Electronic Supporting Information

Blue hydrogenated lithium titanate as high-rate anode material for lithium-ion batteries

Jingxia Qiu, Chao Lai, Evan Gray, Sheng Li, Siyao Qiu, Ekaterina Strounina, Chenghua Sun, Huijun Zhao, and Shanqing Zhang*

* Corresponding author. Tel: 61 5552 8155; Fax: 61 5552 8067; E-mail: s.zhang@griffith.edu.au

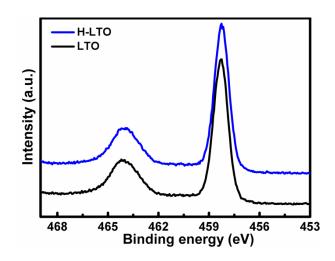


Fig. S1 XPS of the blue H-LTO and pristine LTO.

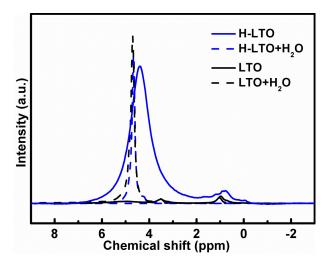


Fig. S2 ¹H NMR solid state spectra of the chemical shift of LTO and H-LTO with and without H_2O .

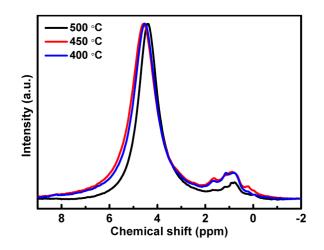


Fig. S3 ¹H NMR solid state spectra of the chemical shift of LTO and H-LTO at different temperature.

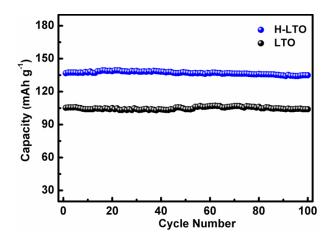


Fig. S4 Specific charge and discharge capacities of the white and blue LTO at 5 C rate.

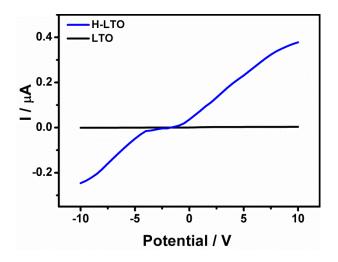


Fig. S5 *i*–*V* current measurement of the blue H-LTO and white pristine LTO pellets that were prepared by compressing 0.10 g of powders under 15 tons inch⁻² pressure.

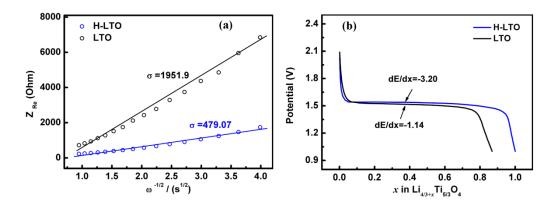


Fig. S6 (a) Z_{Re} vs. $\omega^{-1/2}$ in *plots* in the low frequency region according to Nyquist plots of the pristine LTO and blue H-LTO; (b) The specific depth of discharge curves of the pristine LTO and H-LTO which were used to calculate the lithium diffusion coefficient D_{Li}.