

Supporting Information

A green and scalable route to yield porous carbon sheets from biomass for supercapacitors with high capacity

Cunjing Wang^{ac}, Dapeng Wu^{a,d*}, Hongju Wang^{ab}, Zhiyong Gao^{a,d}, Fang Xu^{ab}, Kai Jiang^{ab*}

^aCollaborative Innovation Center of Henan Province for Green Manufacturing of Fine Chemicals, Key Laboratory of Green Chemical Media and Reactions, Ministry of Education, School of Chemistry and Chemical Engineering, Henan Normal University, Xinxiang, Henan 453007, P. R. China

^bSchool of Environment, Henan Normal University, Xinxiang, Henan 453007, P. R. China

^cSchool of Chemistry and Chemical Engineering, Xinxiang University, Xinxiang, Henan 453003, P. R. China

^dHenan Key Laboratory of Boron Chemistry and Advanced Energy Materials, Henan Normal University, Xinxiang, Henan 453007, PR China

*Corresponding author: Dapeng Wu, Kai Jiang

E-mail: dpengwu@126.com; or dapengwu@htu.edu.cn; Fax/Tel: +86 3733328629;

E-mail: jiangkai6898@126.com Fax/Tel: +86 3733328629;

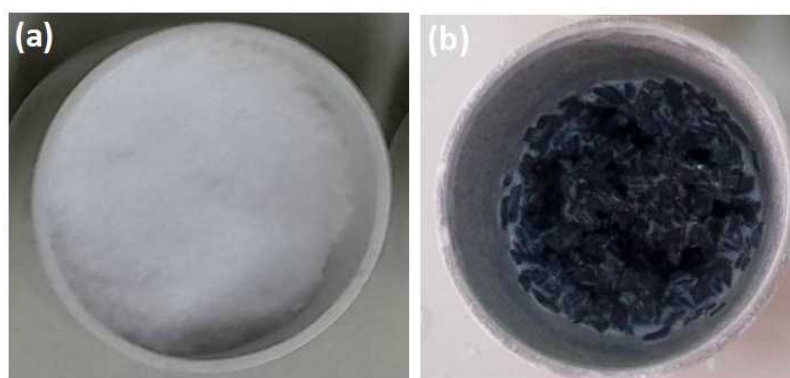


Fig. S1 the photograph of the mixture (a) before and (b) after calcinations.

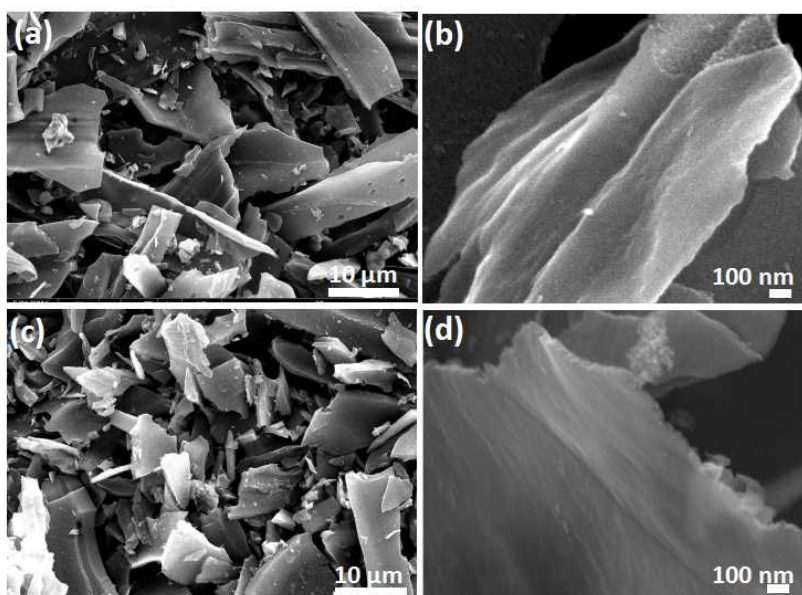


Fig. S2 FESEM images of (a, b) HPCS-3-2h and (c, d) HPCS-3-1h.

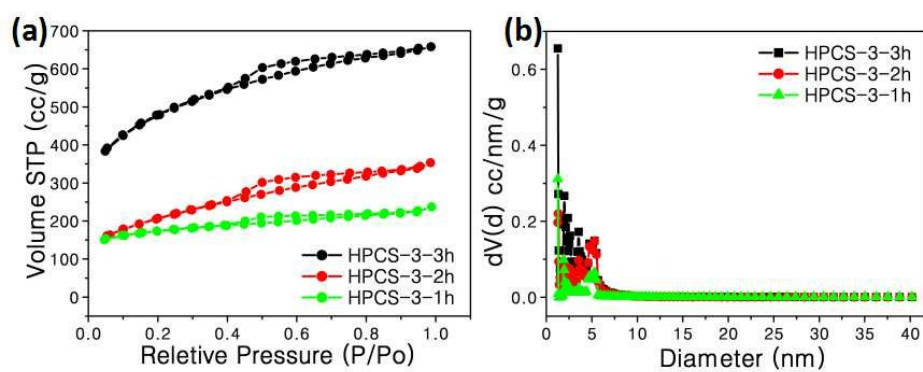


Fig. S3 (a) N_2 adsorption/desorption isotherms and (b) DFT pore size distribution of HPCS-3h, HPCS-3-2h and HPCS-3-1h.

