

Supporting Information

Rational Design of Conductive Metal–Organic Frameworks and Aligned Carbon Nanofibers for Enhancing the Performance of Flexible Supercapacitors

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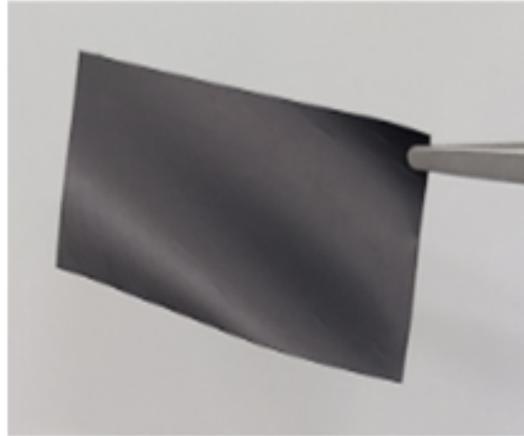
a**b****c**

Figure S1. Optical images of (a) aligned PAN nanofibers, (b) aligned oxidized PAN nanofibers and (c) aligned carbon nanofibers (ACNF).

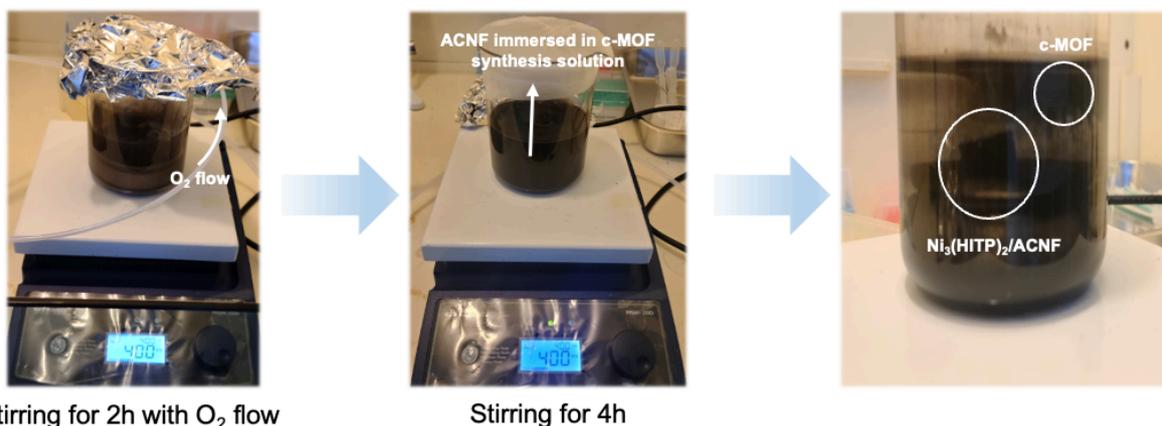


Figure S2. In-situ synthesis process of c-MOF onto the surface of ACNF.

