

High graphitic porous carbon prepared via K_2FeO_4 -assisted KOH activation for supercapacitors

Yongtao Tan^{1*}, Jining Ren¹, Xiaoming Li², Lijun He¹, Chengmeng Chen², Haibo Li¹

¹ Ningxia Key Laboratory of Photovoltaic Materials, School of Materials and New Energy,

Ningxia University, Yinchuan, 750021, P. R. China

² Key Laboratory of Carbon Materials, Institute of Coal Chemistry, Chinese Academy of Sciences,

Taiyuan 030001, China

Corresponding author: Yongtao Tan (tanyt0124@163.com; or tanyt0124@nxu.edu.cn)

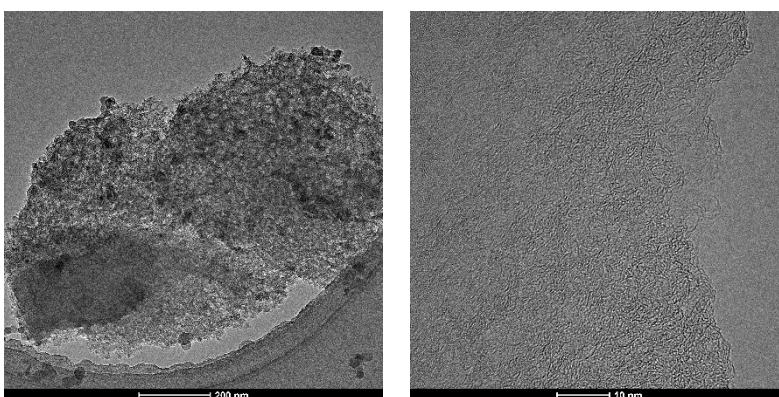


Fig. S1 TEM images of PC-KOH+ K_2FeO_4

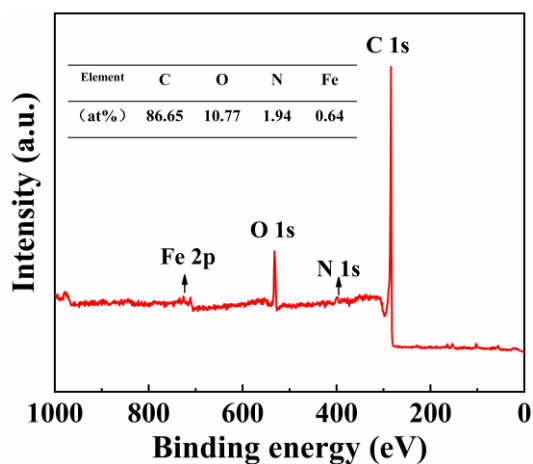


Fig.S2 XPS survey spectrum

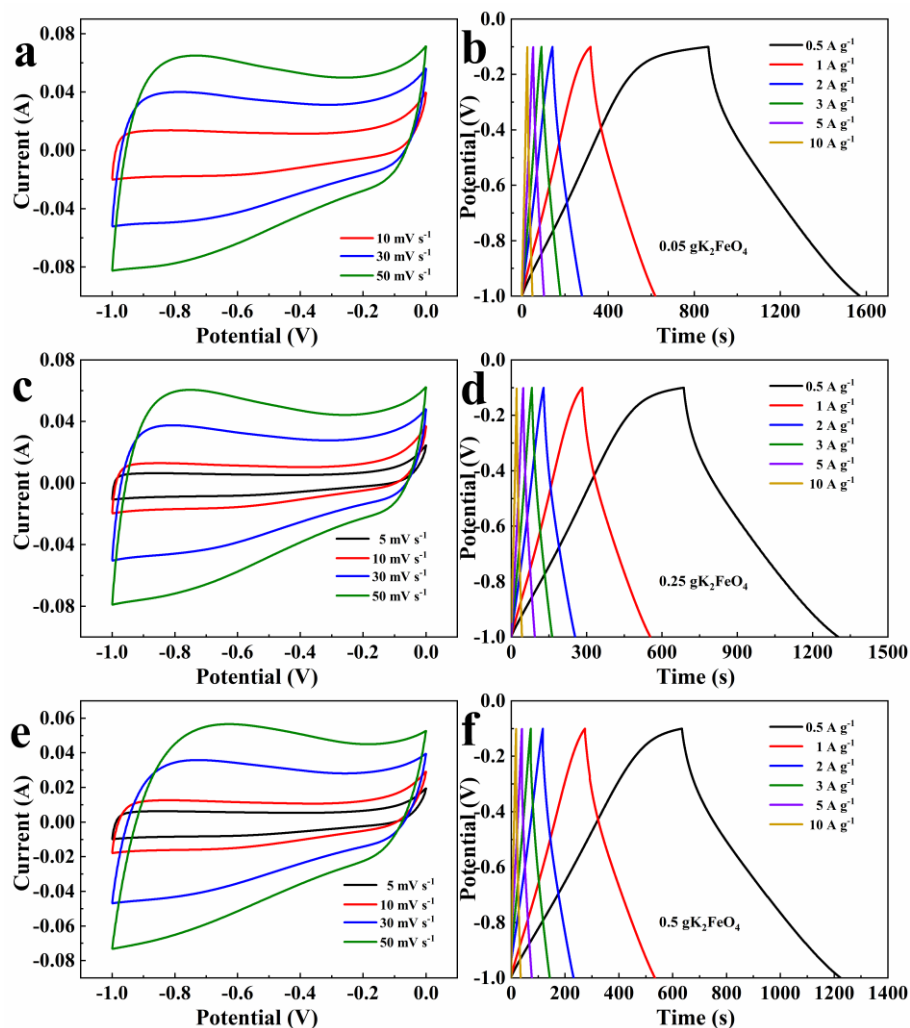


Fig.S3 Electrochemical performances of PC-KOH+K₂FeO₄ at loading different K₂FeO₄ addition: (a) CV curves and (b) GCD curves of loading (a,b) 0.05 g K₂FeO₄, (c,d) 0.25 g K₂FeO₄, (e,f) 0.5 g K₂FeO₄

