-Supporting Information-

Manipulation on ZnO heterostructures: from binary ZnO-Ag to ternary ZnO-Ag-polypyrrole

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Figure S1. TEM images of ZnO-Ag without PVP.
Figure S2. XRD pattern of the product synthesized in the absence of water.

Figure S3. TEM images of the product in the absence of water.
Figure S4. The typical time-dependent evolution of UV–vis absorption spectra of MB solution using ZnO (a); ZnO-Ag (b); ZnO-Ag-PPy (c) as catalysts under UV light.
Figure S5. The relationship between $-\ln(C_t/C_0)$ versus time of photodegradation of MB under UV light (a), and visible light (b) of different products.
Figure S6. The cycling runs for the degradation of MB of ZnO-Ag under UV light.