

Electronic Supplementary Information

**Robust and Durable Poly(aryl-co-aryl piperidinium)
Reinforced Membranes for Alkaline Membrane Fuel Cells**

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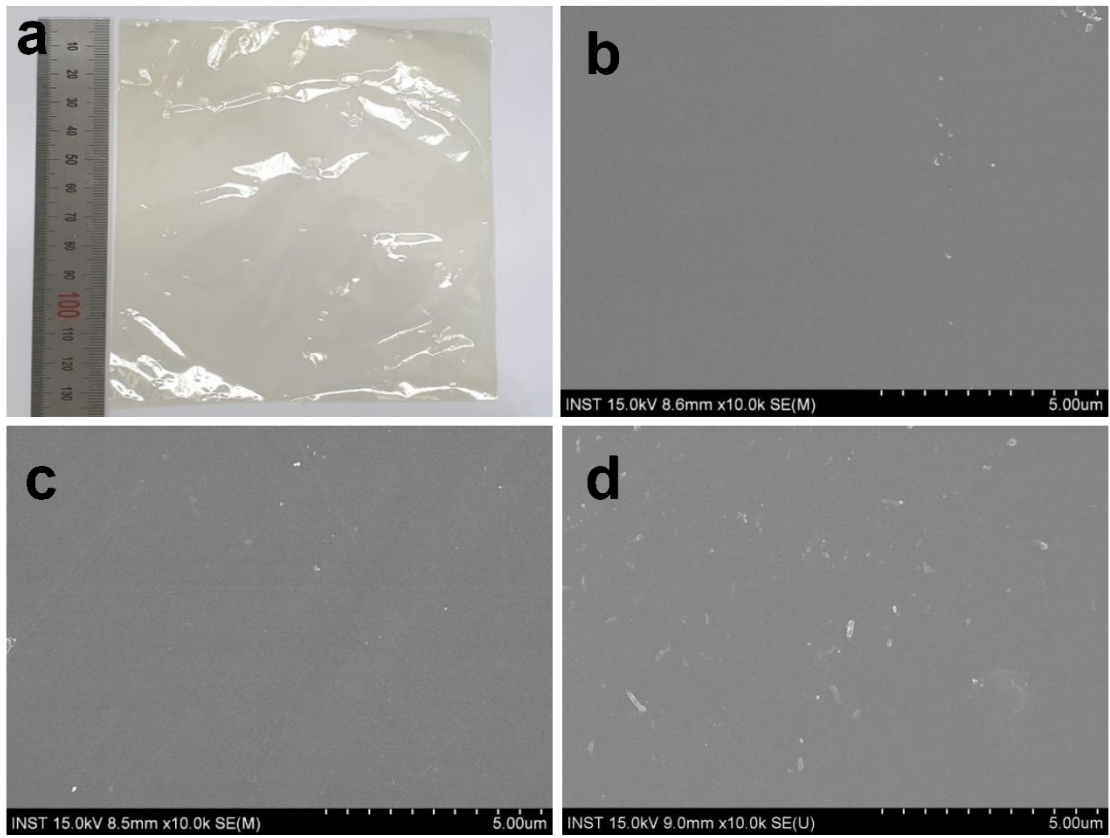


Fig. S1. a) Optical image, b) SEM top surface image, and c) SEM bottom surface image of PFTP RCM, respectively. d) SEM bottom surface image of PDTP RCM.

