

Supporting data

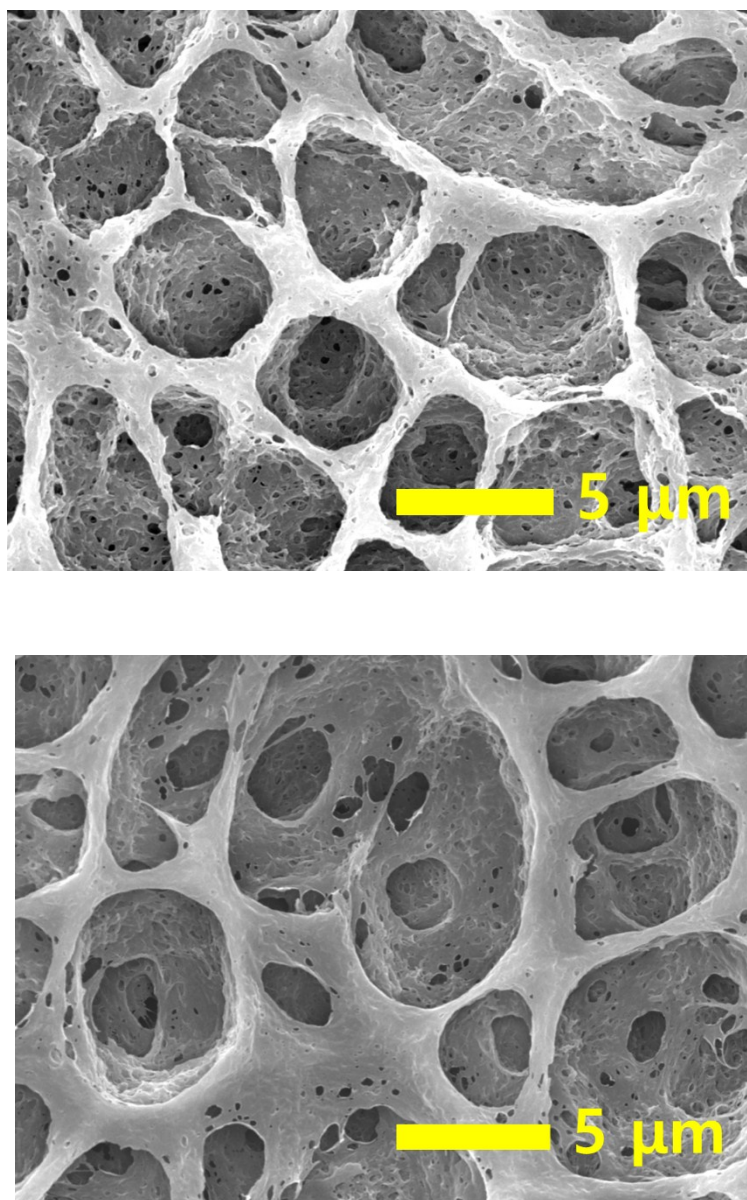


Figure S1. SEM image of PVdF-HFP separators with different water contents: 8 wt%(top) and 10 wt% (bottom).

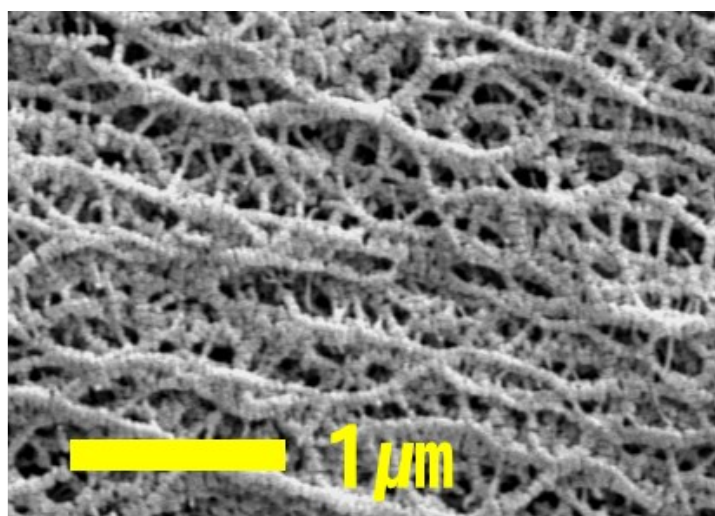


Figure S2. SEM image of a PE separator.

