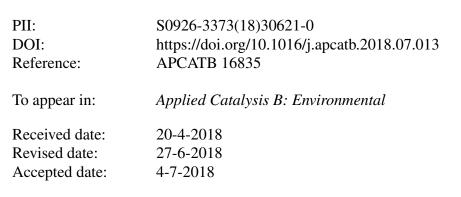
Accepted Manuscript

Title: Amino acid-derived non-precious catalysts with excellent electrocatalytic performance and methanol tolerance in oxygen reduction reaction

Authors: Da-Hee Kwak, Sang-Beom Han, Do-Hyoung Kim, Ji-Eun Won, Kyung-Won Park



Please cite this article as: Kwak D-Hee, Han S-Beom, Kim D-Hyoung, Won J-Eun, Park K-Won, Amino acid-derived non-precious catalysts with excellent electrocatalytic performance and methanol tolerance in oxygen reduction reaction, *Applied Catalysis B: Environmental* (2018), https://doi.org/10.1016/j.apcatb.2018.07.013

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

Amino acid-derived non-precious catalysts with excellent electrocatalytic performance and methanol tolerance in oxygen reduction reaction

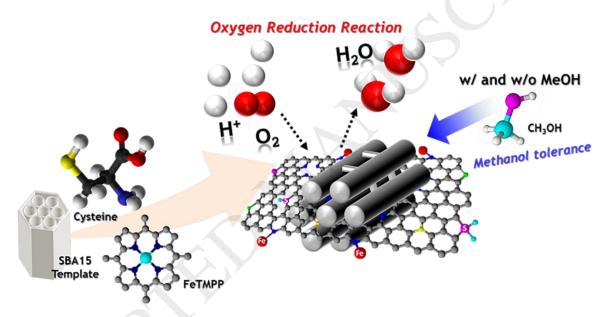
Da-Hee Kwak, Sang-Beom Han, Do-Hyoung Kim, Ji-Eun Won, and Kyung-Won Park*

Department of Chemical Engineering, Soongsil University, Seoul 156-743, Republic of

Korea.

* Corresponding author. Tel: 82-2-820-0613. Fax: 82-2-812-5378.

Graphical Abstract



Research highlights

- **•** Doped mesoporous carbon nanostructures were synthesized using template method.
- Doped porous carbon nanostructures were synthesized using amino acid cysteine.
- The mesoporous carbon nanostructures contained multi-dopants such as Fe, N, and S.
- ► The doped carbon nanostructures showed highly improved ORR activity and stability.
- The doped carbon nanostructures showed an superior tolerance of methanol.

E-mail address: kwpark@ssu.ac.kr (Prof. K.-W. Park).

Download English Version:

https://daneshyari.com/en/article/6498031

Download Persian Version:

https://daneshyari.com/article/6498031

Daneshyari.com