

Supporting Information

Fluorinated SEI Layer Induced by a Fire-Retardant Gel Polymer

Electrolyte Boosting Lateral Dendrite Growth

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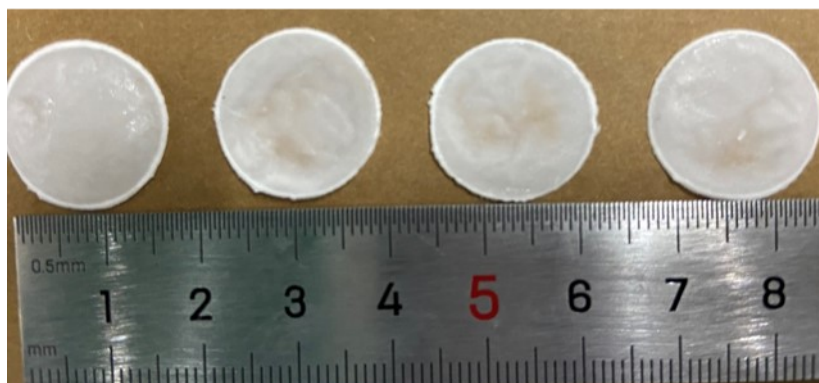


Figure S1. The digital photo of serials TPEs.

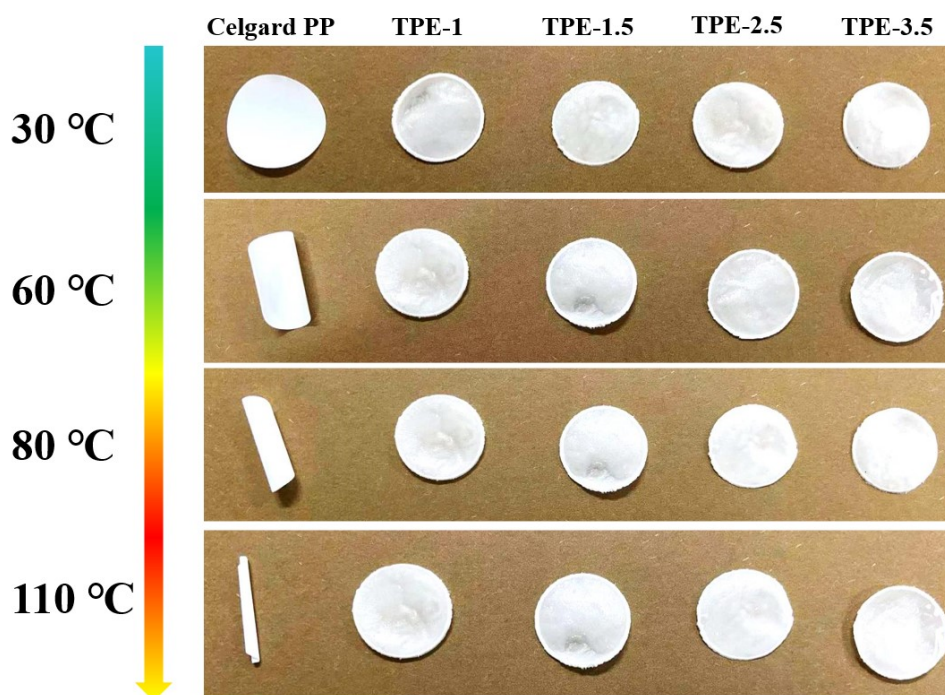


Figure S2. The temperature test from 30 to 110 °C for PP membrane and TPEs.

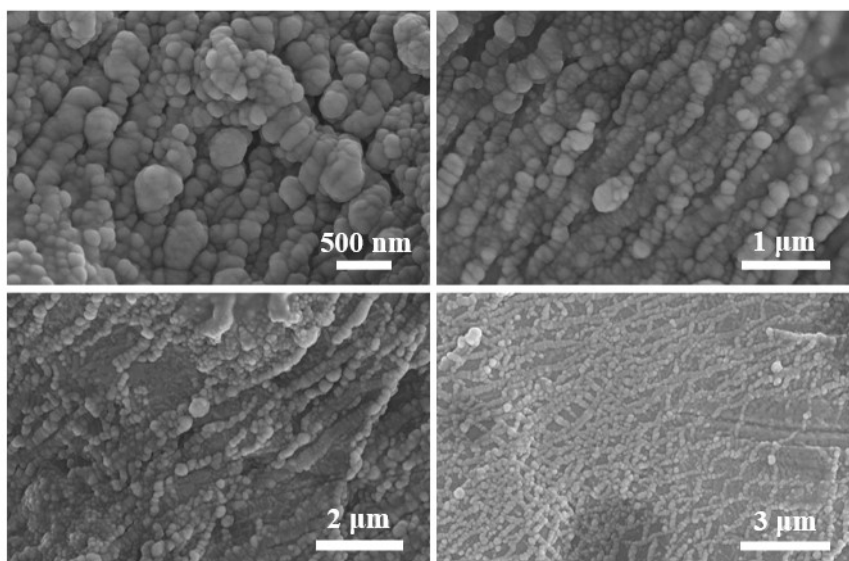


Figure S3. SEM images of cycled Li metal surface at different magnifications.

