Electronic Supplementary Information

HCl post-processing BiOBr photocatalyst: Structure, morphology, and composition and their impacts to activity

Min Hu,a Rui Li,a Xiaochao Zhang,*a Changming Zhang,a Hui Zhang,b Caimei Fan,*a Jesse Zhu,b

1College of Chemistry and Chemical Engineering, Taiyuan University of Technology, Taiyuan 030024, PR China
2Particle Technology Research Centre, Department of Chemical and Biochemical Engineering, The University of Western Ontario, London, Ontario N6A 5B9, Canada

*Corresponding author.

Tel.: +86-351-6018193; +86-13007011210; fax: +86-351-6018554.

E-mail address: zhangxiaochao@tyut.edu.cn (X.C. Zhang);

hzhang1@uwo.ca (H. Zhu);

fanem@163.com (C.M. Fan)
Fig. S1. EDX patterns of (a) BOB, (b) BOB-HC2, (c) BOB-HC3, and (d) BOB-HC5 samples

Fig. S2. Nitrogen adsorption-desorption isotherms and pore size distribution for: (a) BOB, (b) BOB-HC2, (c) BOB-HC3, and (d) BOB-HC5 samples
Fig. S3. SEM images of (a) fresh and (b) used BOB-HC3 catalysts

Fig. S4. SEM images of (a) BOB-NC and (b) BOB samples

Table S1 Values of electronegativity of atoms calculated from the ionization energy and the electron affinity energy

<table>
<thead>
<tr>
<th>Atoms</th>
<th>The ionization energy (kJ/mol)</th>
<th>The electron affinity energy (kJ/mol)</th>
<th>Electronegativity (eV)</th>
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<tbody>
<tr>
<td>Bi</td>
<td>703.0</td>
<td>91</td>
<td>4.11</td>
</tr>
<tr>
<td>O</td>
<td>1313.9</td>
<td>141</td>
<td>7.54</td>
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<tr>
<td>Cl</td>
<td>1251.2</td>
<td>349</td>
<td>8.29</td>
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<tr>
<td>Br</td>
<td>1139.9</td>
<td>324</td>
<td>7.59</td>
</tr>
</tbody>
</table>