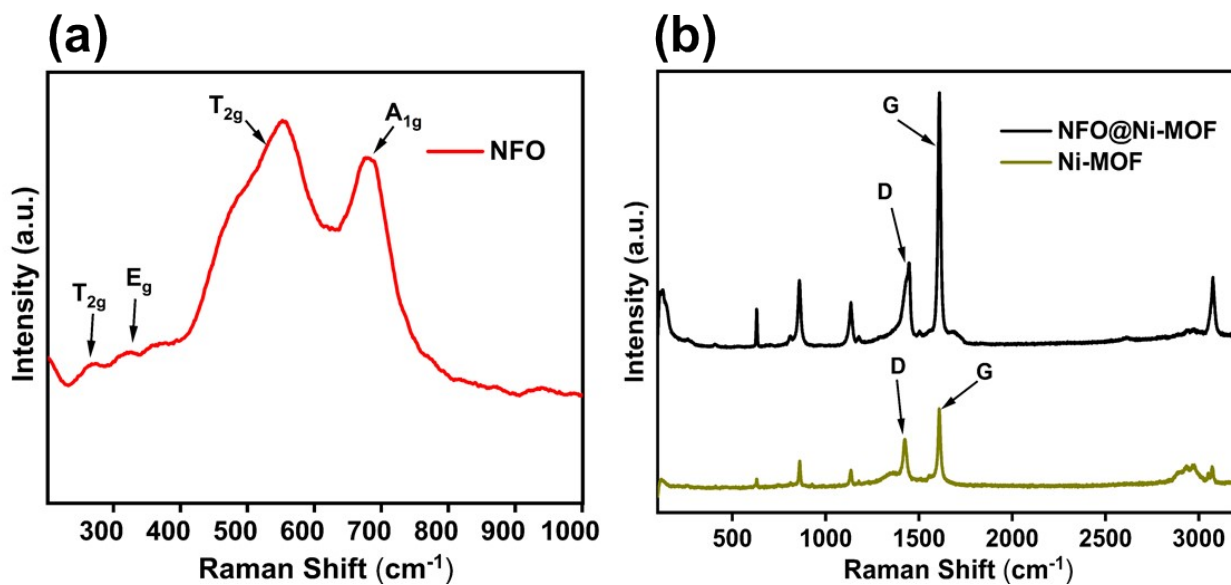


## Supplementary material

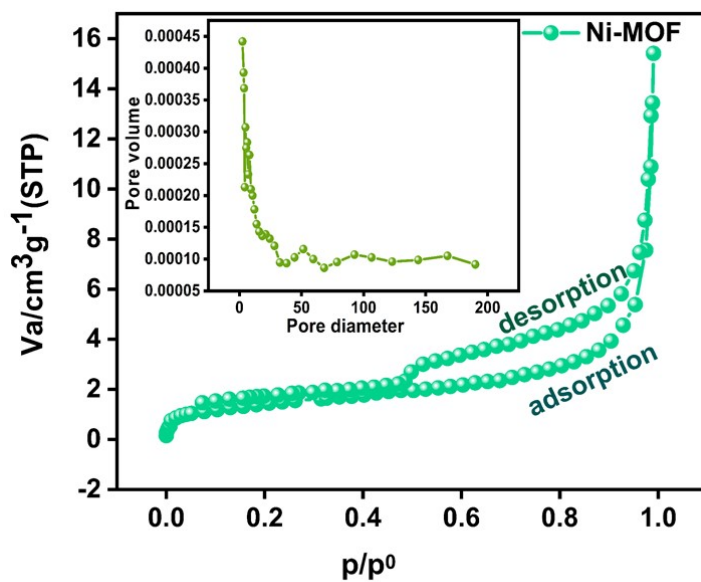
# Synergistic Enhancement of Electrochemical Performance in NiFe<sub>2</sub>O<sub>4</sub>@Ni-MOF Nanoflakes Hybrids for High-Performance Energy Storage Applications