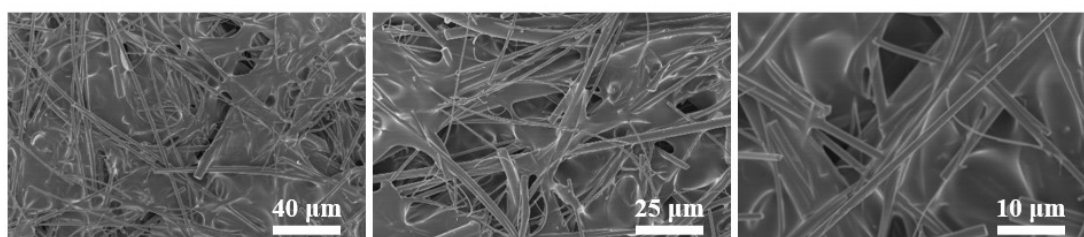


Figure S4. SEM images of cycled TPE surface at different magnifications.

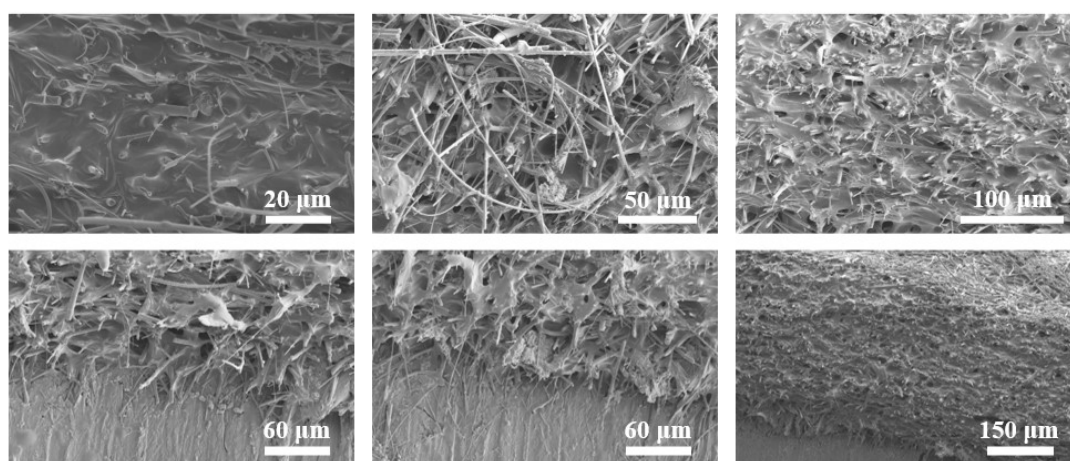


Figure S5. SEM images of TPE-1.5 and Li metal/TPE-1.5 electrolyte cross section at different magnifications.

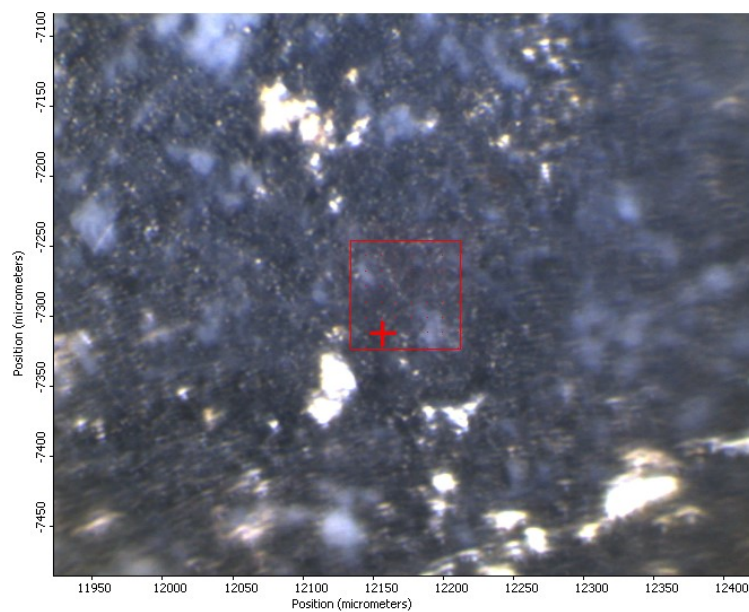


Figure S6. The optical images of Li surface collected by ThermoFisher Nicolet iN10.