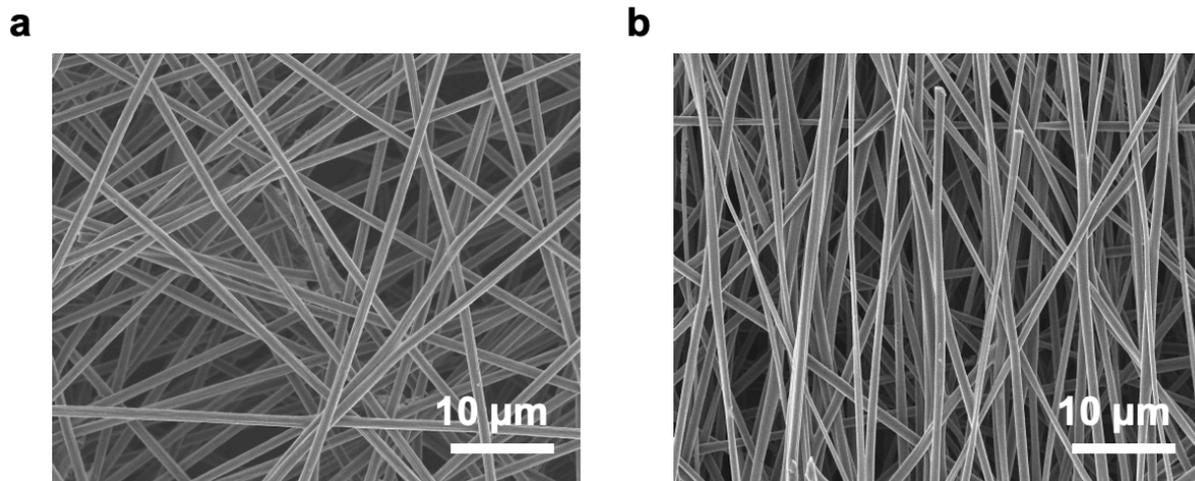


Figure S3. Low magnification SEM image of (a) RCNFs and (b) ACNFs.

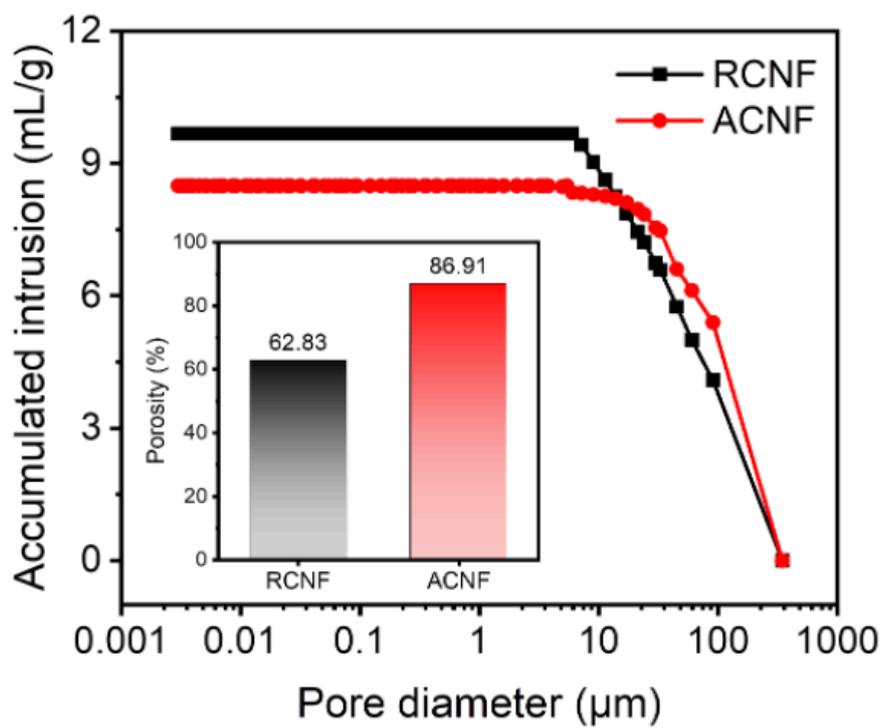


Figure S4. Accumulated mercury intrusion of RCNF and ACNF using mercury intrusion porosimetry (inset: porosity values).

