



Effective exposure of nitrogen heteroatoms in 3D porous graphene framework for oxygen reduction reaction and lithium-sulfur batteries

Jia-Le Shi , Cheng Tang , Jia-Qi Huang , Wancheng Zhu , Qiang Zhang

PII: S2095-4956(17)30765-9
DOI: [10.1016/j.jechem.2017.09.014](https://doi.org/10.1016/j.jechem.2017.09.014)
Reference: JECHEM 402

To appear in: *Journal of Energy Chemistry*

Received date: 2 September 2017
Revised date: 15 September 2017
Accepted date: 16 September 2017

Please cite this article as: Jia-Le Shi , Cheng Tang , Jia-Qi Huang , Wancheng Zhu , Qiang Zhang , Effective exposure of nitrogen heteroatoms in 3D porous graphene framework for oxygen reduction reaction and lithium-sulfur batteries, *Journal of Energy Chemistry* (2017), doi: [10.1016/j.jechem.2017.09.014](https://doi.org/10.1016/j.jechem.2017.09.014)

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.

Effective exposure of nitrogen heteroatoms in 3D porous graphene framework for oxygen reduction reaction and lithium-sulfur batteries

Jia-Le Shi^a, Cheng Tang^a, Jia-Qi Huang^{b,e}, Wancheng Zhu^c, Qiang Zhang^{a,d,*}

^a *Beijing Key Laboratory of Green Chemical Reaction Engineering and Technology, Department of Chemical Engineering, Tsinghua University, Beijing 100084, China*

^b *Advanced Research Institute for Multidisciplinary Science, Beijing Institute of Technology, Beijing 100081, China*

^c *Department of Chemical Engineering, Qufu Normal University, Qufu, 273165, Shandong, China*

^d *Key Laboratory of Advanced Energy Materials Chemistry (Ministry of Education), Nankai University, Tianjin 300071, China*

^e *CAS Key Laboratory of Carbon Materials, Institute of Coal Chemistry, Chinese Academy of Sciences, Taiyuan 030001, Shanxi, China*

* Corresponding author. Tel.: +86-10-62789041; Fax: +86 10 62772051.

E-mail addresses: zhang-qiang@mails.tsinghua.edu.cn (Q. Zhang).

Download English Version:

<https://daneshyari.com/en/article/6529850>

Download Persian Version:

<https://daneshyari.com/article/6529850>

[Daneshyari.com](https://daneshyari.com)