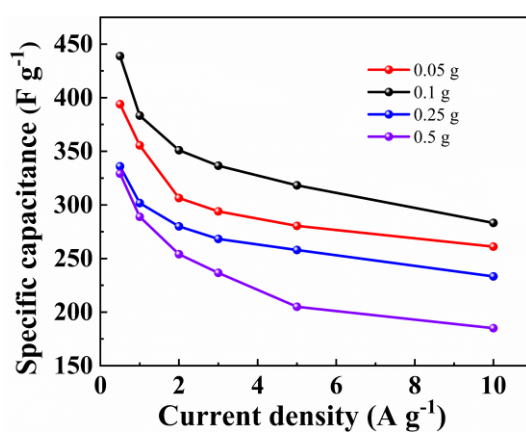


Fig.S4 Specific capacitance of different loading mass of K₂FeO₄

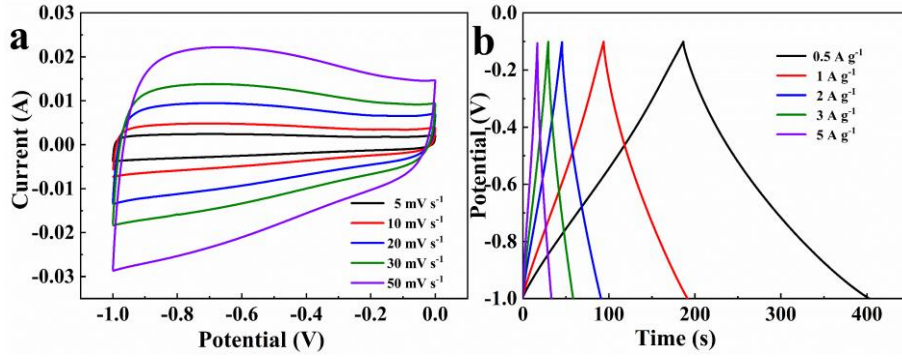


Fig.S5 Electrochemical performances of PC-Non: (a) CV curves, (b) GCD curves

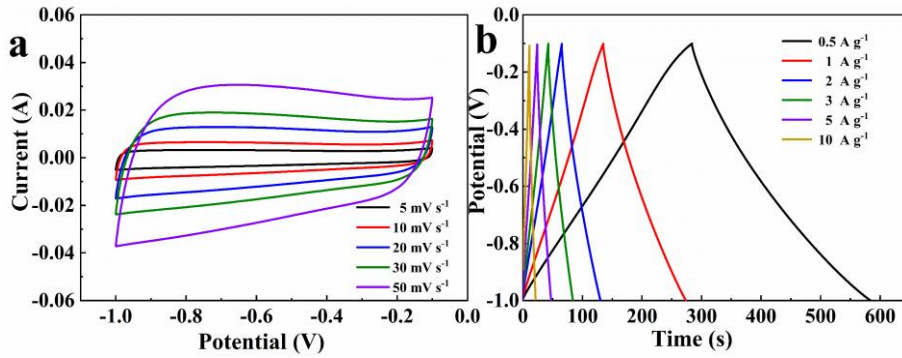


Fig.S6 Electrochemical performances of PC-K₂FeO₄: (a) CV curves, (b) GCD curves

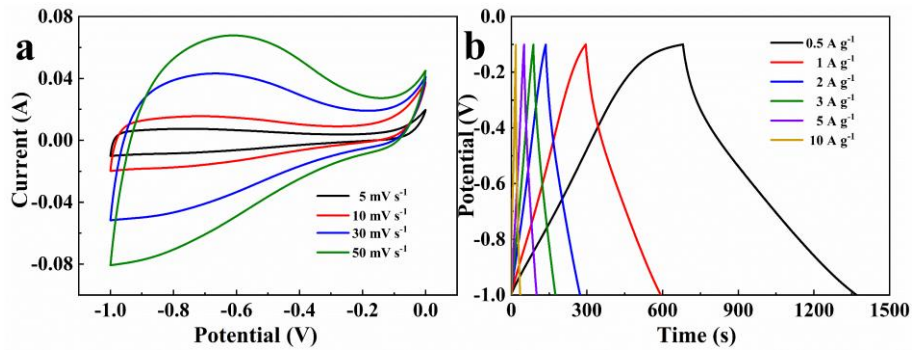


Fig.S7 Electrochemical performances of PC-KOH: (a) CV curves, (b) GCD curves

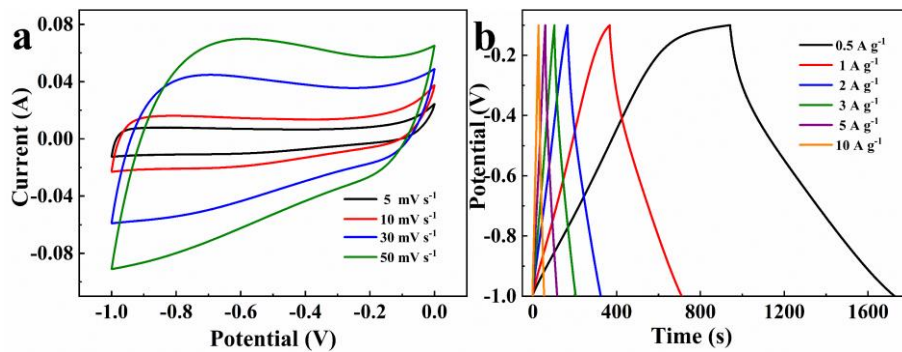


Fig.S8 Electrochemical performances of PC-KOH+K₂FeO₄: (a) CV curves, (b) GCD curves at 700 °C

