

Supplementary Information

A flexible three-dimensional composite nanofiber enhanced quasi-solid electrolyte for high-performance lithium metal batteries

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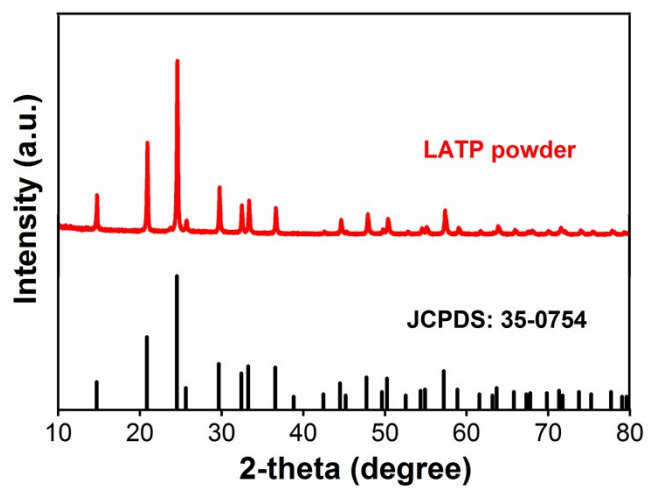


Fig. S1 LATP particles prepared by sol-gel method and milled for 12h



Fig. S2 Photo of the formed gel.

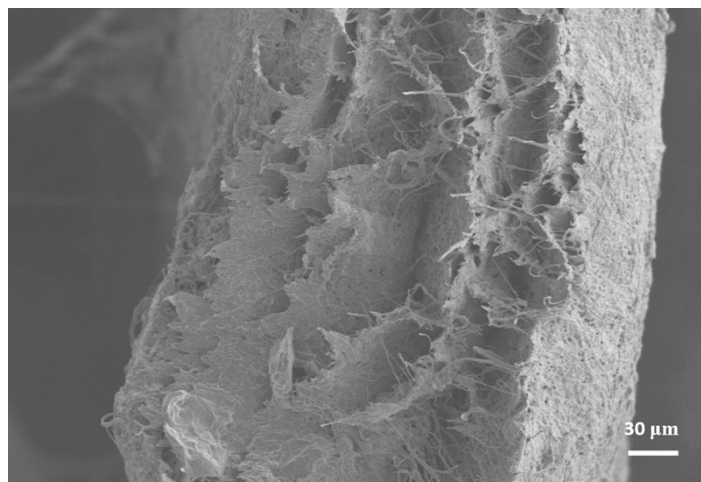


Fig. S3 The cross-sectional SEM images of the CGE.

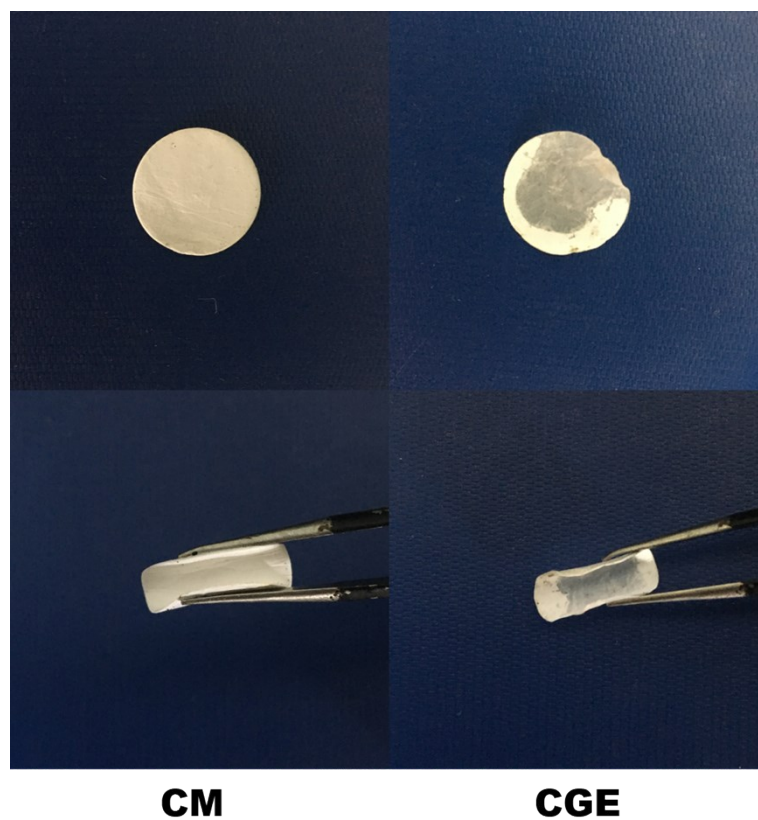


Fig. S4 Photos of the flexible composite membrane and the CGE.

