Supporting Information

A Facile Synthesis of Copper Nanoparticles Supported on Ordered Mesoporous Polymer as an Efficient and Stable Catalyst for Solvent-Free Sonogashira Coupling Reactions

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Table S1 Catalytic performances of the use of different amounts of CuNPs@MP-3 catalyst<sup>a</sup>

<table>
<thead>
<tr>
<th>Entry</th>
<th>Catalyst (mol%)</th>
<th>Base</th>
<th>Temp. (°C)</th>
<th>Time (h)</th>
<th>Yield (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.50</td>
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<td>8</td>
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<tr>
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<td>1.0</td>
<td>TEA</td>
<td>40</td>
<td>8</td>
<td>96.0</td>
</tr>
<tr>
<td>4</td>
<td>1.5</td>
<td>TEA</td>
<td>40</td>
<td>8</td>
<td>99.0</td>
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</tbody>
</table>

<sup>a</sup> Reaction conditions: phenylacetylene (0.50 mmol), benzoyl chloride (0.75 mmol), Et<sub>3</sub>N (1.5 mmol), N<sub>2</sub> atmosphere.
<table>
<thead>
<tr>
<th>Entry</th>
<th>Catalyst</th>
<th>Base</th>
<th>Temp. (°C)</th>
<th>Time (h)</th>
<th>Yield (%)</th>
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<tbody>
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*a Reaction conditions: phenylacetylene (0.50 mmol), benzoyl chloride (0.75 mmol), 1.0 mol% catalyst, Et₃N (1.5 mmol), N₂ atmosphere.*
<table>
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<th>Entry</th>
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<th>Temp. (°C)</th>
<th>Time (h)</th>
<th>Yield (%)</th>
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*Reaction conditions: phenylacetylene (0.50 mmol), benzoyl chloride (0.75 mmol), 1.0 mol%Cu NPs@MP-3, N$_2$ atmosphere.*
Table S4 Catalytic performances of Cu NPs@MP-3 catalyst with different reaction temperatures$^a$

<table>
<thead>
<tr>
<th>Entry</th>
<th>Catalyst</th>
<th>Base</th>
<th>Temp. (°C)</th>
<th>Time (h)</th>
<th>Yield (%)</th>
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$^a$Reaction conditions: phenylacetylene (0.5 mmol), benzoyl chloride (0.75 mmol), 1.0 mol% catalyst, Et$_3$N (1.5 mmol), N$_2$ atmosphere.
Figure S1 TEM image of the commercial Cu powder.
Figure S2 XRD pattern of Cu NPs@SBA-15.
Figure S3 TEM picture of Cu NPs@SBA-15.
Figure S4 N₂ sorption isotherm of Cu NPs@SBA-15.
Figure S5 FT-IR spectrum of Cu NPs@TMS-SBA-15 sample.
Figure S6 XRD pattern of the recycled Cu NPs@MP-3 after ten repetitions.
Figure S7 N$_2$ sorption isotherm of the recycled Cu NPs@MP-3 after ten repetitions.
Figure S8 TEM image of the recycled Cu NPs@MP-3 catalyst after ten runs.