Supporting information

Activated Biochar Derived from Pomelo Peel as High-Capacity Sorbent for Removal of Carbamazepine from Aqueous Solution

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Figure S1. TG curve of CBZ.

Figure S2. Typical SEM images of a) pristine biochar and b) activated (at 800 °C) biochar from pomelo peel.
Figure S3. Typical (a, b) TEM and (c, d) HRTEM of as-prepared AB-600.

Figure S4. Relationship of pore structure and the adsorption capacity.
Figure S5. Arrhenius plot for adsorption of CBZ by AB-700

Figure S6. Zeta potential as a function of pH for AB-700.

Table S1. The elemental compositions (atomic %) on the surface AB-600, AB-700, AB-800 and AB-900

<table>
<thead>
<tr>
<th>Sample</th>
<th>Carbon</th>
<th>Oxygen</th>
<th>Nitrogen</th>
</tr>
</thead>
<tbody>
<tr>
<td>AB-600</td>
<td>89.74</td>
<td>8.88</td>
<td>1.38</td>
</tr>
<tr>
<td>AB-700</td>
<td>93.04</td>
<td>5.79</td>
<td>1.17</td>
</tr>
<tr>
<td>AB-800</td>
<td>95.39</td>
<td>3.90</td>
<td>0.71</td>
</tr>
<tr>
<td>AB-900</td>
<td>97.29</td>
<td>2.39</td>
<td>0.32</td>
</tr>
</tbody>
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