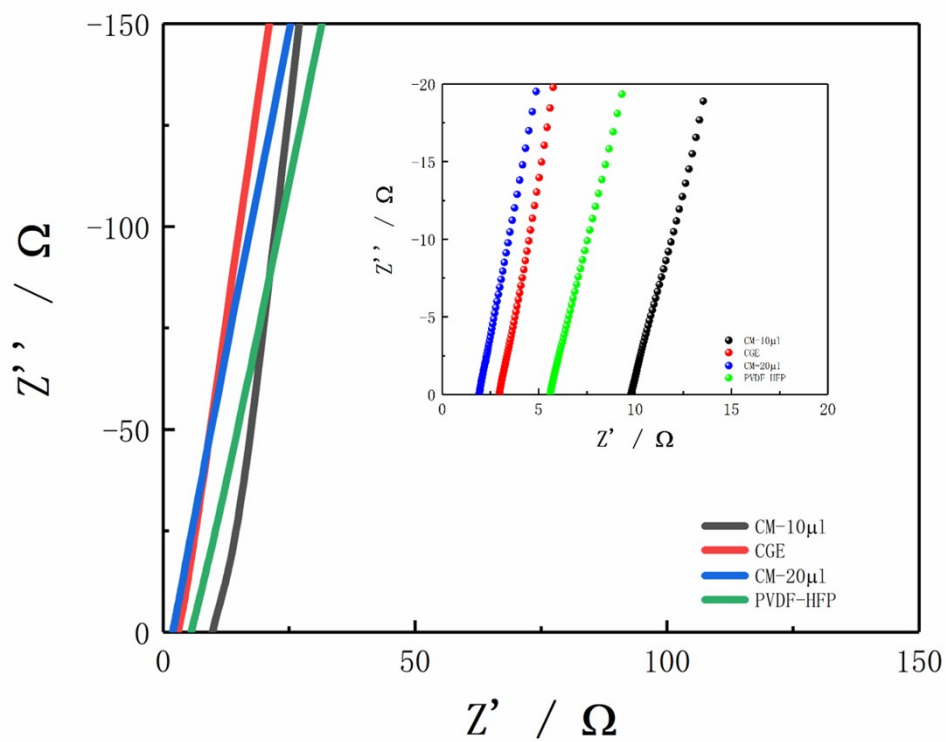


Fig. S5 EIS spectra of the CGE, the PVDF-HFP film with gel, and the composite membrane of LATP/PVDF-HFP (CM) with various gel contents on each side.

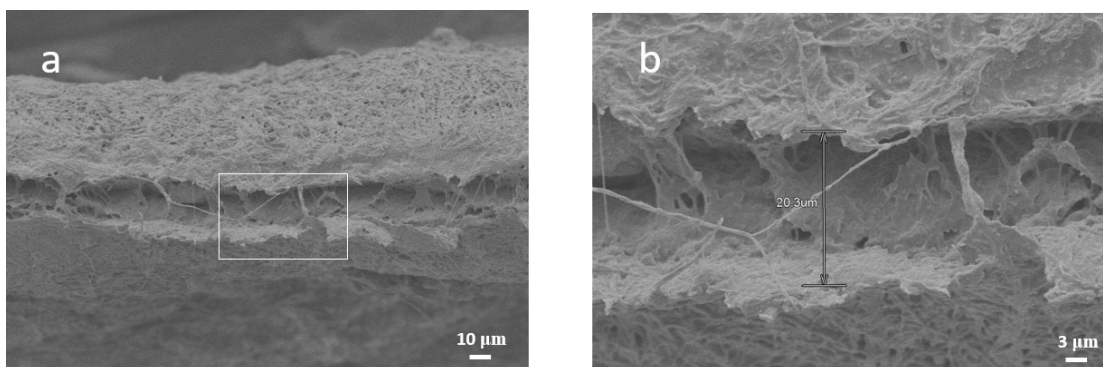


Fig. S6 SEM images of (a) Cross-sectional view of the CGE and (b) The magnified SEM image of marked area in (a).

