



Improved electrosorption performance using acid treated electrode scaffold in capacitive deionization

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Outline



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Highlights

- Commercial polyurethane sponge (OPS) was modified by oxygen-containing functional groups via direct acid treatment (APS).
- Acid treatment significantly increased the wettability and reduced the co-ion expulsion effect.
- N-doped camphor soot (NCS) was used as CDI electrode material.
- APS-NCS exhibited significantly higher electrosorption performance than OPS-NCS.
- APS-NCS showed better cyclic stability retaining 66.1% of the initial electrosorption capacity.

Full Text

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