Electronic Supplementary Information

Highly efficient visible-light-driven photocatalytic degradation of Rhodamine B from a novel Z-scheme Ag₃PO₄/MIL-101/NiFe₂O₄ composite

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CAPTIONS

**Fig. S1** XRD patterns in the 2θ range from 5 to 90° of fresh and used APO/MOF/NFO(20%) samples..........................................................S3

**Fig. S2** Ag 3d XPS spectra of APO-fresh (a), APO/MOF/NFO(20%)-fresh (b), APO-used (c) and APO/MOF/NFO(20%)-used (d)..............................S4

**Fig. S3** Photocatalytic degradation curves of RhB over APO/MOF/NFO(20%) system in the different concentration of RhB (a) and photocatalyst mass (b); kinetics study of photocatalytic RhB degradation effect of RhB over APO/MOF/NFO(20%) system in the different concentration of RhB (c) and photocatalyst mass (d) .........................S5

**Fig. S4** (a) Z-Scheme and (b) heterojunction mechanism over APO/MOF/NFO(20%) for RhB degradation under visible light illumination..................................................S6

**Table S1** Surface Area of the Ag$_3$PO$_4$ photocatalysts..................................................S7

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Table S1 Surface Area of the Ag₃PO₄ photocatalysts.

<table>
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<tr>
<th>Sample</th>
<th>Preparation method</th>
<th>Particle sizes(um)</th>
<th>$S_{BET}$(m² g⁻¹)</th>
<th>Reference</th>
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<td>Ag₃PO₄</td>
<td>Ion-exchange deposition</td>
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<tr>
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<td>0.24</td>
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Reference