Supporting Information

Synthesis and Acid Catalysis of Zeolite-Templated Microporous Carbons with SO$_3$H Groups

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Figure S2. Raman spectra of (a)SO$_3$H-MC(Imp) and (b)SO$_3$H-MC(Imp-CVD).
1. Physicochemical properties of microporous carbon catalysts.

Table S1. Physicochemical properties of microporous carbon catalysts.

<table>
<thead>
<tr>
<th></th>
<th>$S_{\text{BET}}$ / m$^2$ g$^{-1}$</th>
<th>Micropore volume / cm$^3$ g$^{-1}$</th>
<th>Carbon fraction$^1$ / g g$^{-1}$ zeolite</th>
<th>H/C</th>
</tr>
</thead>
<tbody>
<tr>
<td>SO$_3$H-MC(Imp)</td>
<td>890 (1300)$^2$</td>
<td>0.36</td>
<td>0.24</td>
<td>0.55</td>
</tr>
<tr>
<td>SO$_3$H-MC(Imp-CVD)</td>
<td>1150 (1900)$^2$</td>
<td>0.61</td>
<td>0.75</td>
<td>0.21</td>
</tr>
<tr>
<td>CCSA</td>
<td>&lt;$5$ (&lt;5)$^2$</td>
<td>-</td>
<td>-</td>
<td>0.96</td>
</tr>
</tbody>
</table>

$^1$ Carbon fraction in each zeolite/carbon composite was calculated from TG-DTA profiles.

$^2$ Values in parentheses are BET surface areas of the sample before sulfonation.
2. TG curves of carbon-zeolite composite materials.

Figure S1. TG curves of (a) MC(Imp) and (b) MC(Imp-CVD) before HF treatment.
2. Raman spectra of SO$_3$H-bearing microporous catalysts

![Raman spectra](image)

**Figure S2.** Raman spectra of (a) SO$_3$H-MC(Imp) and (b) SO$_3$H-MC(Imp-CVD).

Figure S2 shows Raman spectra of SO$_3$H-MC(Imp) and SO$_3$H-MC(Imp-CVD). Two distinct signals, assignable to the D (1350 cm$^{-1}$, $A_{1g}$ D breathing mode) and G bands (1580 cm$^{-1}$, $E_{2g}$ G mode), are evident. These signals are typical of amorphous carbon with small graphene sheets.