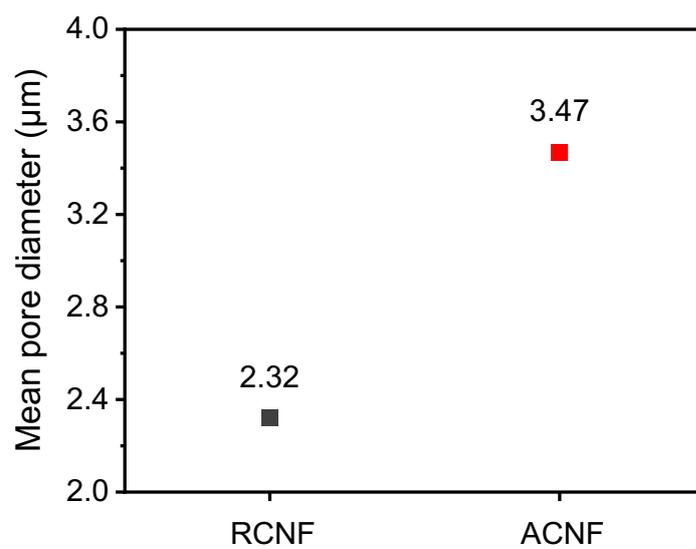


Figure S5. Mean pore diameter of RCNF and ACNF measured by a capillary flow porometer.

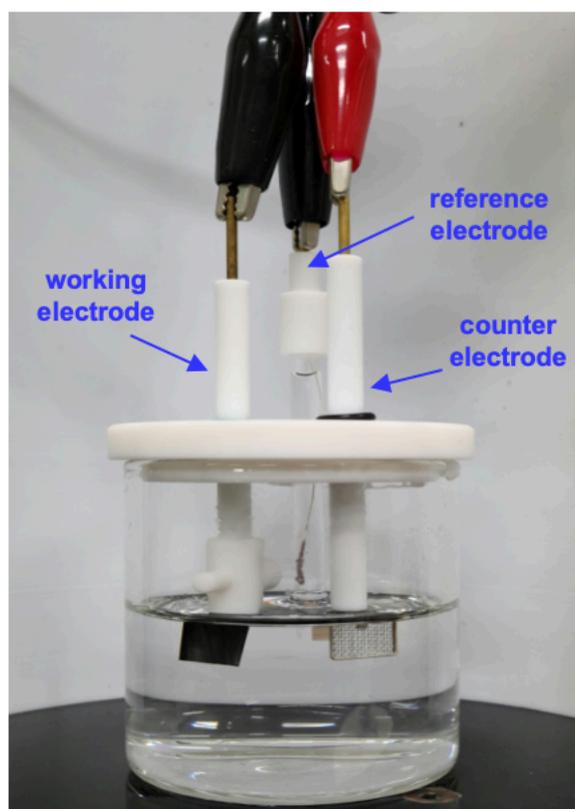


Figure S6. The three electrode setup in 3 M KCl electrolyte.

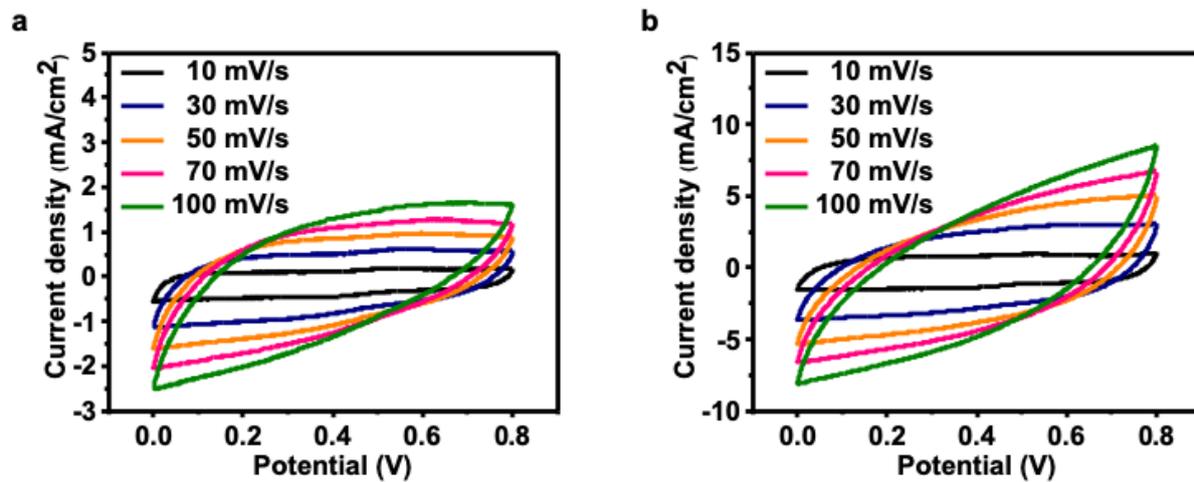


Figure S7. Cyclic voltammetry (CV) curves of (a) RCNF (b) ACNF at various scan rates.