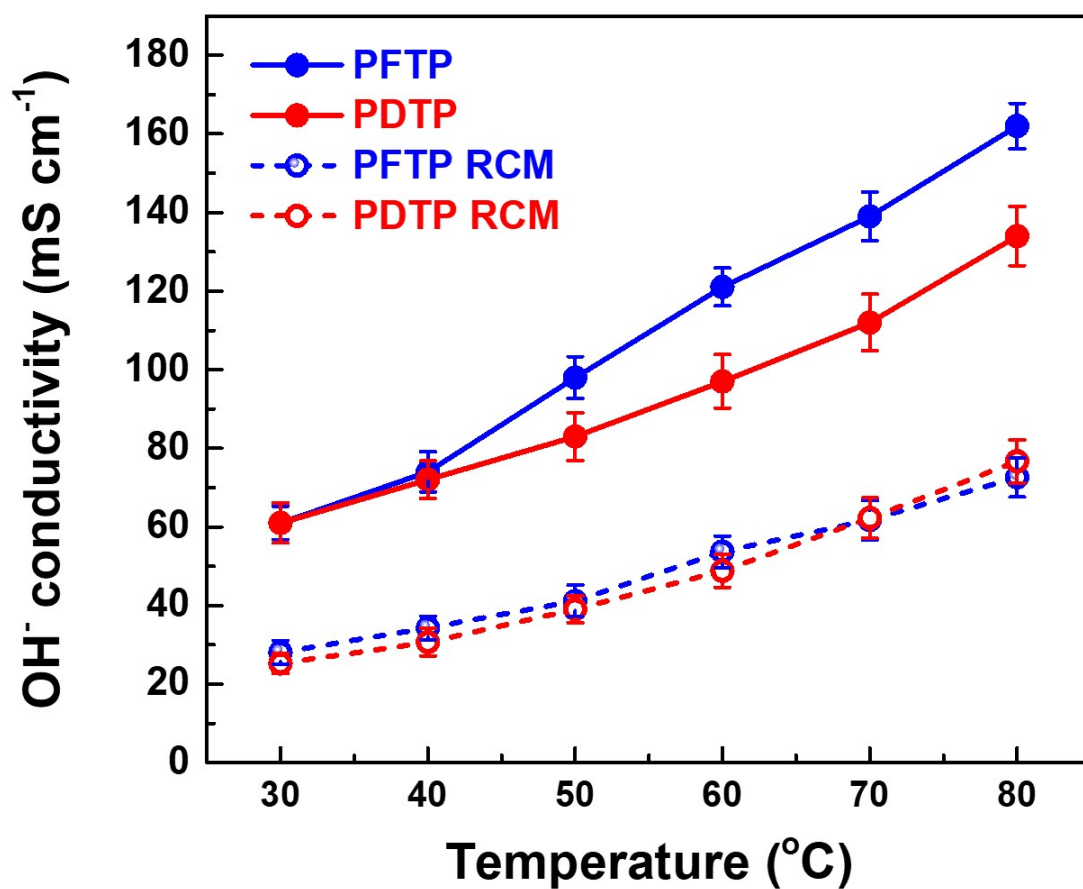


Fig. S2. Hydroxide conductivity as a function of temperatures of pristine membranes and RCMs