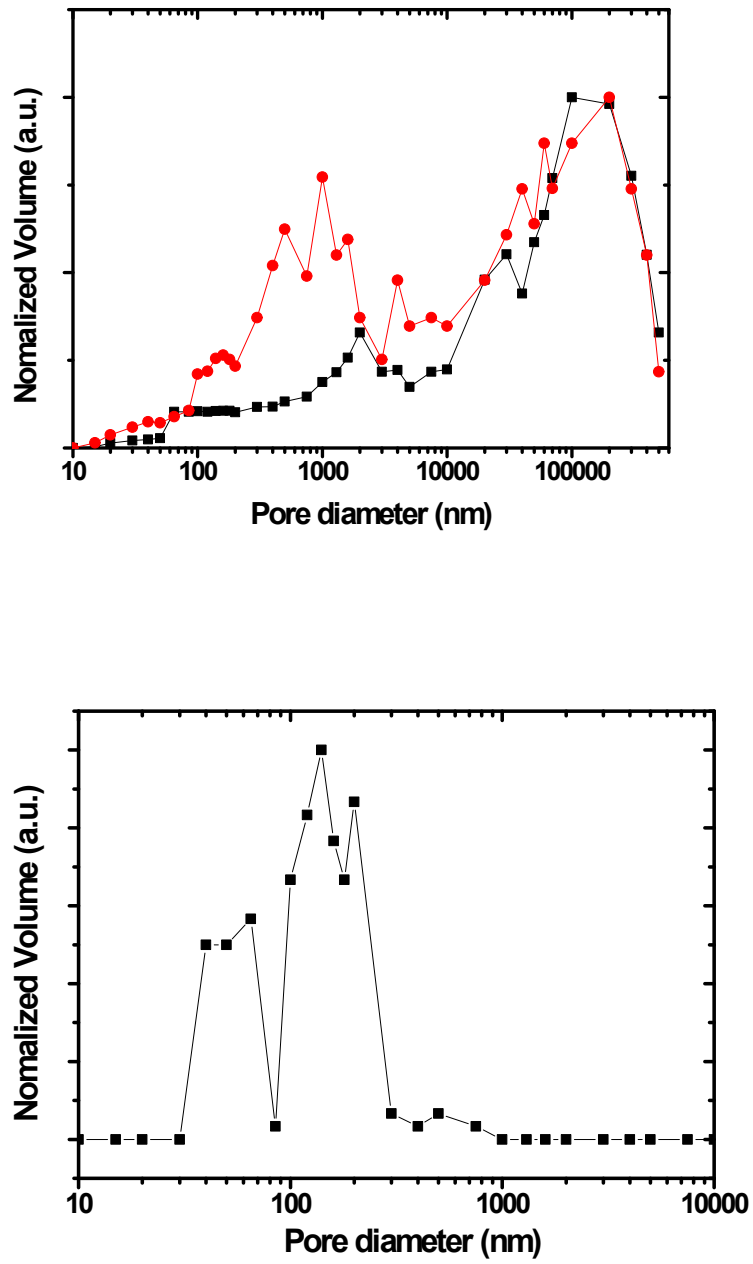


Figure S3. Top: Pore size distribution of (black) W4 separator and (red) W2M3. Bottom: Pore size distribution of commercialized PE separator.

