Supplementary Material

Dual-activator strategy to facilely tune pore structure of lignin-based porous carbon for high performance supercapacitors

Xiaofeng Liang[a], Yue Yang[b], Hongtao Guo[a], Yichao Ye[a], Tao Yin[a]*, Zhipeng Tian[a], Chao Wang[a], Jingtao Zhang[a], Riyang Shu[a]*

[a] *Guangdong Provincial Key Laboratory of Functional Soft Condensed Matter, School of Materials and Energy, Guangdong University of Technology, Guangzhou 510006, PR China*

[b] *Dezhou Eco-environment Monitoring Center of Shandong Province, Dezhou 253000, PR China*

*Corresponding author: Tao Yin; Riyang Shu

E-mail address: yintao@gdut.edu.cn; shuriyang@gdut.edu.cn

Table S1 The solution resistance and charge transfer resistance of the porous carbons.

Samples	Rs (Ω)	Rct (Ω)
CFe	1.176	0.22
CFeK-1.5	1.254	0.24
CFeK-1	1.268	0.24
CFeK-0.5	1.339	0.25
CK	1.665	0.29

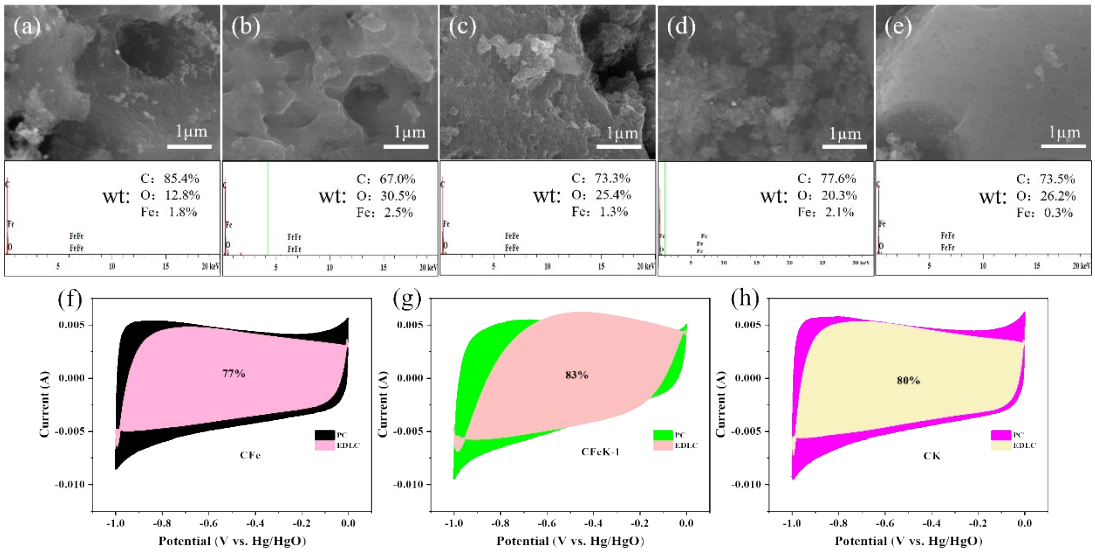

Fig. S1. SEM images and EDS results, (a) CFe , (b) CFeK-1.5, (c) CFeK-1, (d) CFeK-0.5, (e) CK, and pseudocapacitive contribution, (f) CFe, (g) CFeK-1, (h) CK.

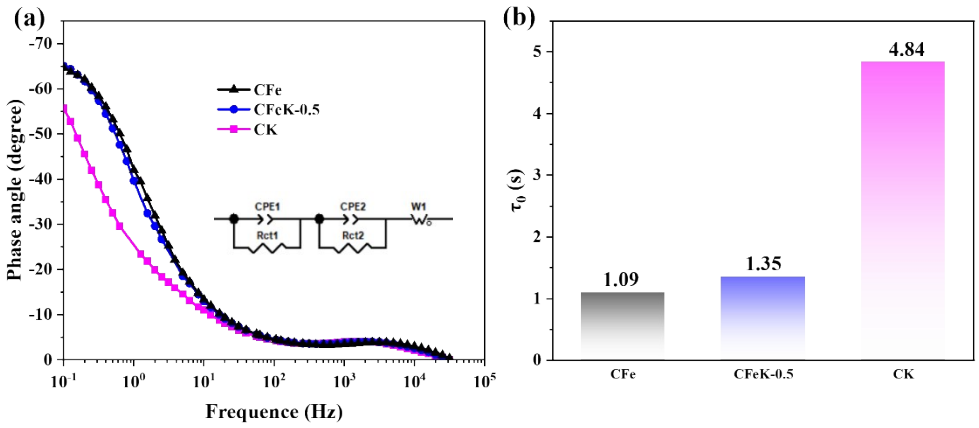

Fig. S2. (a) Bode plots of phase angle versus frequency, (b) Relaxation time (τ_0, s) of porous carbons.