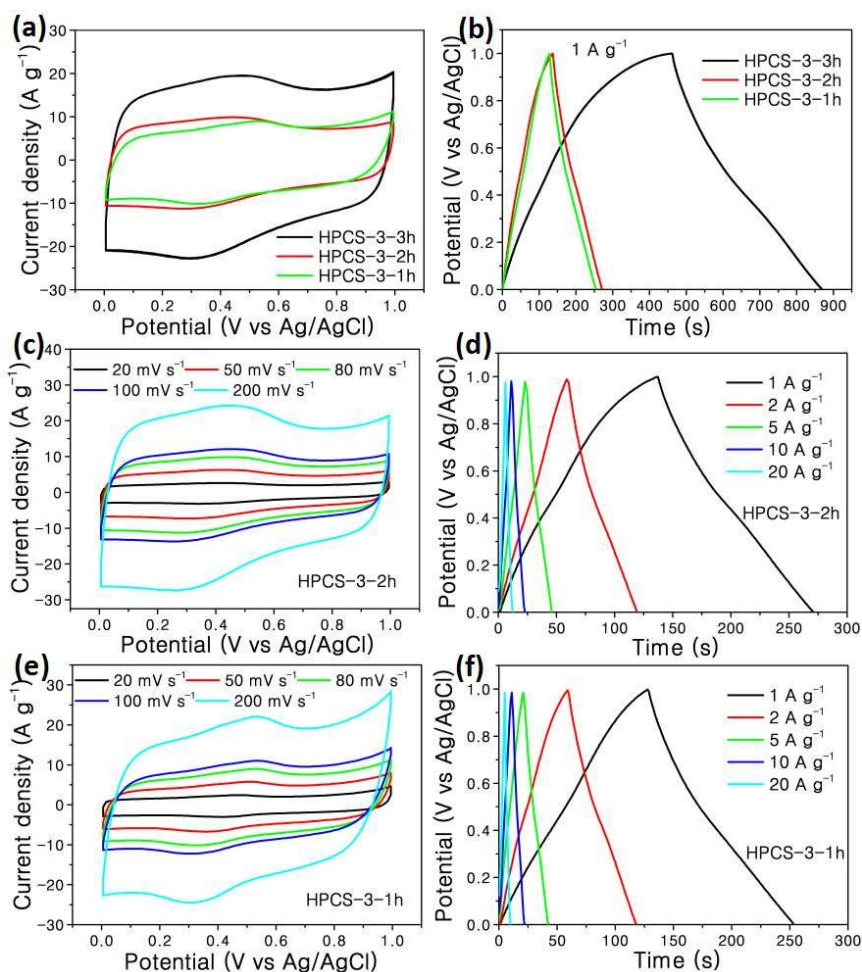


Fig. S4 Electrochemical performance in a three-electrode system in 1.0 M H₂SO₄ aqueous solution (a) CV curves at 80 mV s⁻¹ and (b) GCD curves at 1 A g⁻¹ of HPCS-3-3h, HPCS-3-2h and HPCS-3-1h, (c-f) CV curves at different scan rates and GCD curves at different current densities of HPCS-3-2h and HPCS-3-1h.

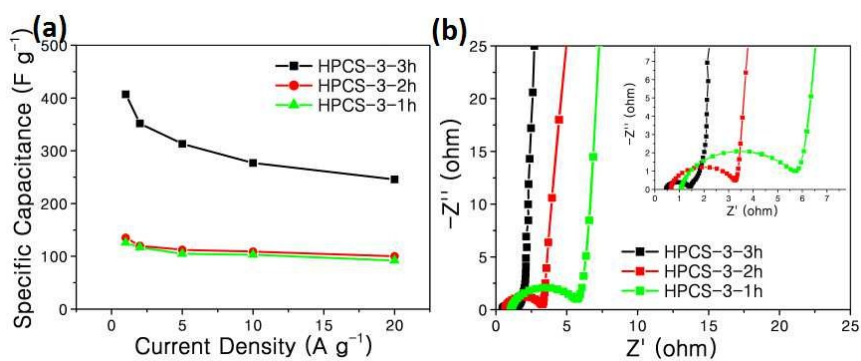


Fig. S5 Specific capacitance at different current densities and (b) Nyquist plots of HPCS-3-3h, HPCS-3-2h and HPCS-3-1h for a three-electrode system in 1.0 M H₂SO₄ aqueous solution.