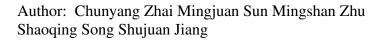
## Accepted Manuscript

Title: A new method to synthesize sulfur-doped graphene as effective metal-free electrocatalyst for oxygen reduction reaction





PII:	S0169-4332(17)30564-0
DOI:	http://dx.doi.org/doi:10.1016/j.apsusc.2017.02.191
Reference:	APSUSC 35300
To appear in:	APSUSC
Received date:	28-1-2017
Revised date:	19-2-2017
Accepted date:	21-2-2017

Please cite this article as: C. Zhai, M. Sun, M. Zhu, S. Song, S. Jiang, A new method to synthesize sulfur-doped graphene as effective metal-free electrocatalyst for oxygen reduction reaction, *Applied Surface Science* (2017), http://dx.doi.org/10.1016/j.apsusc.2017.02.191

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

### **Graphical abstract**



#### Highlights

- S doped graphene was facile synthesized by one-pot solvothermal method
- DMSO acted as S source as well as reaction solvent
- S-RGO worked as an efficient metal-free electrocatalyst for ORR
- S-RGO acted as a promising candidate instead of Pt-based catalyst

#### A new method to synthesize sulfur-doped graphene as effective metal-free

#### electrocatalyst for oxygen reduction reaction

Chunyang Zhai,<sup>a</sup> Mingjuan Sun,<sup>a</sup> Mingshan Zhu, <sup>\*,a</sup> Shaoqing Song,<sup>b</sup> Shujuan Jiang<sup>\*b</sup>

<sup>a</sup> School of Materials Science and Chemical Engineering, Ningbo University, Ningbo

315211, P. R. China

<sup>\*</sup> Corresponding authors: E-mail: mingshanzhu@yahoo.com (M. Zhu); sjjiang@ecit.edu.cn (S. Jiang).

Download English Version:

# https://daneshyari.com/en/article/5351478

Download Persian Version:

https://daneshyari.com/article/5351478

Daneshyari.com