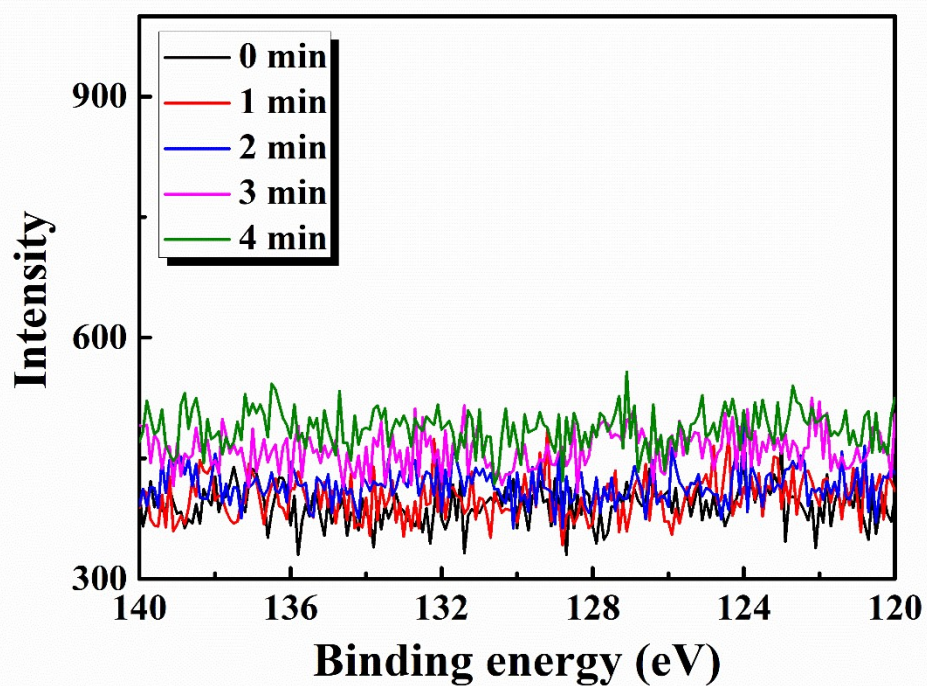


Figure S7. P 2p XPS spectra at various etching depth.

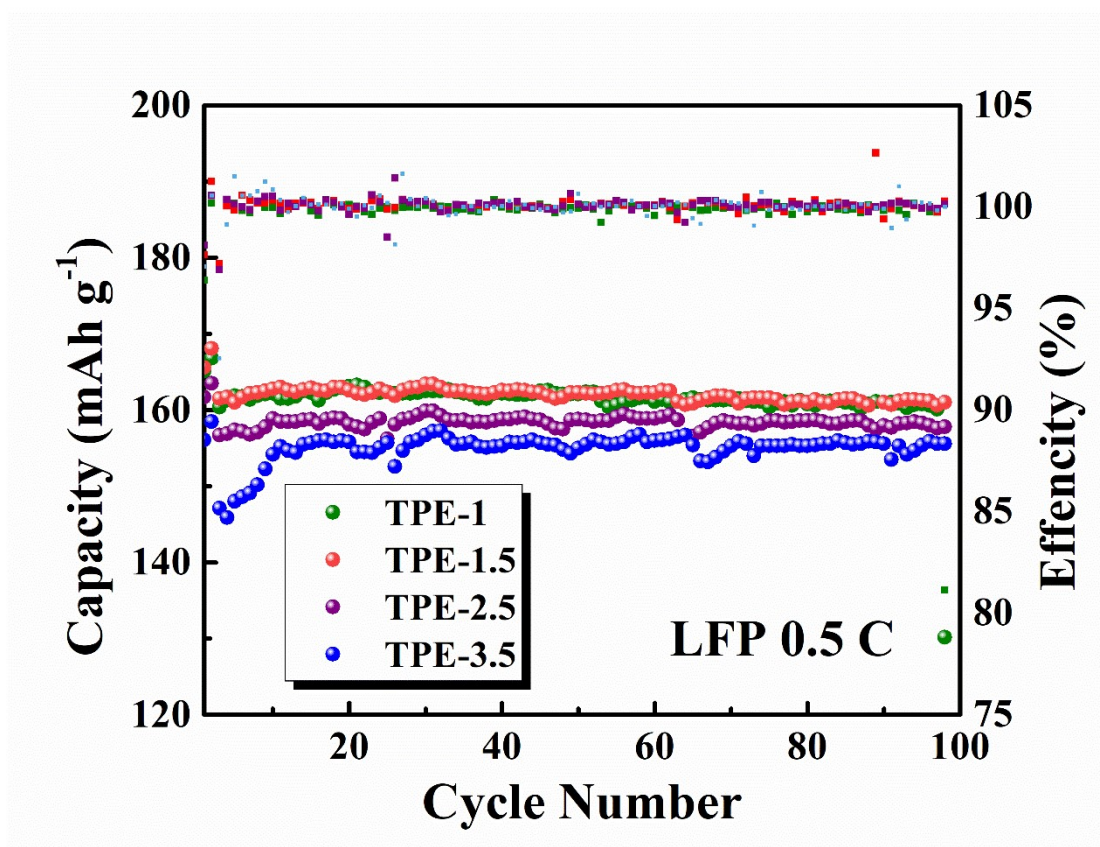


Figure S8. The galvanostatic charge-discharge performance of Li|LFP full batteries with different TPEs at 0.5 C rate.