

Supporting Information

Proton Delivery through Dynamic 3D H-bond Network Initiated by Dense Hydroxyls for Advanced Ion-selective Membrane

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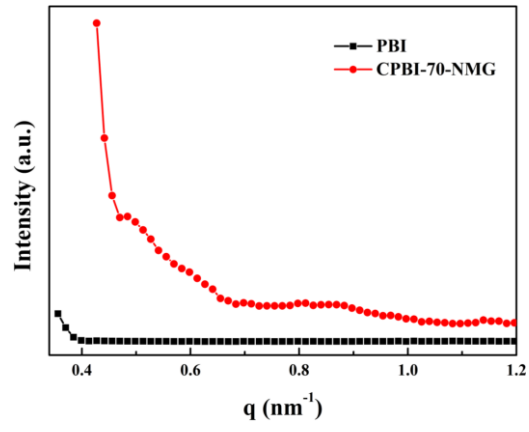


Figure S1. SAXS of PBI and CPBI-70-NMG membranes.

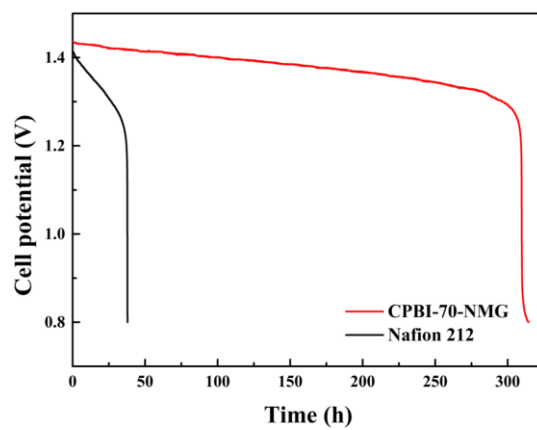


Figure S2. Self-discharge curves of VFB assembled with CPBI-70-NMG and Nafion 212 membranes.

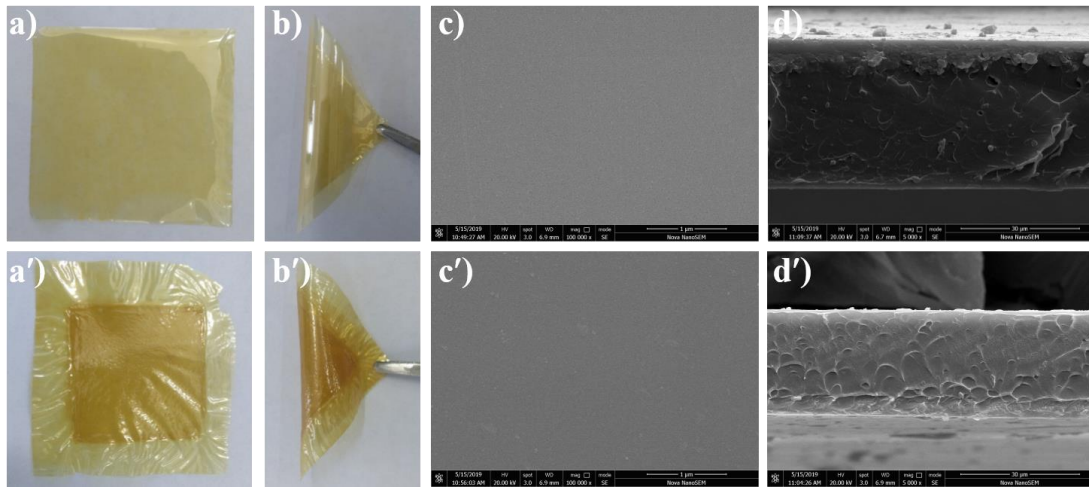


Figure S3. The morphological images. The pristine membrane: (a) flat and (b) folded digital photographs; (c) surface and (d) cross section of SEM images. The membrane after 800-time cycling charge-discharge test: (a') flat and (b') folded digital photographs; (c') surface and (d') cross section of SEM images.

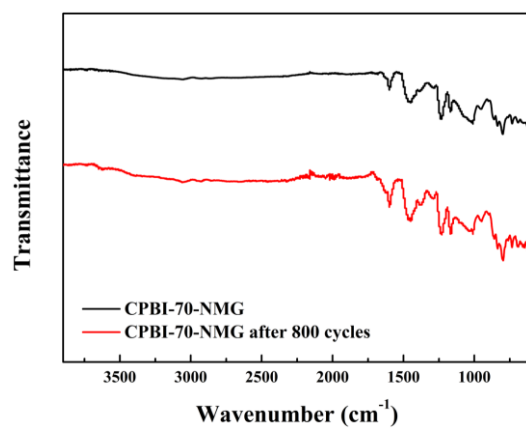


Figure S4. FTIR spectra of CPBI-70-NMG membranes before and after 800 charge-discharge cycles at 120 mA

cm⁻².