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Title: Effect of non-sulfonated diamine monomer on branched sulfonated polyimide membrane for vanadium redox flow battery application

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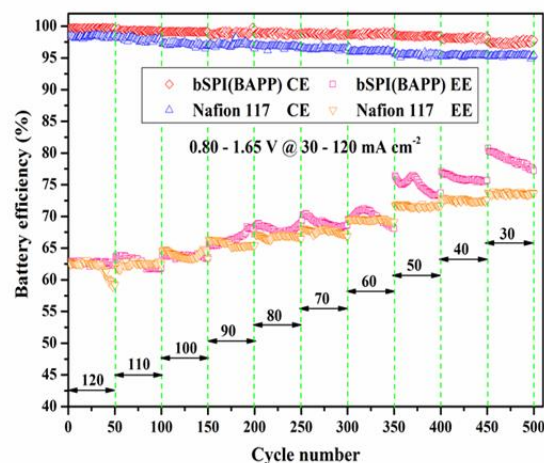
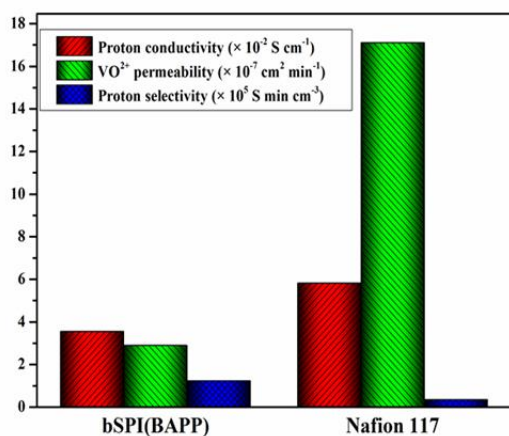
Effect of non-sulfonated diamine monomer on branched sulfonated polyimide membrane for vanadium redox flow battery application

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Graphical abstract



Research Highlights

- ★ Effect of non-sulfonated diamine monomer on bSPI membrane in VRFB is disclosed.
- ★ bSPI membranes own better VO^{2+} blocking performance than Nafion 117.
- ★ bSPI (BAPP) membrane has the highest proton selectivity among all membranes.
- ★ bSPI (BAPP) membrane has the highest chemical stability among all bSPI membranes.
- ★ bSPI (BAPP) membrane shows excellent performance in VRFB.

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