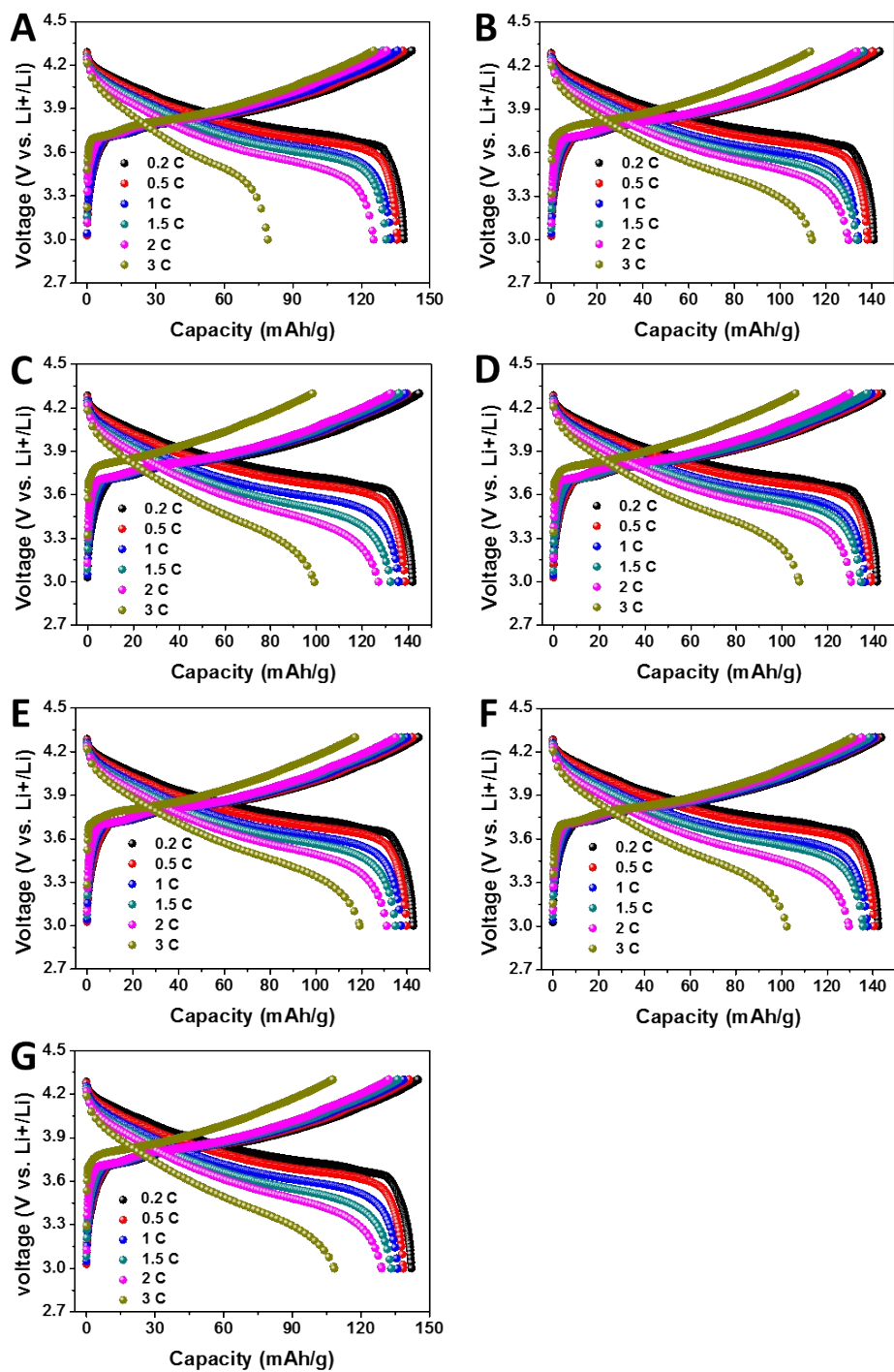


Figure S4. Charge/discharge curves for Figure 8A; PE (A), W2E1 (B), W2E2 (C), W2M2 (D), W2M3 (E), W2P2 (F) and W2P3 (G).

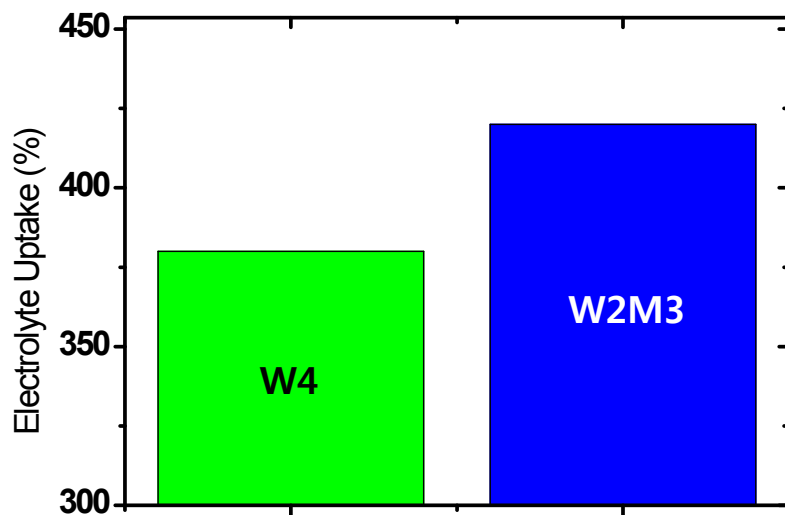
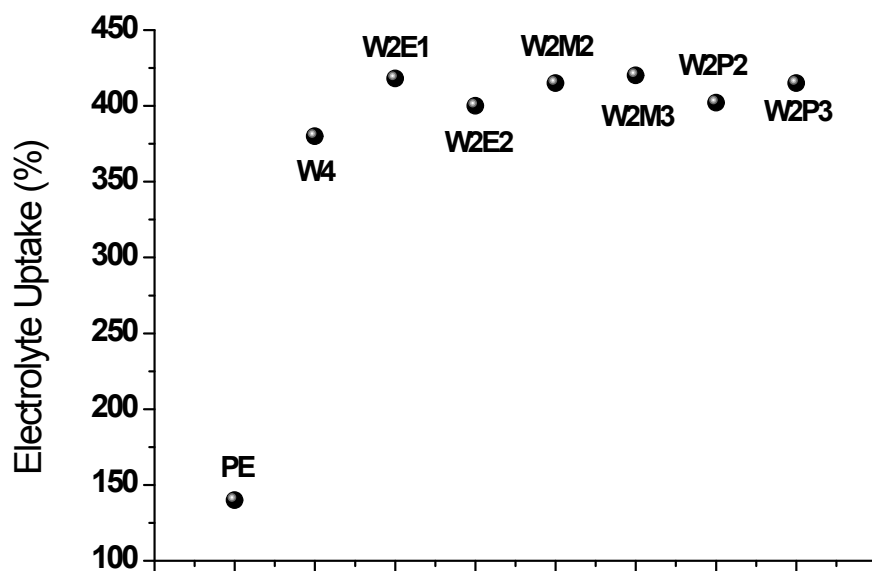


Figure S5. Electrolyte uptake (%) of variable samples (top). Highlighted for W4 and W2M3 samples (bottom).

