

A Flexible Lithium-Ion-Conducting Membrane with Highly Loaded Titanium Oxide Nanoparticles to Promote Charge Transfer for Lithium–Air Battery

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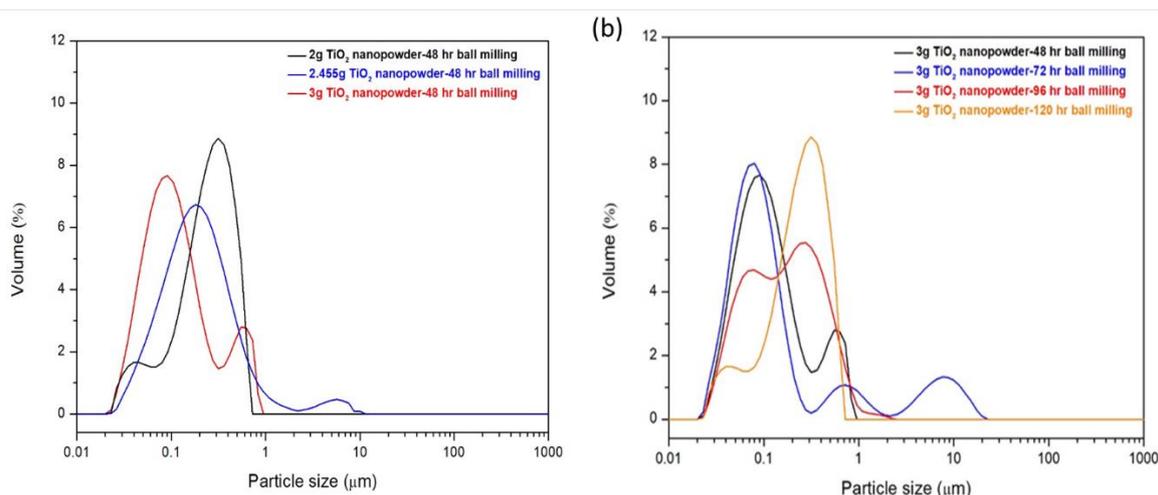


Figure S1. Ball milling conditions effects on prepared TiO₂ powder: (a) powder weight (b) ball milling time.

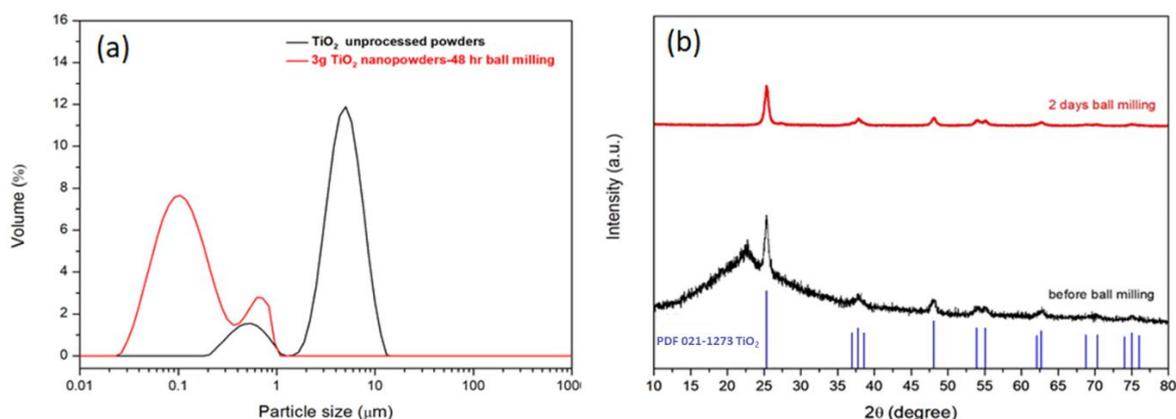


Figure S2. TiO₂ powder refinement before-and-after 48 hours ball milling treatment: (a) powder size distribution (b) XRD result.

