Electronic Supporting Information

Transforming waste biomass with an intrinsically porous network structure into porous nitrogen-doped graphene for highly efficient oxygen reduction

Huang Zhou, Jian Zhang, Ibrahim Saana Amiinu, Chenyu Zhang, Xiaobo Liu, Wenmao Tu, Mu Pan and Shichun Mu*

State Key Laboratory of Advanced Technology for Materials Synthesis and Processing
Wuhan University of Technology, Wuhan, 430070 P. R. China

* Corresponding author: Tel: +86 27 87651837, E-mail: msc@whut.edu.cn

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Figure S3 XPS spectra of surface chemical composition (a) and N1s spectra (b) of SBS-Ar, (c) Tafel plots for SBS-K-A and Pt/C extracted from Fig. 2b (d) the stability of Pt/C before and after i-t test in 0.1M KOH solution with O2-saturation during a constant potential -0.35 V and a rotation rate of 1,600 rpm,

Figure S4 (a) Nyquist plots of SBS-K-A and SBS-Ar, (b) LSV curves of SBS-K-A at different rotation rates, (c) the corresponding K-L plots of SBS-K-A (inset: the electron transfer number n at the various potentials of SBS-K-A) and (d) the CO tolerance (VCO/VO2~10%) of SBS-K-A and Pt/C in 0.1M HClO4 solution with O2-saturation during a constant potential at 0.3V and a rotation rate of 1,600 rpm.

Data (b and c) were recorded in 0.1M HClO4 solution.

Table S1 The content (%) of C, N and O, and the content of N species (%) of SBS-K-A and SBS-Ar.
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<table>
<thead>
<tr>
<th>Sample</th>
<th>Content (%)</th>
<th>Content of N species (%)</th>
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<tbody>
<tr>
<td></td>
<td>C (%)</td>
<td>N (%)</td>
</tr>
<tr>
<td>SBS-K-A</td>
<td>84.73</td>
<td>5.73</td>
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<tr>
<td>SBS-Ar</td>
<td>89.25</td>
<td>0.55</td>
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