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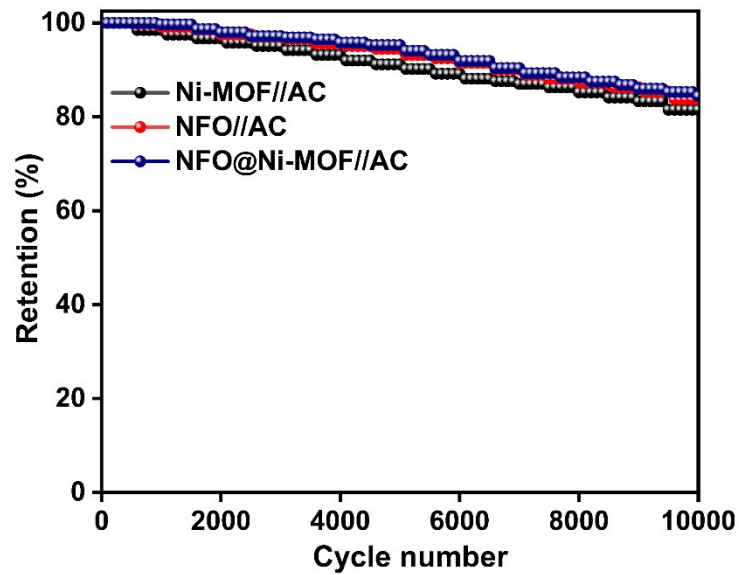
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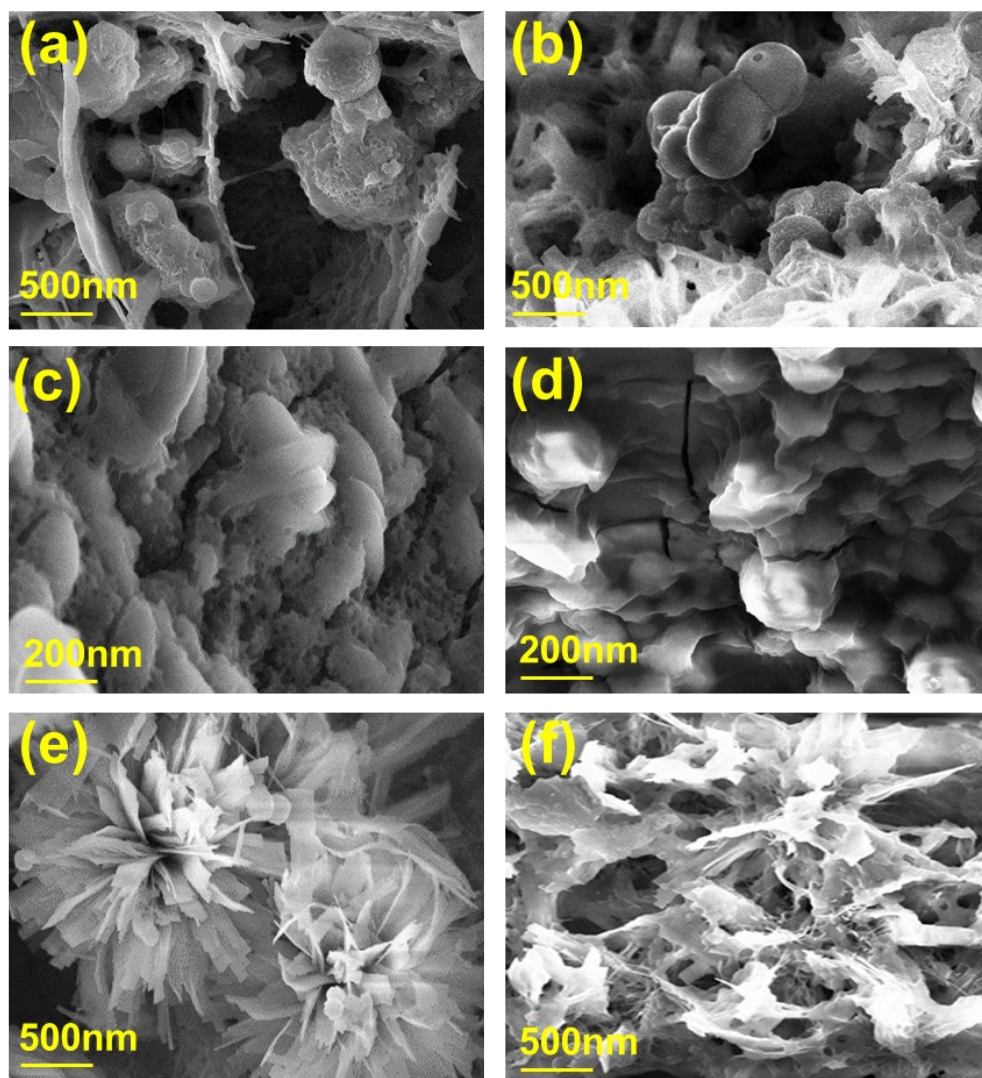
**Figure S1.** Raman spectra of the synthesized (a) NFO nanoflakes (b) Ni-MOF and NFO@Ni-MOF.



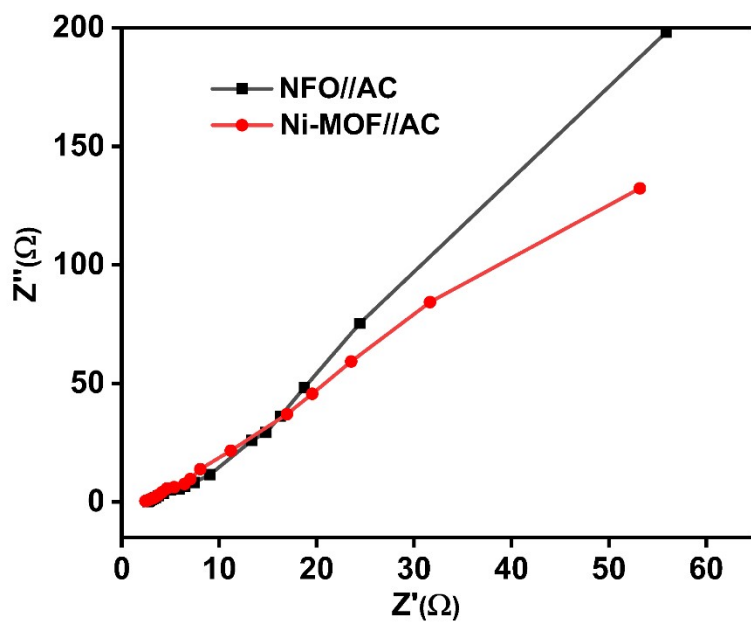
**Figure S2.** N<sub>2</sub> adsorption-desorption isotherms for the Ni-MOF.



**Figure S3.** Cyclic stability of the NFO//AC, Ni-MOF//AC, and NFO@Ni-MOF//AC, HASCs device.



**Figure S4.** FE-SEM of the NFO@Ni-MOF, Ni-MOF and NFO electrodes before (a, c, e) and after (b, d, f) 10000 cycles.



**Figure S5.** EIS plot for NFO//AC, and Ni-MOF//AC HASCs device.