

Accepted Manuscript

Title: Polymeric graphitic carbon nitride nanosheet-coated amorphous carbon supports for enhanced fuel cell electrode performance and stability

Authors: In Hyuk Lee, Jinwon Cho, Keun Hwa Chae, Min Kyung Cho, Juhae Jung, Jongin Cho, Hyun Jin Lee, Hyung Chul Ham, Jin Young Kim



PII: S0926-3373(18)30513-7
DOI: <https://doi.org/10.1016/j.apcatb.2018.05.081>
Reference: APCATB 16735

To appear in: *Applied Catalysis B: Environmental*

Received date: 7-2-2018
Revised date: 10-5-2018
Accepted date: 28-5-2018

Please cite this article as: Lee IH, Cho J, Chae KH, Cho MK, Jung J, Cho J, Lee HJ, Ham HC, Kim JY, Polymeric graphitic carbon nitride nanosheet-coated amorphous carbon supports for enhanced fuel cell electrode performance and stability, *Applied Catalysis B: Environmental* (2018), <https://doi.org/10.1016/j.apcatb.2018.05.081>

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.

Polymeric graphitic carbon nitride nanosheet-coated amorphous carbon supports for enhanced fuel cell electrode performance and stability

In Hyuk Lee^{a,b,c}, Jinwon Cho^a, Keun Hwa Chae^d, Min Kyung Cho^d, Juhae Jung^b, Jongin Cho^b, Hyun Jin Lee^b, Hyung Chul Ham^a, and Jin Young Kim^{a,c,*}

^aFuel Cell Research Center, Korea Institute of Science and Technology, Hwarangno 14-gil 5, Seongbuk-gu, Seoul 02792, Republic of Korea

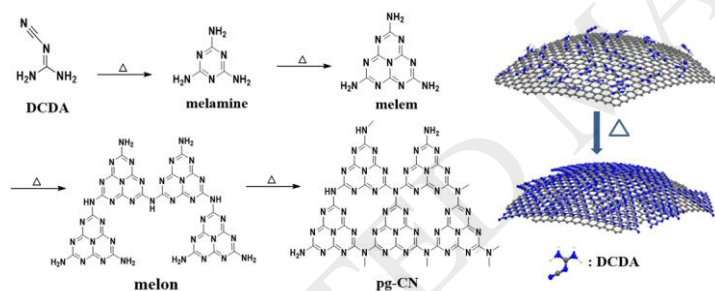
^bDoosan Corporation Electro-Materials, 10, Suji-Ro(St) 112 Beon-Gil, Suji-Gu, Yongin-Si, Gyeonggi-do, Republic of Korea

^cUniversity of Science and Technology, Daejeon 305-355, Republic of Korea

^dAdvanced Analysis Center, Korea Institute of Science and Technology, Hwarangno 14-gil 5, Seongbuk-gu, Seoul 02792, Republic of Korea

*Corresponding author: jinykim@kist.re.kr

Graphical abstract



Highlights

- The polymeric graphitic carbon nitride was coated on amorphous carbon.
- The a-CB@pg-CN supports showed a higher electrochemical stability.
- Pt has been perfectly deposited on a-CB@pg-CN.
- The Pt/a-CB@pg-CN catalyst showed higher stability in half and single cell.

Abstract

Download English Version:

<https://daneshyari.com/en/article/6498128>

Download Persian Version:

<https://daneshyari.com/article/6498128>

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