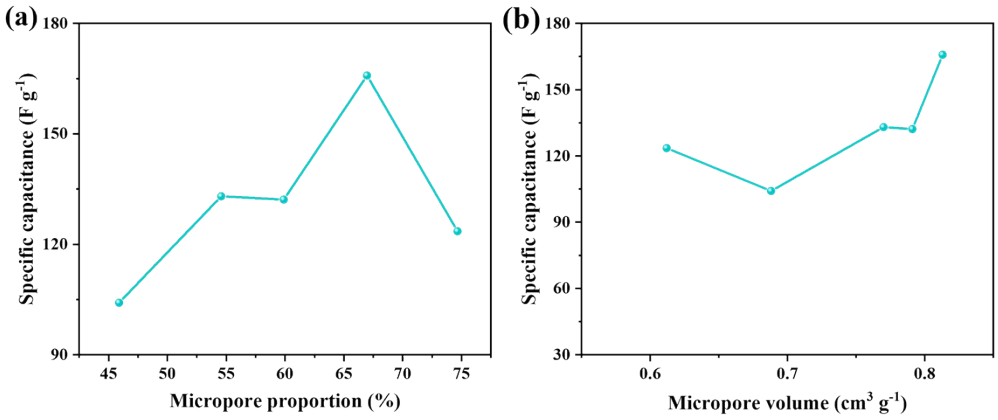

Fig. S3. The effect of (a) micropore proportion and (b) micropore volume on the electrochemical performance.

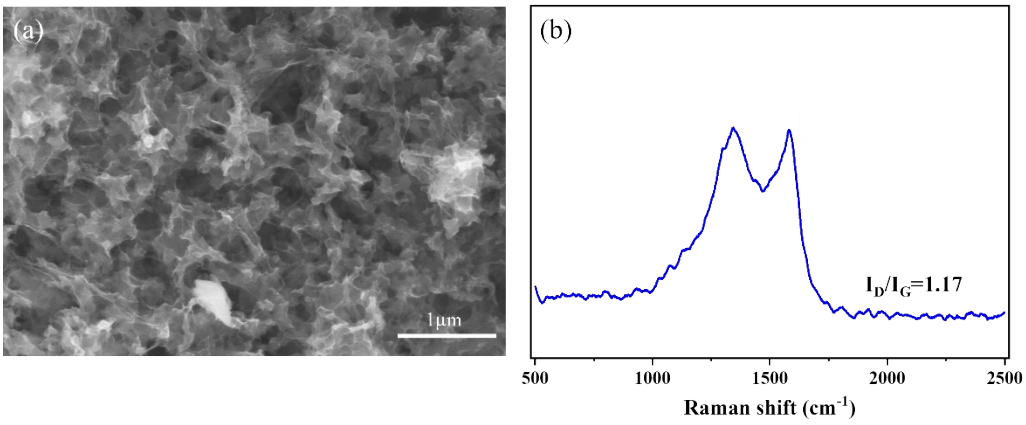

Fig. S4. (a) SEM image and (b) Raman spectra of CFeK-0.5 after cycling.

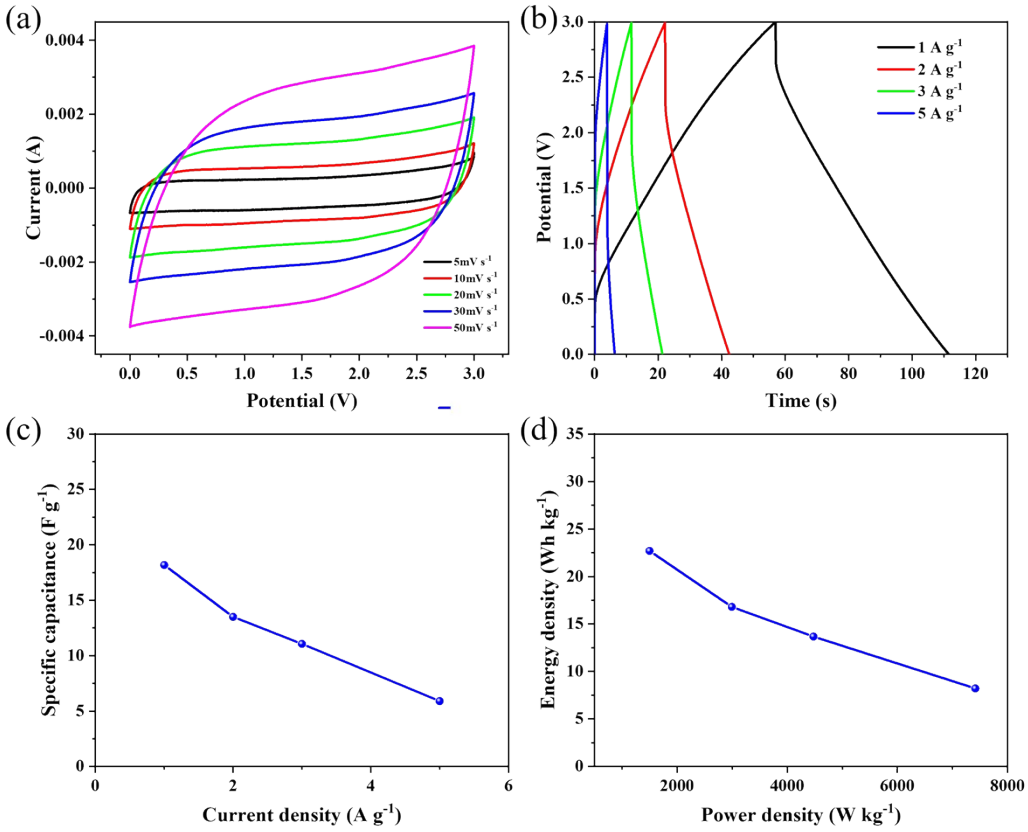

Fig. S5. Electrochemical performance of CFeK-0.5-based symmetric supercapacitors in $EMIMBF_4$. (a) CV curves, (b) GCD curves, (c) specific capacitance at different current densities, (d) Ragone plots.