Supplementary Information for

Microwave-assisted synthesis of BiFeO$_3$ nanoparticles with high catalytic performance in microwave-enhanced Fenton-like process

Shuo Li $^a$, Guangshan Zhang $^a$,* Heshan Zheng $^a$, Nannan Wang $^a$, Yongjie Zheng $^b$, Peng Wang $^a$,*

$^a$ State Key Laboratory of Urban Water Resource and Environment, School of Municipal and Environmental Engineering, Harbin Institute of Technology, Harbin, 150090, China

$^b$ College of Chemistry and Chemical Engineering, Qiqihar University, Qiqihar, 161006, China

*Corresponding authors. Tel.: 86-451-86283557; Fax: 86-451-86283557.
E-mail addresses: gszhanghit@gmail.com (G.S. Zhang), pwang73@vip.sina.com (P. Wang)
This supplementary information contains the following sections:

Table S1 The results of BET surface area with different synthesis methods.

Fig. S1 (a) The experiment device schematic diagrams for synthesis and (b) reaction.

Fig. S2 Adsorption curves of the RhB using BFO-MAHS and BFO-THM catalysts.

Fig. S3 Comparison of pseudo-first-order kinetics curves between Fenton-like processes and MW-Fenton-like process.
Table S1 The results of BET surface area with different synthesis methods

<table>
<thead>
<tr>
<th>Synthesis method</th>
<th>Surface area (m²/g)</th>
<th>Pore Volume (mL/g)</th>
<th>Pore Diameter (nm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BFO-MAHS</td>
<td>78.51±0.01</td>
<td>0.02±0.001</td>
<td>13.6±0.03</td>
</tr>
<tr>
<td>BFO-THM</td>
<td>34.11±0.02</td>
<td>0.051±0.001</td>
<td>20.43±0.01</td>
</tr>
</tbody>
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