

Supporting Information

Accelerating the Drug Releasing Performance by Flexible Zinc-Air Fuel Cell based on Polyacrylamide/Cellulose Nanofibril (PAM/CNF) Hydrogel

Yang Yang^{a,b}, Juan Jia^{a,b}, Wang Zhang^{a,b}, Qin Peng^{a,b}, Rong Chen^{a,b*}, Dingding Ye^{a,b}, Jun Li^{a,b}, Xun Zhu^{a,b*}, Qiang Liao^{a,b}

^aKey Laboratory of Low-grade Energy Utilization Technologies and Systems, Ministry of Education, Chongqing University, Chongqing 400030, China

^bInstitute of Engineering Thermophysics, School of Energy and Powering Engineering, Chongqing University, Chongqing 400030, China

* Corresponding author.

E-mail: rchen@cqu.edu.cn (Rong Chen); zhuxun@cqu.edu.cn (Xun Zhu).

Supplementary Figures

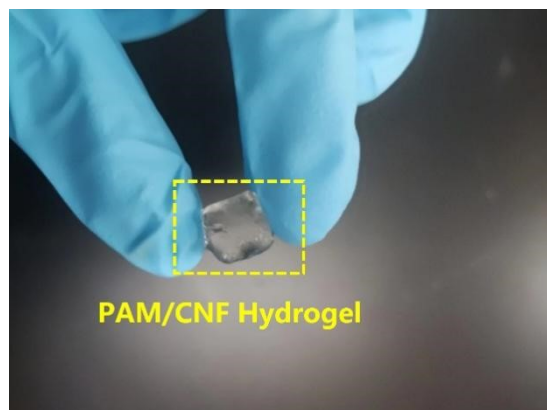


Fig. S1 Diagram of synthesized PAM/CNF hydrogel.

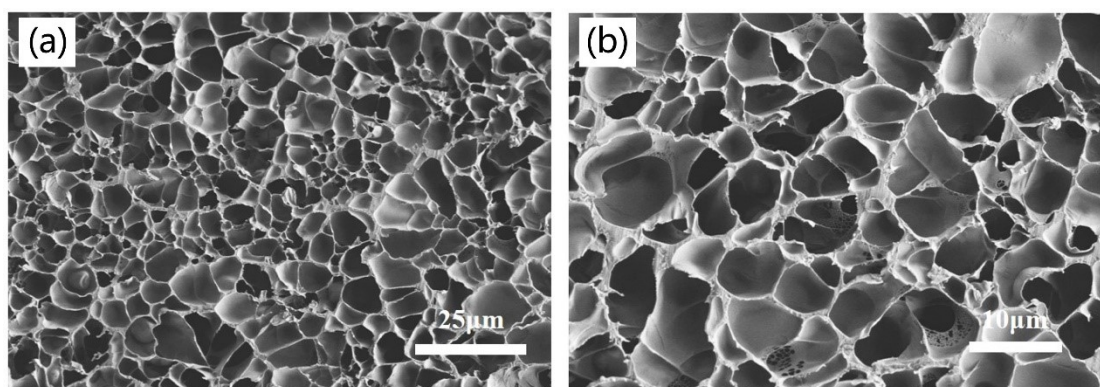


Fig.S2 SEM images of PAM hydrogel at different magnifications.

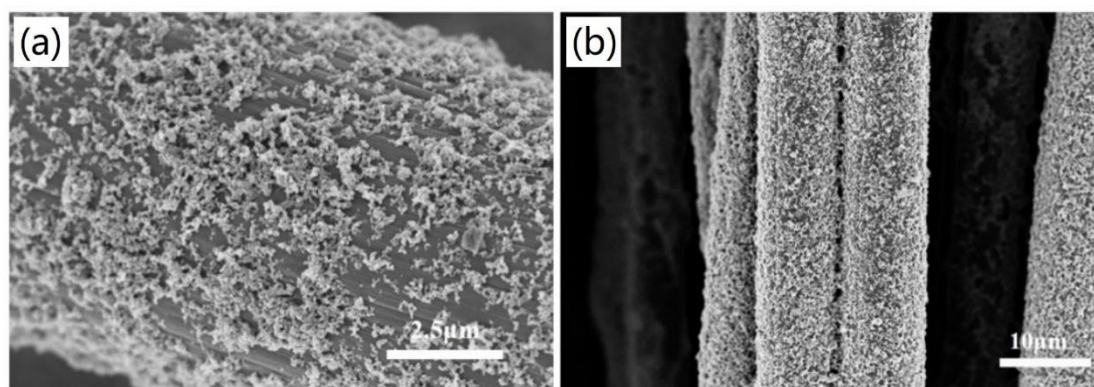


Fig.S3 SEM images of cathode catalysts at different magnifications.