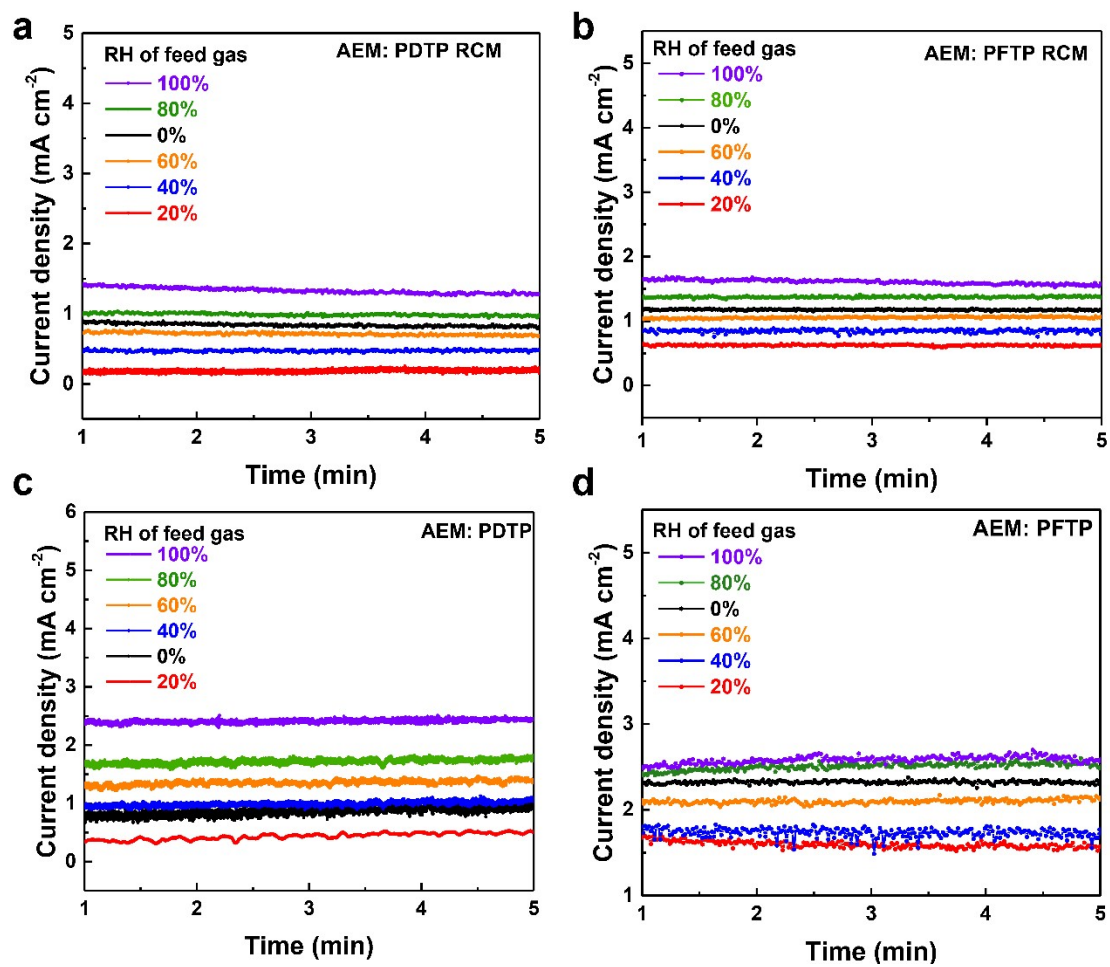


Fig. S3. H₂ crossover current density of a) PDTP RCM, b) PFTP RCM, c) PDTP, and d) PFTP membranes related with time at different RHs at 60 °C, 1,000/1,000 mL min⁻¹ H₂/N₂

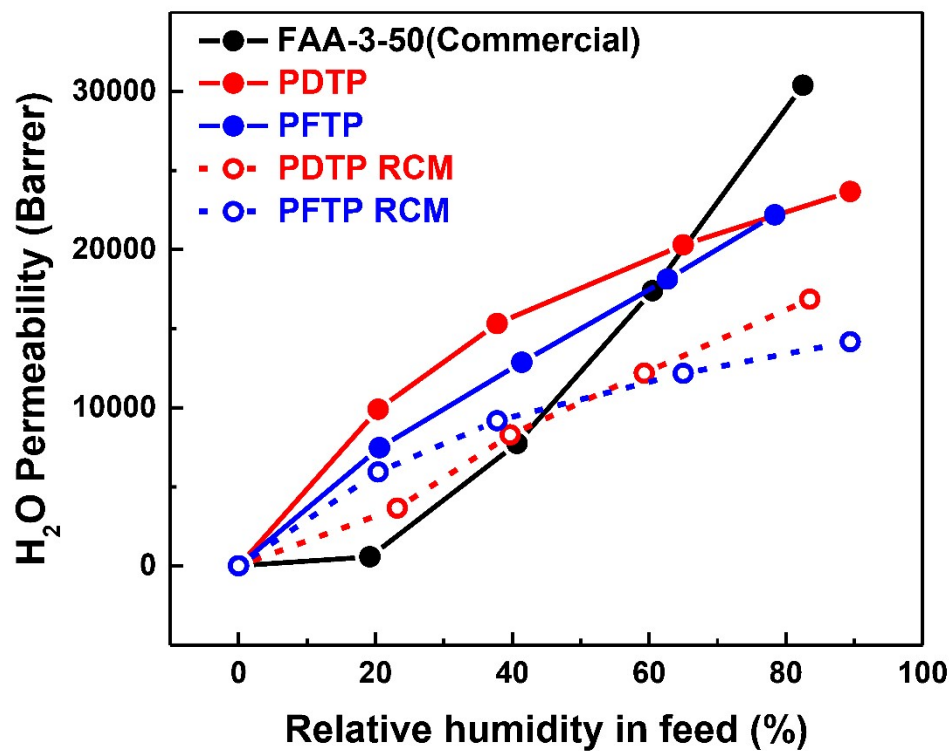


Fig. S4. Water vapor permeability of commercial FAA-3-50, pristine membranes, and RCMs at different RHs.