Accepted Manuscript

Title: Facile Preparation of Porous Nickel Oxide Membrane for Flexible Supercapacitors Electrode *via* Phase-Separation Method of Polymer

Authors: Fen Ran, Hezhen Yang, Yage Wu, Xiaoning Zhao, Yongtao Tan, Ying Liu, Xiaoqin Niu, Yuhong Chen, Lingbin Kong, Long Kang

PII: S0025-5408(18)30222-8

DOI: https://doi.org/10.1016/j.materresbull.2018.03.004

Reference: MRB 9885

To appear in: *MRB*

Received date: 19-1-2018 Revised date: 28-2-2018 Accepted date: 3-3-2018

Please cite this article as: Ran F, Yang H, Wu Y, Zhao X, Tan Y, Liu Y, Niu X, Chen Y, Kong L, Kang L, Facile Preparation of Porous Nickel Oxide Membrane for Flexible Supercapacitors Electrode *via* Phase-Separation Method of Polymer, *Materials Research Bulletin* (2010), https://doi.org/10.1016/j.materresbull.2018.03.004

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.

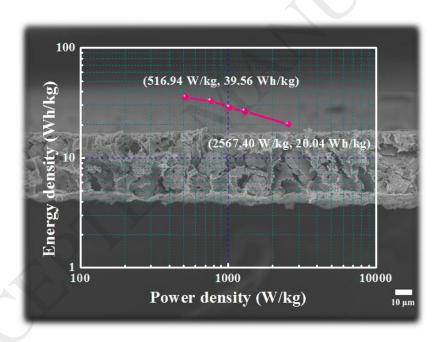


ACCEPTED MANUSCRIPT

Facile Preparation of Porous Nickel Oxide Membrane for Flexible Supercapacitors Electrode *via* Phase-Separation Method of Polymer

Fen Ran^{1,2,*}, Hezhen Yang², Yage Wu², Xiaoning Zhao², Yongtao Tan^{1,2}, Ying Liu^{1,2}, Xiaoqin Niu^{3,*}, Yuhong Chen³, Lingbin Kong^{1,2}, Long Kang^{1,2}

Graphical Abstract



Highlights

- Polymer/metal oxide hybrid membrane is fabricated for supercapacitors electrode
- Effects of membrane components on structure and performance are investigated
- The prepared electrode membrane shows high flexible property
- A capacitance of 794 F/g is obtained at a current density of 1.0 A/g
- Symmetric supercapacitor device exhibits an energy density of 39.6 Wh/kg

¹ State Key Laboratory of Advanced Processing and Recycling of Non-ferrous Metals, Lanzhou University of Technology, Lanzhou 730050, P. R. China

² School of Material Science and Engineering, Lanzhou University of Technology, Lanzhou 730050, Gansu, P. R. China

³ College of Petrochemical Technology, Lanzhou University of Technology, Lanzhou 730050, P. R. China

^{*}Corresponding Xiaoqin Niu (niuxiaoqin1978@163.com); or Fen Ran (ranfen@163.com).

Download English Version:

https://daneshyari.com/en/article/7904576

Download Persian Version:

https://daneshyari.com/article/7904576

<u>Daneshyari.com</u>