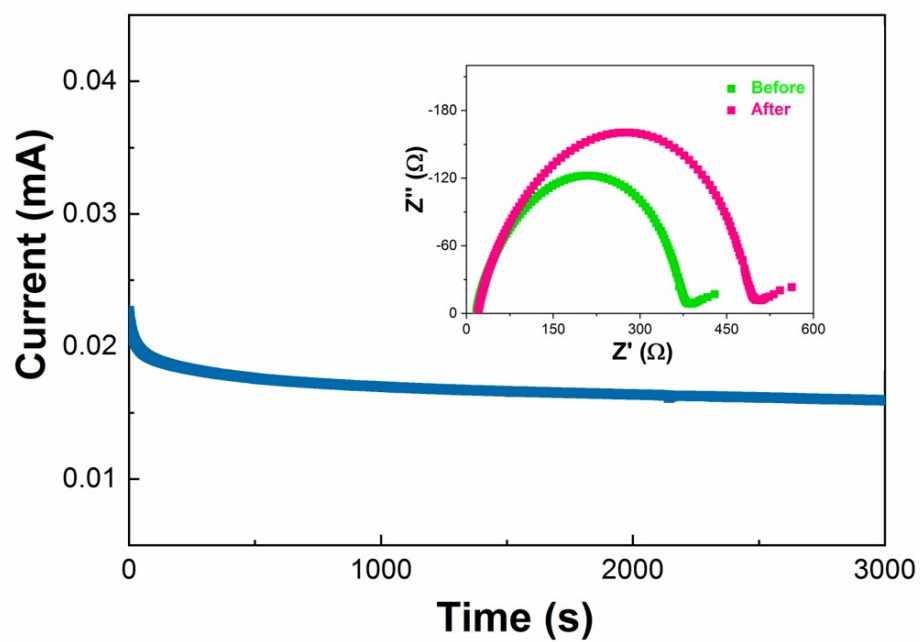


Fig. S7 Lithium ion transference number (t_{Li^+}) of the composite membrane without adding LATP particle.

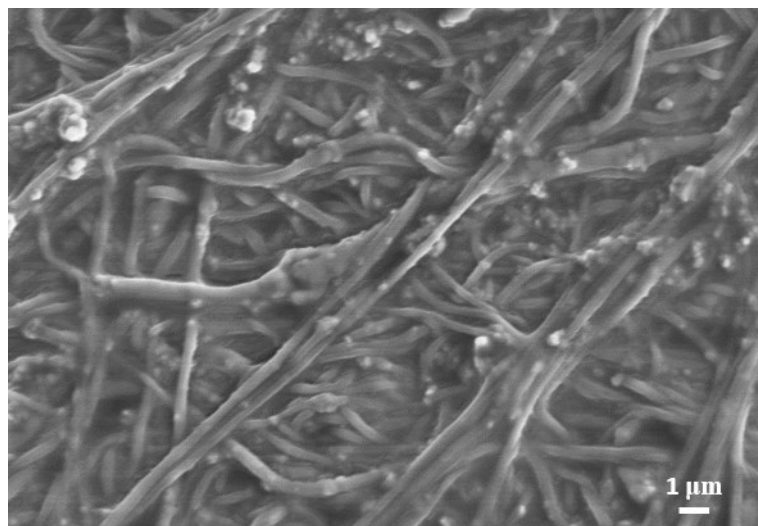


Fig. S8 SEM images of the surface of the CGE after charge and discharge cycles at 0.5 C rate for 300 cycles.

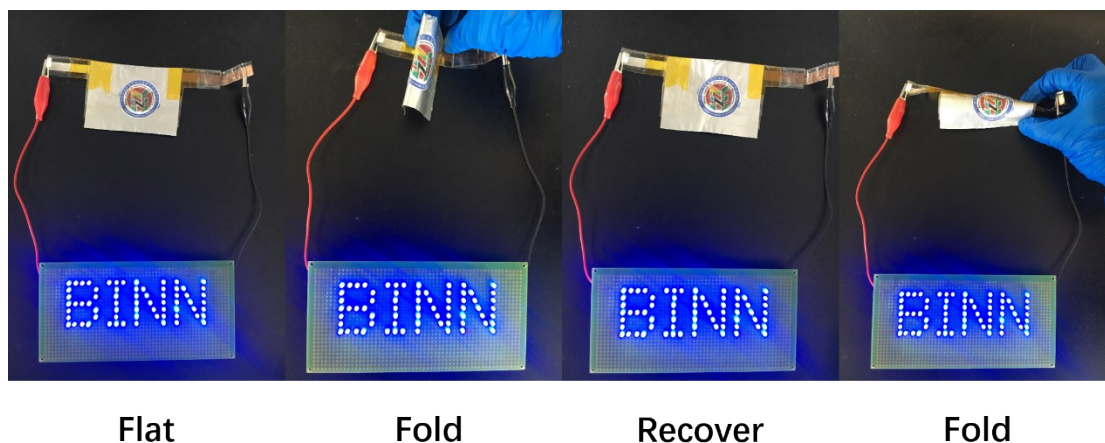


Fig. S9 Photos of the pouch battery under different states.