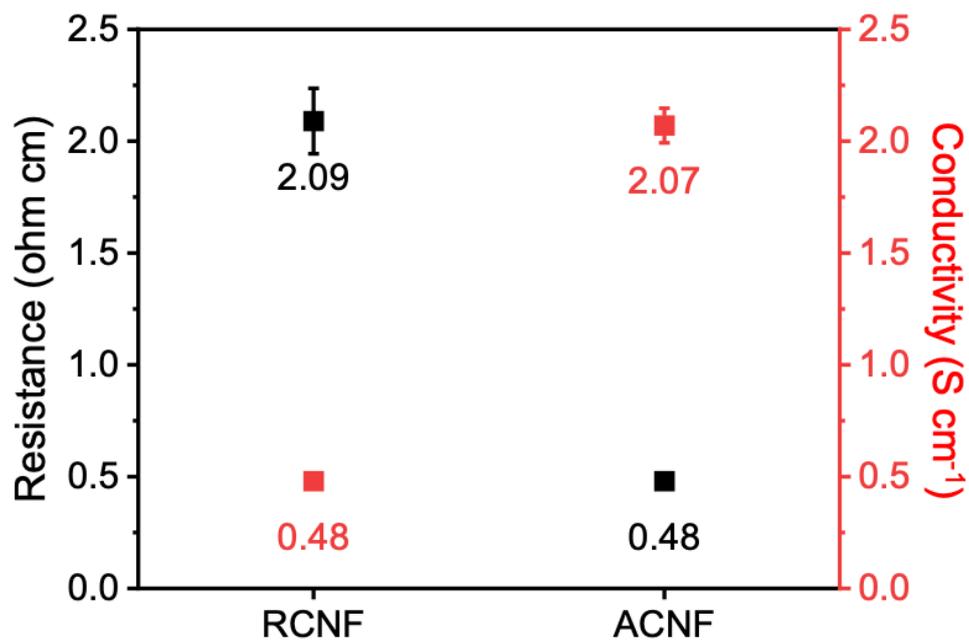


Figure S8. Electrical resistance and conductivity values of RCNFs and ACNFs investigated through a 4-point probe analysis.

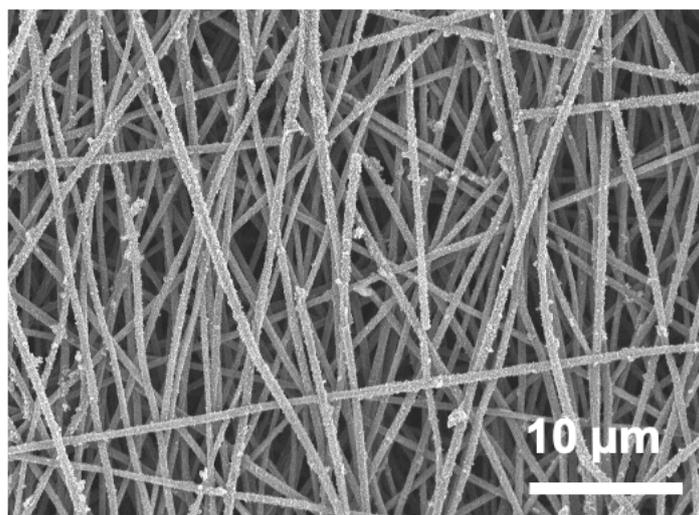


Figure S9. Low magnification SEM image of c-MOF/ACNF.

