

Supporting Information

Both Composite TiO_2 and Extending of discharge voltage Range for the Capacity

Enhancement of $\text{Li}_4\text{Ti}_5\text{O}_{12}$ battery

Meng Ding, Hui Liu*, Xiangnan Zhao, Lingyan Pang*, Lu Deng, Mengyan Li

School of Materials Science and Engineering, Shaanxi University of Science and
Technology

Xi'an 710021, P. R. China

*Corresponding author. Tel: +86-29-86177018; Fax: +86-29-86177018.
Email address: liuhui@sust.edu.cn (Hui Liu)

*Corresponding author. Tel: +86-29-86177018; Fax: +86-29-86177018.
Email address: hxplyl@126.com

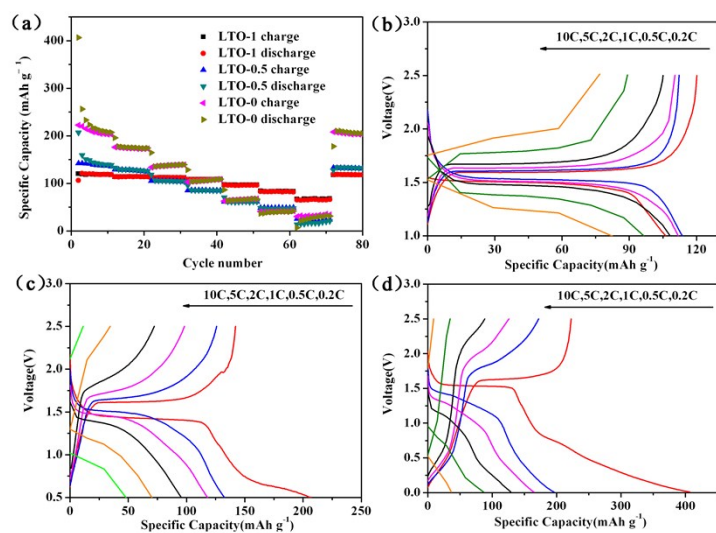


Fig. S1. (a) Rate performances of the LTO (LTO-1, LTO-0.5, and LTO-0) electrodes.

Typical charge/discharge curves of the LTO electrodes (b) LTO-1, (c) LTO-0.5, and

(d) LTO-0 at various current rates.

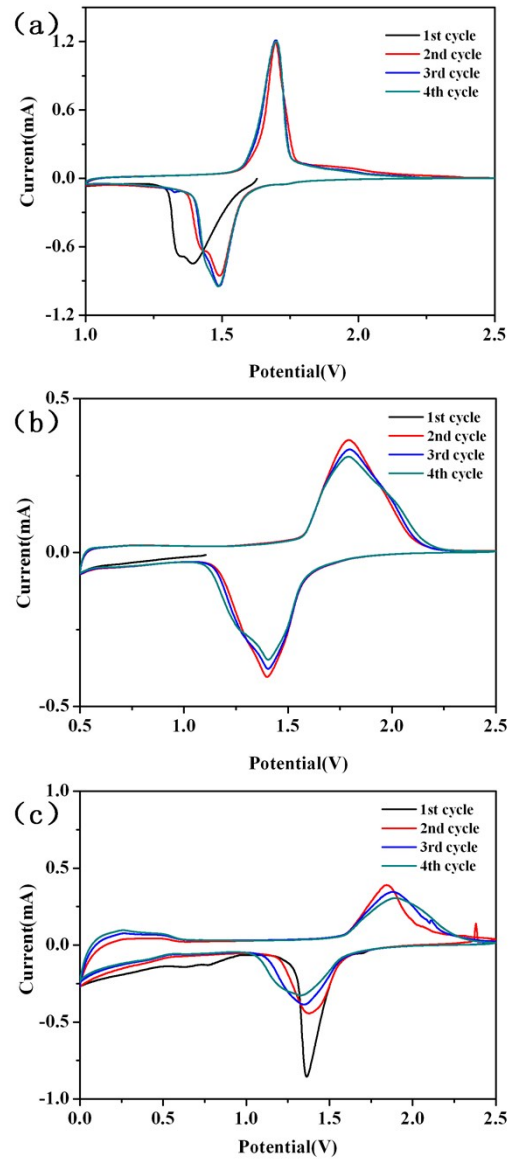


Fig.S2. CV curves of the LTO electrodes (a) LTO-1, (b) LTO-0.5, and (c) LTO-0 at a scan rate of 0.1 mV s⁻¹ between various voltage ranges.

