Supplementary Information

TG profile of precursor fibers

SI Fig1 TG profile of PS/TiO\textsubscript{2} precursor fibers

SI Table 1 Comparison of the photo degradation rate constants of varied titania nanostructures with the commercial TiO\textsubscript{2} powder P25 Aeroxide\textsuperscript{®} P25 (Evonik Degussa, GmbH).

<table>
<thead>
<tr>
<th>TiO\textsubscript{2}</th>
<th>Catalyst Conc</th>
<th>Initial MB Conc</th>
<th>Reaction condition</th>
<th>Rate constant</th>
<th>Source</th>
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<tbody>
<tr>
<td>Nanofiber</td>
<td>100mg/L</td>
<td>10mg/L</td>
<td>160W Hg Lamp</td>
<td>0.007 min\textsuperscript{-1}</td>
<td>This work</td>
</tr>
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<td>NW@MT</td>
<td>100mg/L</td>
<td>10mg/L</td>
<td>160W Hg Lamp</td>
<td>0.016 min\textsuperscript{-1}</td>
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<td>Tubes</td>
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<td>10mg/L</td>
<td>160W Hg Lamp</td>
<td>0.024 min\textsuperscript{-1}</td>
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<td>Porous Tubes</td>
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<td>10mg/L</td>
<td>160W Hg Lamp</td>
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<td>P25 Degussa</td>
<td>240mg/L</td>
<td>25mg/L</td>
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<td>P25 Degussa</td>
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<td>P25 Degussa</td>
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<td>32mg/L</td>
<td>75 W Hg Lamp</td>
<td>0.012 min\textsuperscript{-1}</td>
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</tbody>
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3 M.J.Height, S.E.Pratsinis, O.Mekasuwanumrong,P.Praserthdam, Applied Catalysis B, 2006 63 305.