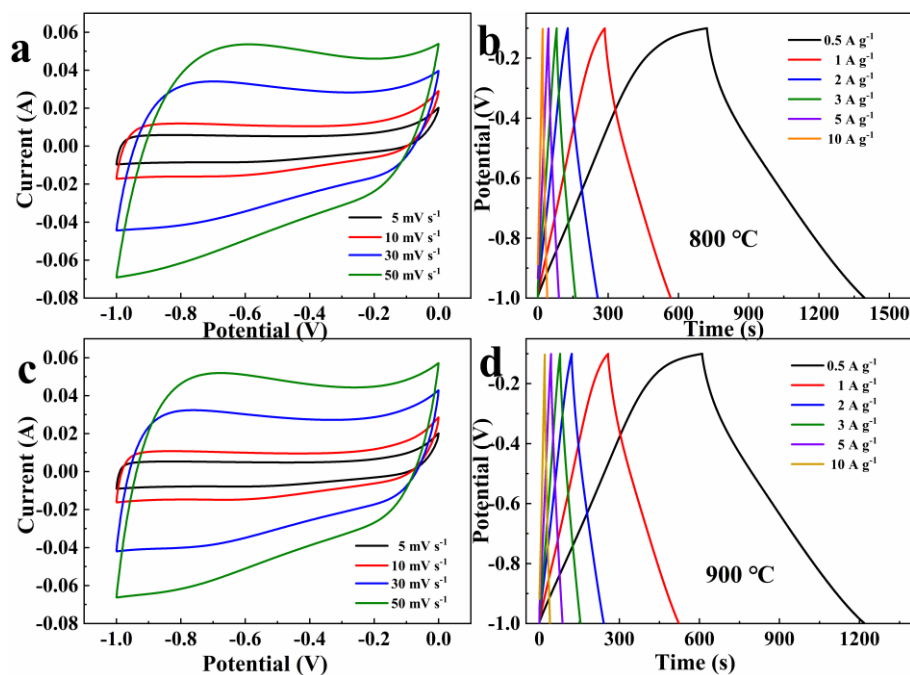


Fig.S9 Electrochemical performances of PC-KOH+K₂FeO₄ at different temperatures: (a) CV curves and (b) GCD curves of PC-KOH+K₂FeO₄ at 800 °C, (c) CV curves and (d) GCD curves of PC-KOH+K₂FeO₄ at 900 °C

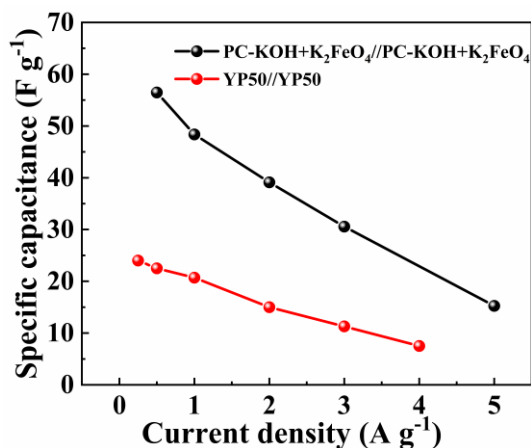


Fig.S10 Specific capacitances at different current densities of supercapacitor devices

Table. S1 Summary of energy densities of different devices in reported literature

The device	Energy density (Wh kg ⁻¹)	Power density (W kg ⁻¹)	Ref
PC-KOH+K ₂ FeO ₄ //PC-OH+K ₂ FeO ₄	19.9	398	This work
YP50//YP50	8.17	205.8	/
ONEPC//ONEPC	9.02	499.6	[1]
N-HNC//N-HNC	15.5	500	[2]
N-BPC//N-BPC	16.75	150	[3]
N-CNF//N-CNF	17.9	850	[4]

References

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