

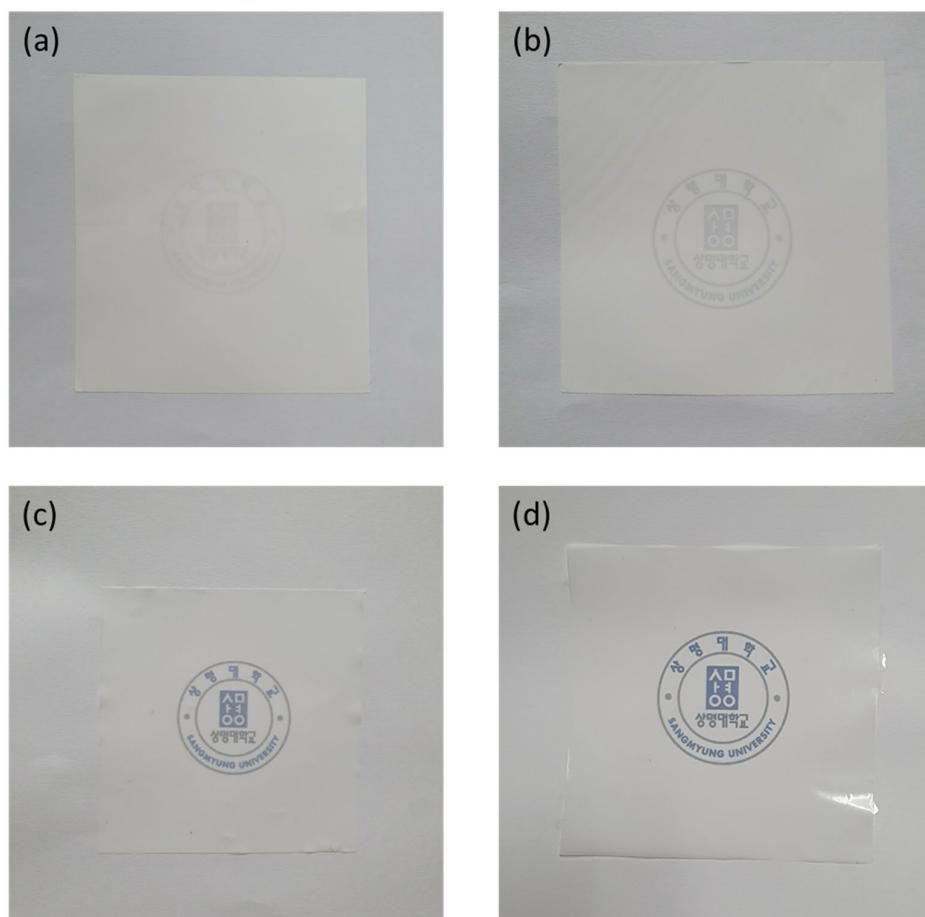
Supplementary Material

# Pore-filled Anion-Exchange Membranes with Double Cross-linking Structure for Fuel Cells and Redox Flow Batteries

Do-Hyeong Kim and Moon-Sung Kang \*

Department of Green Chemical Engineering, College of Engineering, Sangmyung University, Cheonan 31066, Korea; dohyeongkim665@gmail.com

\* Correspondence: solar@smu.ac.kr; Tel.: +82-41-550-5383



**Figure S1.** Pictures of porous substrates ((a) hydrophobic polytetrafluoroethylene (PTFE); (b) hydrophilic PTFE)) and pore-filled anion-exchange membranes ((c) hydrophobic-pore-filled anion-exchange membranes (PFAEM); (d) hydrophilic-PFAEM).

➤ **Hydrophobic PTFE substrate based PFAEMs**

DVB-1%	DVB-3%	DVB-5%	DVB-7%
57.9 °	67.8 °	79.9 °	85.2 °
DVB-10%	DVB-15%	DVB-20%	
93.2 °	100.8 °	101.0 °	

➤ **Hydrophilic PTFE substrate-based PFAEMs**

DVB-1%	DVB-3%	DVB-5%	DVB-7%
48.6 °	58.2 °	62.8 °	68.8 °
DVB-10%	DVB-15%	DVB-20%	
70.7 °	73.4 °	74.7 °	

**Figure S2.** Surface contact angles of pore-filled anion-exchange membranes.