Supporting Information for

Improved Electrode Reversibility of Anionic Redox with Highly Concentrated Electrolyte Solution and Aramid-Coated Polyolefin Separator

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Supporting Figures



Figure S1. STEM images of nanosized $Li_{1.14}Ti_{0.29}Mn_{0.57}O_2$ with different magnifications. FFT analysis of STEM image with corresponding *d*-spacing is also shown.



Figure S2. (a-c) Electrochemical properties of as-prepared and $Li_{1.14}Ti_{0.29}Mn_{0.57}O_2$ treated by lowenergy (300 rpm) and high-energy (600 rpm) milling in Li cells at room temperature. (d) Discharge capacity retention of nanosized $Li_{1.14}Ti_{0.29}Mn_{0.57}O_2$ with HCE and glass fiber filter.



Figure S3. Rate-capability of nanosized $Li_{1.14}Ti_{0.29}Mn_{0.57}O_2$ in (left) 1 M LiPF₆ in EC/DMC and (right) LiFSA:DMC = 1:1.1 in a molar ratio. The cells were charged to 4.8 V at a rate of 50 mA g⁻¹ and held at 4.8 V for 1 h, and then discharged at different rates.



Figure S4. DSC curves of different electrolyte solutions without the charged electrode.