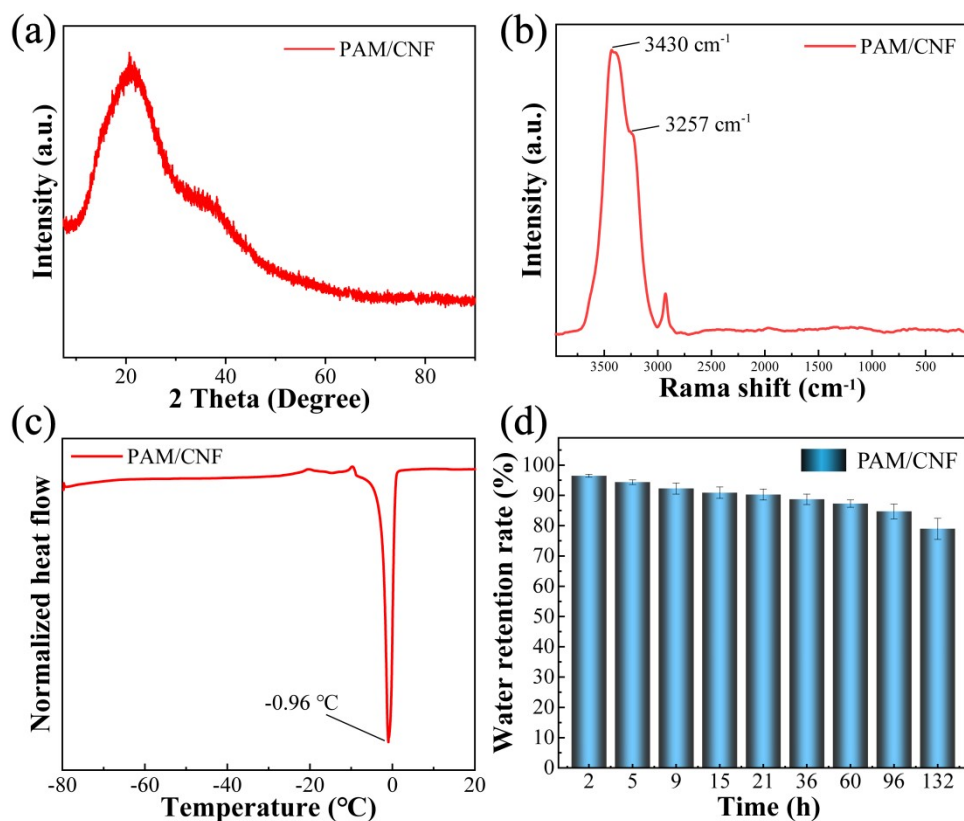


Fig.S4 (a) XRD pattern, (b) Raman shift pattern, (c) DSC pattern, and (d) water retention rate of the PAM/CNF (6% CNF, 0.05% crosslinker) hydrogel.

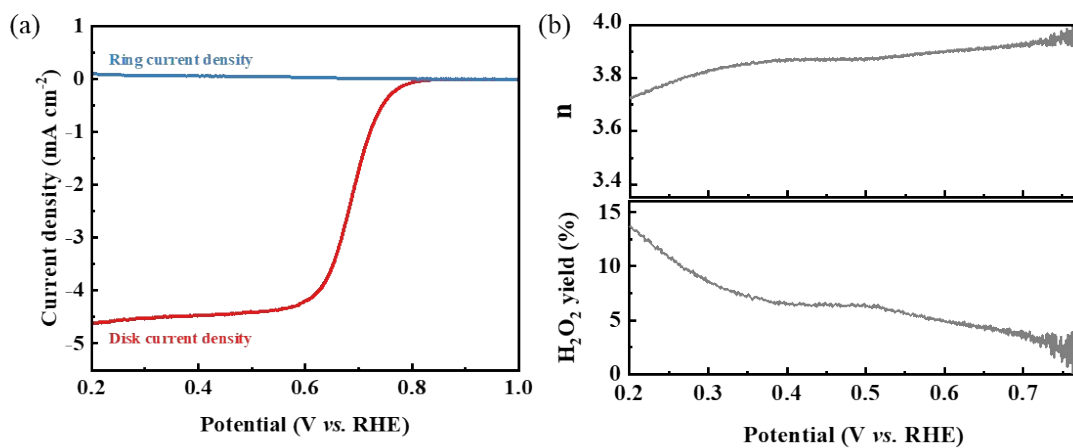


Fig.S5 (a) LSV curves, (b) electron transfer number and H₂O₂ yield of Co₃O₄ catalysts in 0.1 M KOH electrolyte at a rotating speed of 1600 rpm with a scan rate of 10 mV s⁻¹ during the RRDE test.



Fig. S6 Diagram of open circuit potential for single flexible ZAFC.