

Supplementary Information

2D Polyacrylonitrile Brushes Derived Nitrogen-doped Carbon Nanosheets for High-performance Electrocatalyst in Oxygen Reduction Reaction

Cheng'an Cao,^{†ab} Xiaodong Zhuang,^{†b} Yuezeng Su,^{*a} Yi Zhang,^a Fan Zhang,^{*b}
Dongqing Wu,^b and Xinliang Feng^{bc}

[†] These two authors contributed equally to this work

a]. Dr. Y. Su, C. Cao and Y. Zhang

School of Aeronautics and Astronautics,

Shanghai Jiao Tong University,

Shanghai 200240, P. R. China

E-mail: yzsu@sjtu.edu.cn

b]. C. Cao, Dr. X. Zhuang, Prof. F. Zhang, Dr. D. Wu and Prof. X. Feng

School of Chemistry and Chemical Engineering,

Shanghai Jiao Tong University,

Shanghai 200240, P. R. China

E-mail: fan-zhang@sjtu.edu.cn

c]. Prof. X. Feng

Max Planck Institute for Polymer Research,

Ackermannweg 10, D-55128 Mainz, Germany

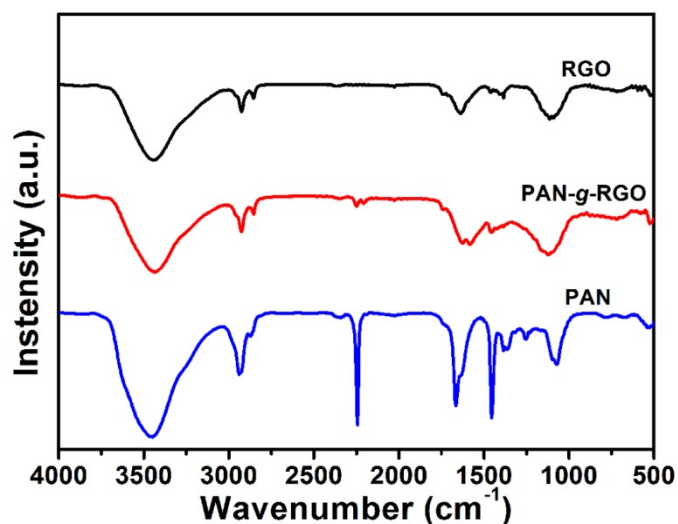


Fig. S1 FT-IR spectra of RGO, PAN-g-RGO, and PAN between 500 and 4000 cm^{-1} .

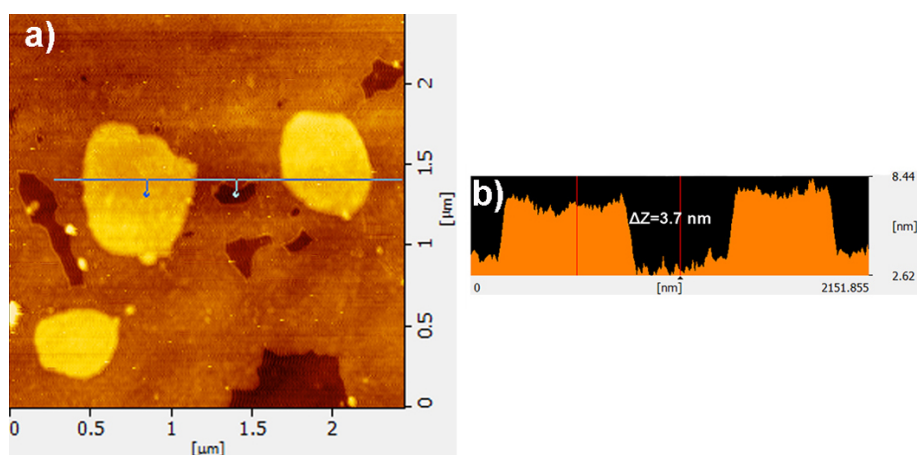


Fig. S2 a) AFM image of NCNS-700/900; b) The cross section image of NCNS-700/900.

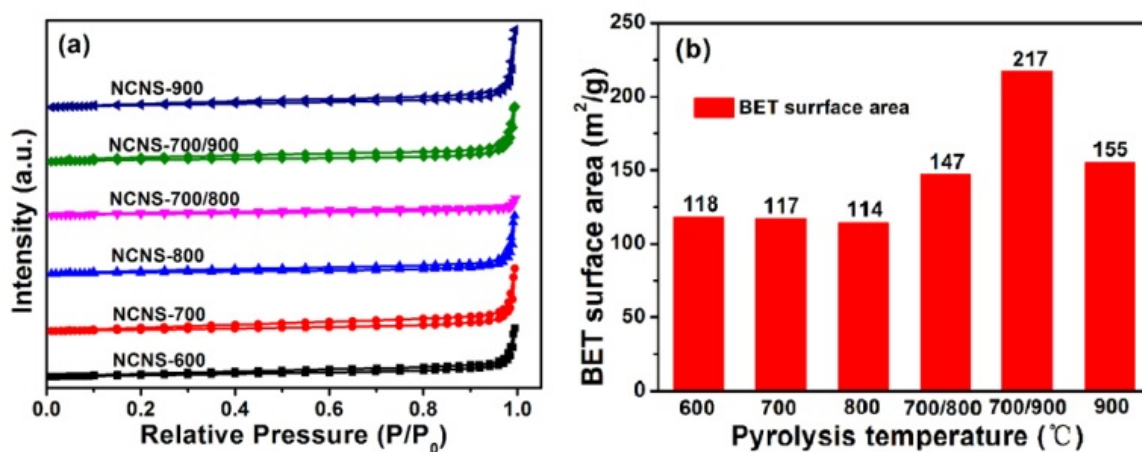


Fig. S3 Nitrogen adsorption and desorption isotherms (a) and BET surface area values (b) for a series of samples pyrolyzed at different temperatures.