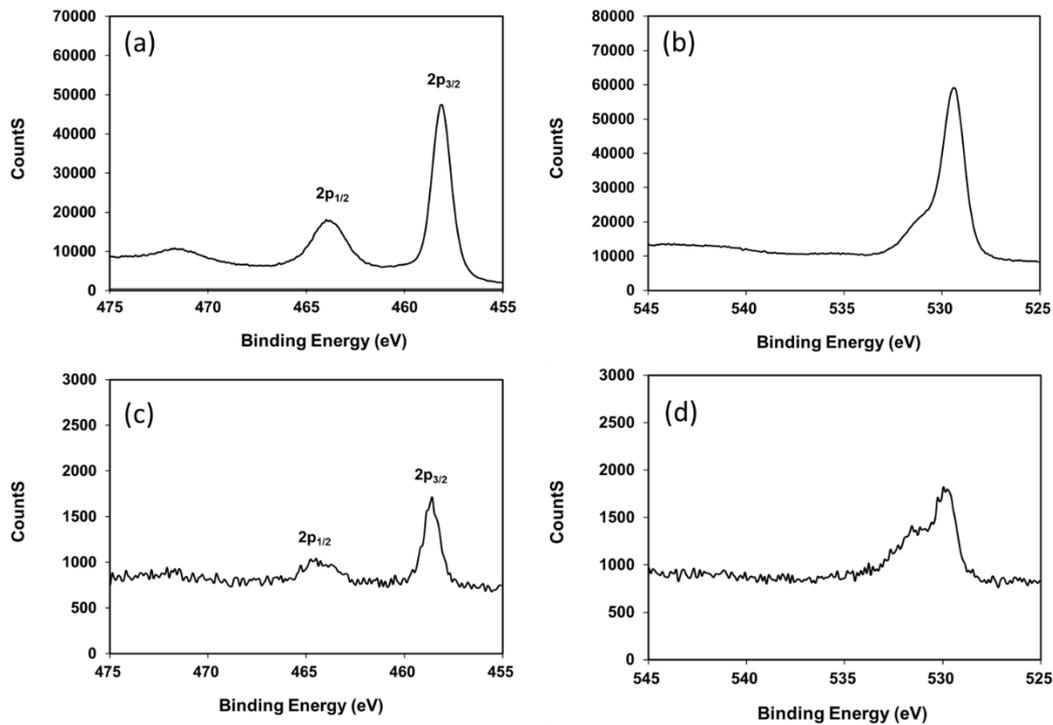


Figure S3. High-resolution XPS spectrum of commercial TiO₂ powder:(a) Ti 2p peaks and (b) O 1s peak; and as-prepared 50 wt% TiO₂ FC-LICM of (c) Ti 2p and (d) O 1s.

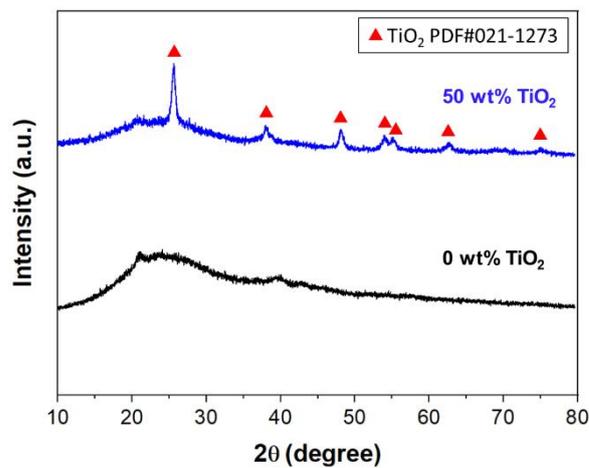


Figure S4. XRD result of 0 wt% TiO₂ and 50 wt% TiO₂ incorporated FC-LICM sample.

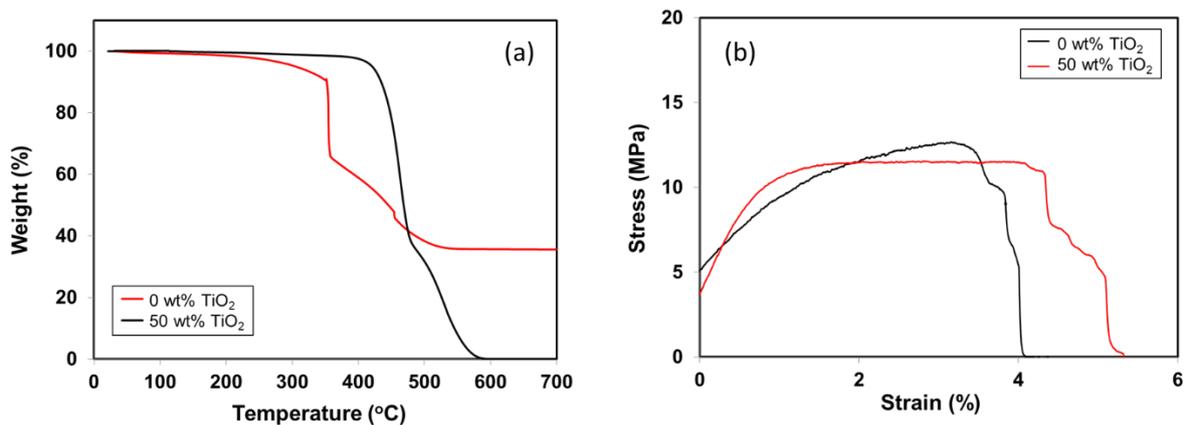


Figure S5. (a) TGA result and (b) tensile result for 0 wt% and 50 wt% TiO₂ incorporated FC-LICM samples.

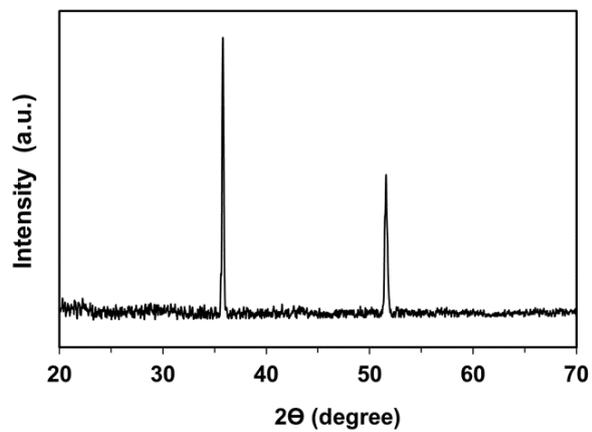


Figure S6. XRD pattern of the pristine lithium anode.