Accepted Manuscript

Biomass derived nitrogen-doped hierarchical porous carbon sheets for supercapacitors with high performance

Cunjing Wang, Dapeng Wu, Hongju Wang, Zhiyong Gao, Fang Xu, Kai Jiang

PII: DOI: Reference:	S0021-9797(18)30251-0 https://doi.org/10.1016/j.jcis.2018.03.009 YJCIS 23359
To appear in:	Journal of Colloid and Interface Science
Received Date:	21 December 2017
Revised Date:	28 February 2018
Accepted Date:	3 March 2018



Please cite this article as: C. Wang, D. Wu, H. Wang, Z. Gao, F. Xu, K. Jiang, Biomass derived nitrogen-doped hierarchical porous carbon sheets for supercapacitors with high performance, *Journal of Colloid and Interface Science* (2018), doi: https://doi.org/10.1016/j.jcis.2018.03.009

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

ACCEPTED MANUSCRIPT

Biomass derived nitrogen-doped hierarchical porous carbon sheets

for supercapacitors with high performance

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

*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;

Abstract: A facile potassium chloride salt-locking technique combined with hydrothermal treatment on precursors was explored to prepare nitrogen-doped hierarchical porous carbon sheets in air from biomass. Benefiting from the effective synthesis strategy, the as-obtained carbon possesses a unique nitrogen-doped thin carbon sheet structure with abundant hierarchical pores and large specific surface areas of 1459

Download English Version:

https://daneshyari.com/en/article/6990736

Download Persian Version:

https://daneshyari.com/article/6990736

Daneshyari.com