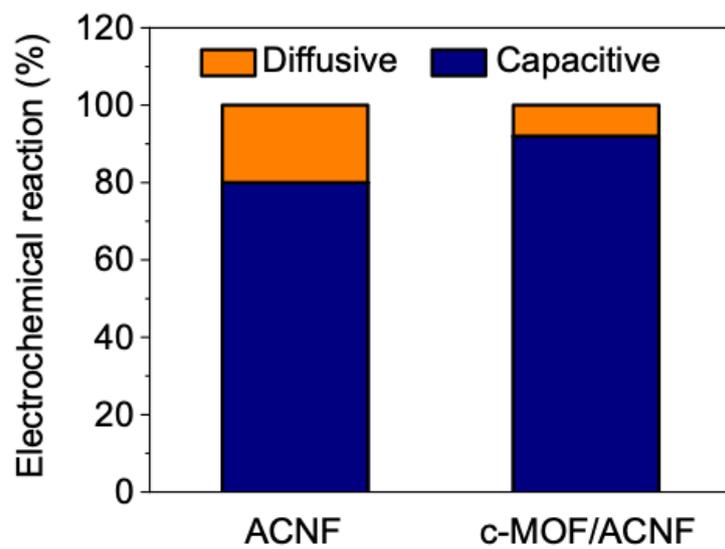


Figure S10. Deconvolution analysis of ACNF and c-MOF/ACNF.

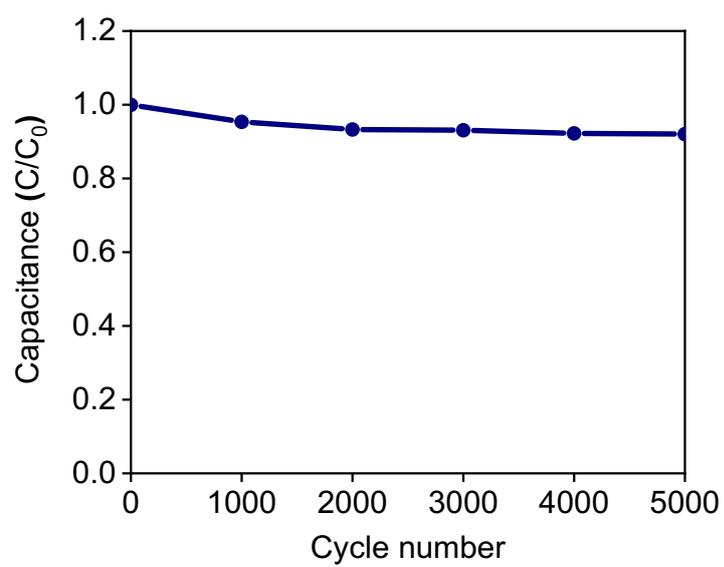


Figure S11. Cycling performance of c-MOF/ACNF electrode.

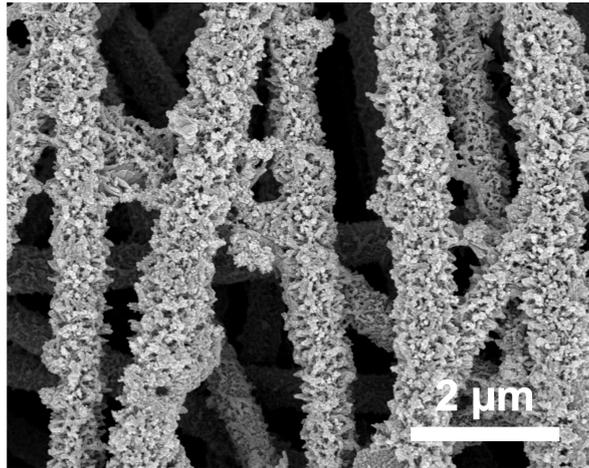


Figure S12. SEM images of c-MOF/ACNF after cycle test.