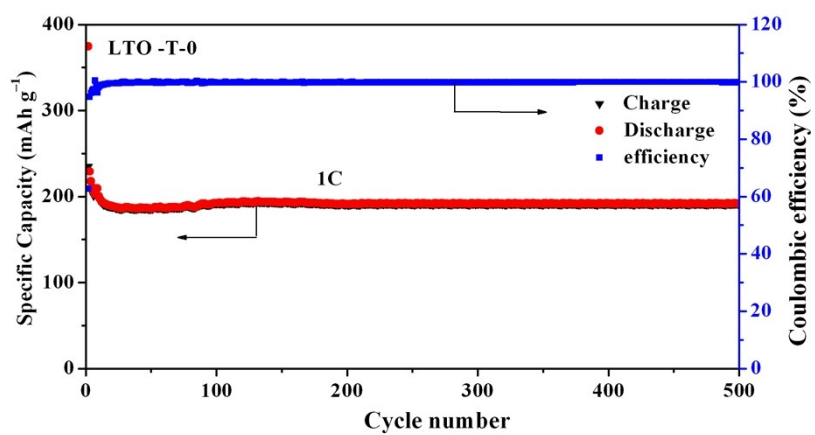


Fig.S3. Cycling performance and coulombic efficiency at a rates of 1 C for LTO-T-0.

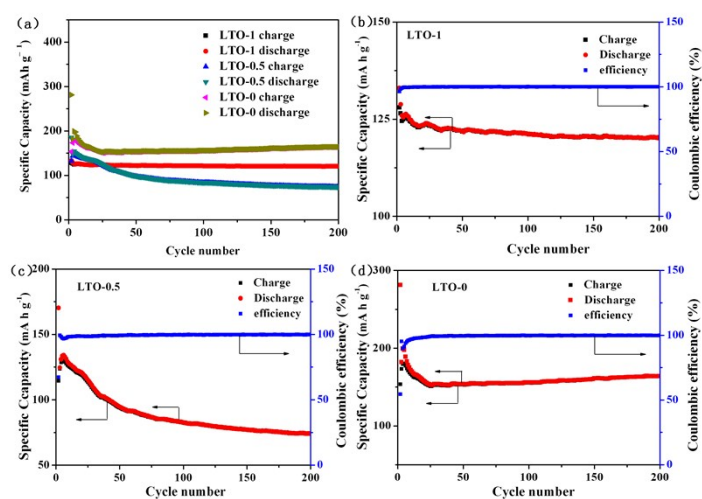


Fig.S4. (a) Cycling performance of the LTO electrodes (LTO-1, LTO-0.5, and LTO-0) at charge/discharge rates of 1 C, the coulomb efficiency of the LTO-TiO₂ electrodes, (LTO-1 (b), LTO-0.5 (c), and LTO-0 (d)).

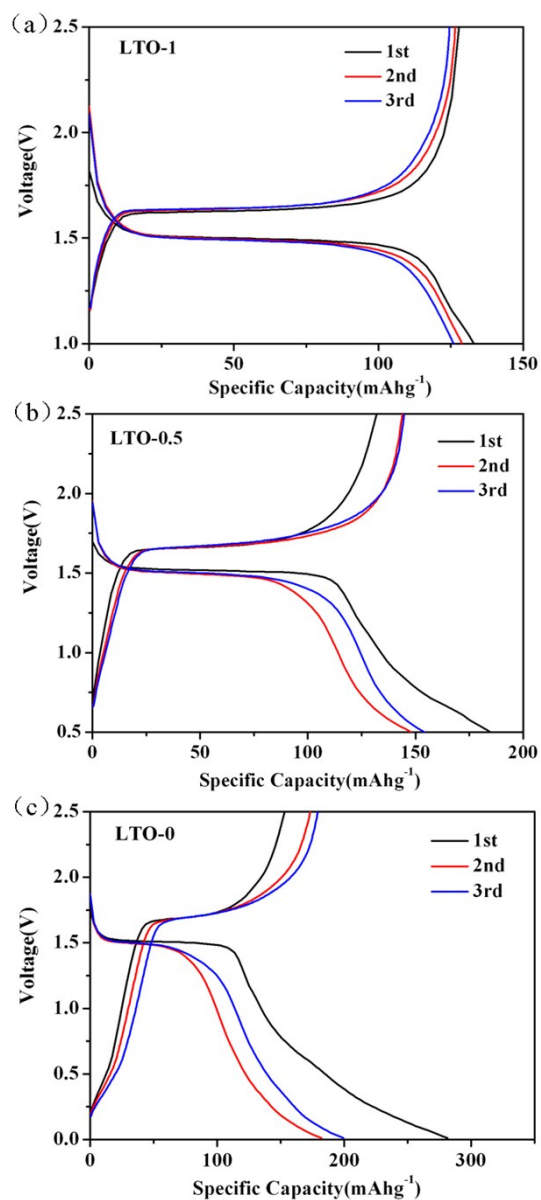


Fig.S5. Initial three discharge-charge curves of the LTO electrodes (LTO-1 (a), LTO-0.5 (b), and LTO-0 (c)) at charge-discharge rates of 1 C.