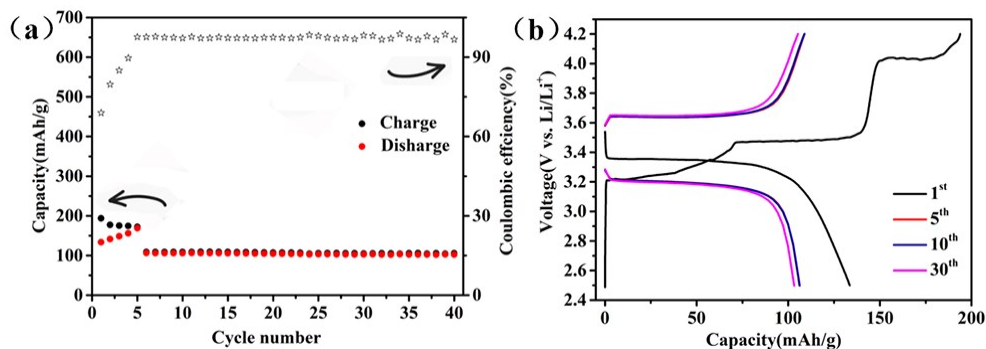
\*Corresponding authors E-mail:

[liulili1203@126.com](mailto:liulili1203@126.com) (L. Liu), [zxliu@hnu.edu.cn](mailto:zxliu@hnu.edu.cn) (Z. Liu)



**Fig. S1 (a)** Charge/discharge curves of LTSO/C nanofibers at 0.05- 4 A g<sup>-1</sup> in the range of 0.01-3.0 V; **(b)**

Continuous discharge and charge curves of LTSO/C nanofibers electrode under a current density of 1 A g<sup>-1</sup>.



**Fig. S2 (a)** Cycle performance of the commercial LFP at current density of 1 A g<sup>-1</sup> after activating 5

cycles at 0.1 A g<sup>-1</sup> and **(b)** corresponding charge/discharge curves of commercial LFP in the range of 2.5-

4.2 V.

**Table S1** Comparison of the electrochemical performance between this work and previously reported LTSO-based materials as anode in lithium ion batteries

Materials	Rate Performance	Cycle Performance	References
	(mAh g <sup>-1</sup> /A g <sup>-1</sup> )	(mAh g <sup>-1</sup> (cycle number) A g <sup>-1</sup> )	
LTSO/C	258/0.1	210/1000 <sup>th</sup> /0.5	[S1]
nanofibers	107.3/10		
C@LTSO/CNT	430/0.1575	125/1500 <sup>th</sup> /0.7875	[S2]
	125/3.15		
LTSO-EG	225/0.1	210/100 <sup>th</sup> /0.1	[S3]
	140/4		
3DC@LTSO	350/0.2	100/6000 <sup>th</sup> /2.0	[S4]
	105/10		
LTSO	308/0.02	205/1000 <sup>th</sup> /0.5	[S5]
	180/1		
<b>LTSO/NDC</b>	<b>322.57/0.05</b>	<b>326.3/800<sup>th</sup>/0.5</b>	<b>this work</b>
<b>nanofibers</b>	<b>108.3/4</b>		

## References

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