

Supplementary Information

Construction of reliable ion-conducting channels based on the perfluorinated anion-exchange membrane for high-performance pure-water-fed electrolysis

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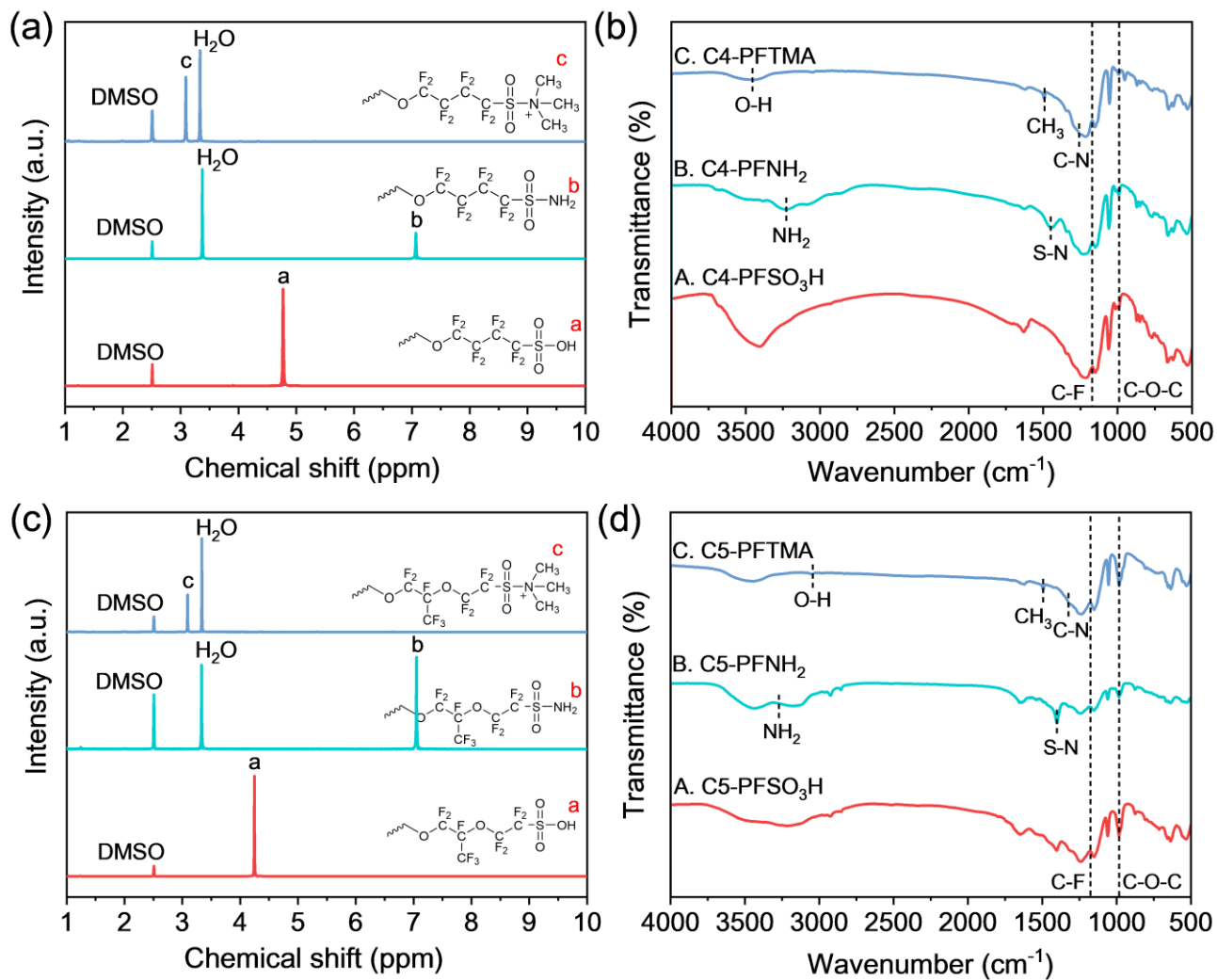


Figure S1. (a) ^1H NMR spectra, (b) FT-IR spectra of C4-PFSO₃H, C4-PFNH₂, C4-PFTMA. (c) ^1H NMR spectra, (d) FT-IR spectra of C5-PFSO₃H, C5-PFNH₂, C5-PFTMA.

