

Supporting Information

“Water-in-salt” electrolyte enhanced high voltage aqueous supercapacitor with carbon electrodes derived from biomass waste-ground grain hulls

Mingjun Pang, Shang Jiang ^{*}, Jianguo Zhao ^{*}, Sufang Zhang, Runwei Wang ^b, Ning Li ^a, Rui Liu ^a, Qiliang Pan ^a, Wenshan Qu ^a and Baoyan Xing ^a

^a Institute of Carbon Materials Science, Shanxi Datong University, Datong 037009, P.R. China

^b State Key Laboratory of Inorganic Synthesis and Preparative Chemistry, College of Chemistry, Jilin University, Changchun 130012, P.R. China

^{*} Corresponding author.

E-mail: jiangshang3714@163.com (S. Jiang), pangmj0861@163.com (J.G. Zhao)

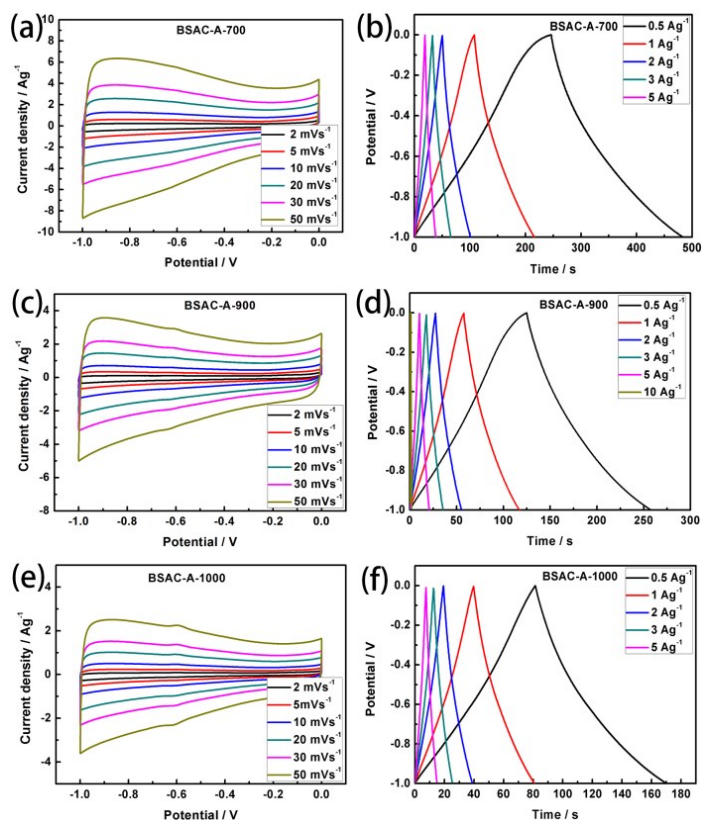


Fig. S1 Electrochemical characteristics of BSAC-A-n in a three-electrode system in 2 M KOH. CV of (a) BSAC-A-700 (c) BSAC-A-900 (e) BSAC-A-1000 at various scan rate. Galvanostatic charge-discharge curves of (b) BSAC-A-700 (d) BSAC-A-900 (f) BSAC-A-1000 under various current densities.

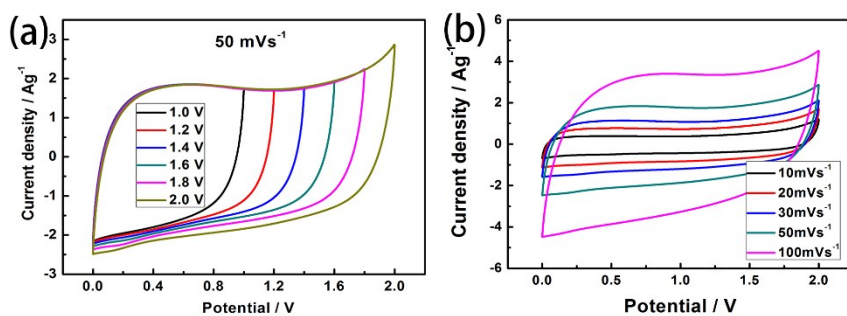


Fig. S2 (a) CV curves of the symmetric supercapacitor based on BSAC-A-800 using 1 M Na₂SO₄ measured at different voltage windows (b) CV curves of the SSCs using 1 M Na₂SO₄ at different scan rates (10-100 mVs⁻¹).

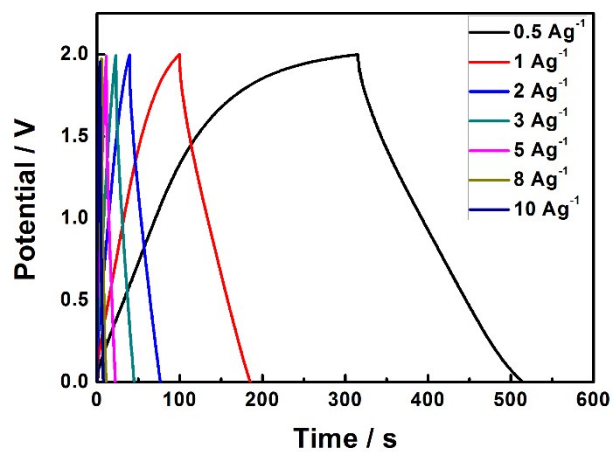


Fig. S3 GCD curves of the SSCs using 1 M Na₂SO₄ at various current densities