## Accepted Manuscript

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PII:	S0013-4686(15)01415-2
DOI:	http://dx.doi.org/doi:10.1016/j.electacta.2015.06.044
Reference:	EA 25169
To appear in:	Electrochimica Acta
Received date:	26-3-2015
Revised date:	11-5-2015
Accepted date:	15-6-2015

Please cite this article as: Juan Xu, Taotao Ding, Jin Wang, Jun Zhang, Shuai Wang, Changqing Chen, Yanyan Fang, Zhihao Wu, Kaifu Huo, Jiangnan Dai, Tungsten Oxide Nanofibers Self-assembled Mesoscopic Microspheres as High-performance Electrodes for Supercapacitor, Electrochimica Acta http://dx.doi.org/10.1016/j.electacta.2015.06.044

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## ACCEPTED MANUSCRIPT

Tungsten Oxide Nanofibers Self-assembled Mesoscopic Microspheres as High-performance Electrodes for Supercapacitor

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Highlights

▶ WO<sub>3</sub> mesoscopic microspheres self-assembled by nanofibers. ▶ Inorganic solvent  $H_2O_2$  play an integral role in the process of self-assembly. ▶ WO<sub>3</sub> mesoscopic microspheres exhibit specific capacitance value of 797.05 F g<sup>-1</sup> at a constant density of 0.5 A g<sup>-1</sup> in 2 M H<sub>2</sub>SO<sub>4</sub> aqueous solution. ▶ The WO<sub>3</sub> //AC asymmetric supercapacitor displays a maximum energy density of 97.61 Wh kg<sup>-1</sup> and power density of 28.01 kW kg<sup>-1</sup>.

Abstract

Mesoscopic  $WO_3$  microspheres composed of self-assembly nanofibers were prepared by hydrothermal reaction of tungsten acid potassium and  $H_2O_2$ . The Download English Version:

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