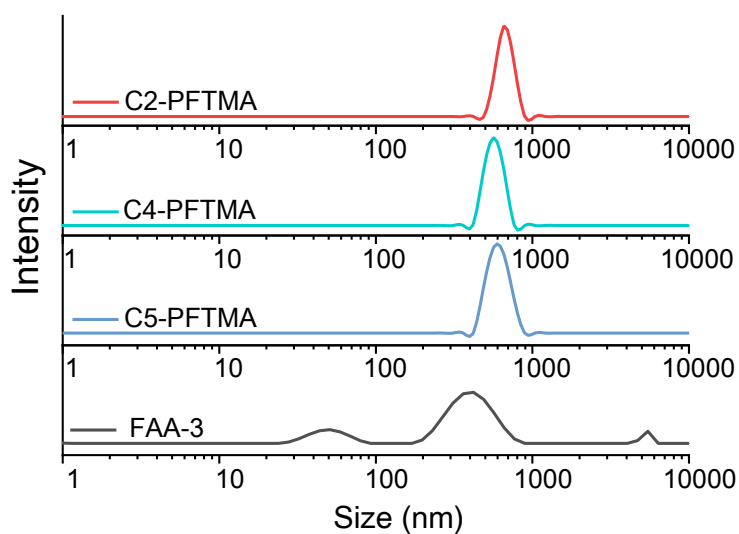


Figure S2. The particle size distribution pattern of Cn-PFTMA dispersions and commercial FAA-3 dispersion.

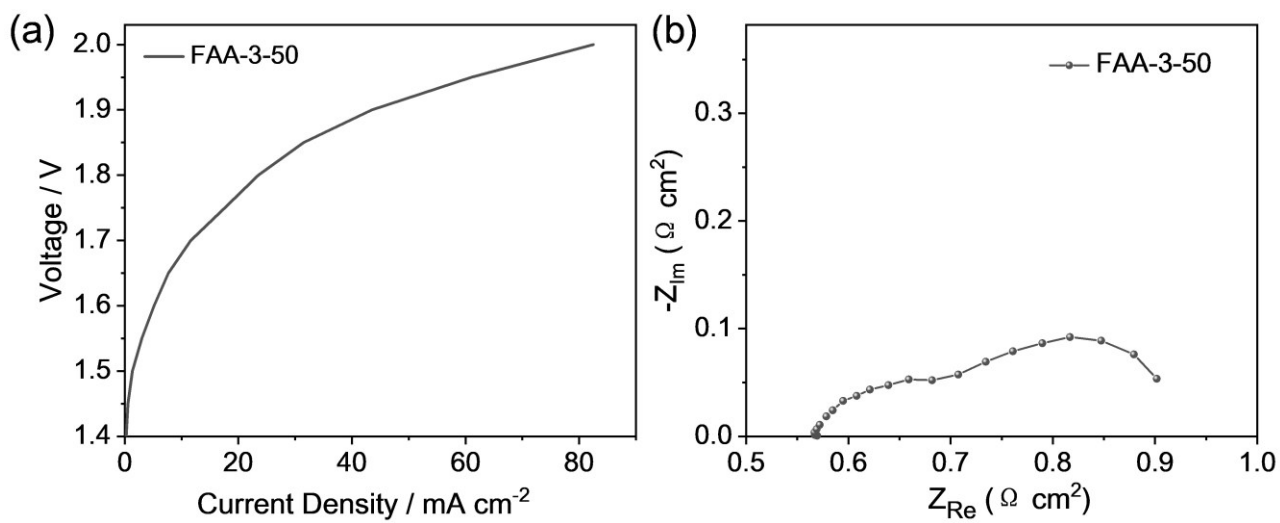


Figure S3. (a) Polarization curve and (b) Nyquist plot for AEMWE with the FAA-3-50 membrane. Nyquist plot was evaluated at 1.9 V.