

Supplementary information for the article:

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Supplementary material

2D and 3D Silver-Based Coordination Polymers with Thiomorpholine-4-carbonitrile and Piperazine-1,4-dicarbonitrile: Structure, Intermolecular Interactions, Photocatalysis, and Thermal Behavior

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Table S1. Selected hydrogen-bond parameters for **3**

D–H···A	D–H (Å)	H···A (Å)	D···A (Å)	D–H···A (°)
OW1–HW1A···O1	0.73	2.15 (7)	2.838 (8)	159 (9)
OW1–HW1B···O2 ⁱ	0.88	1.94 (8)	2.823 (8)	178 (9)

Symmetry code: (i) $x-1, y, z$.

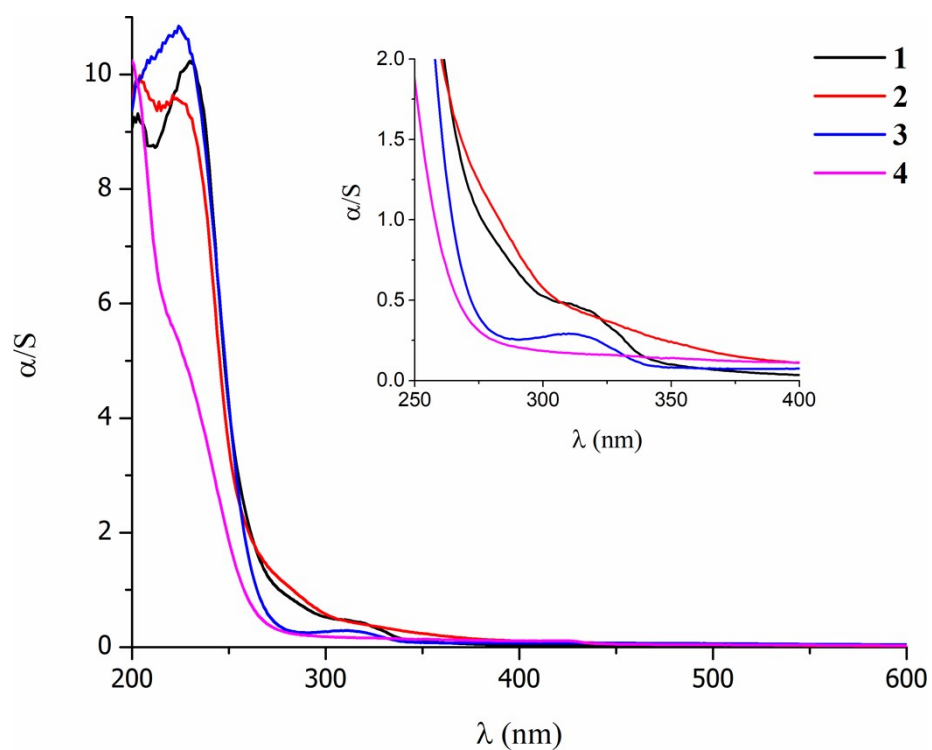


Figure S1. Solid-state optical absorption spectra for crystalline samples of **1–4**.

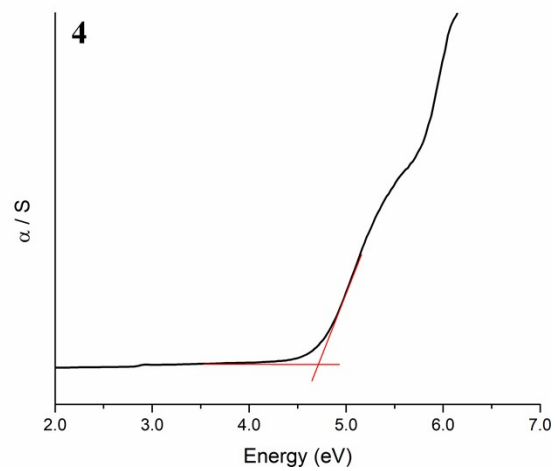
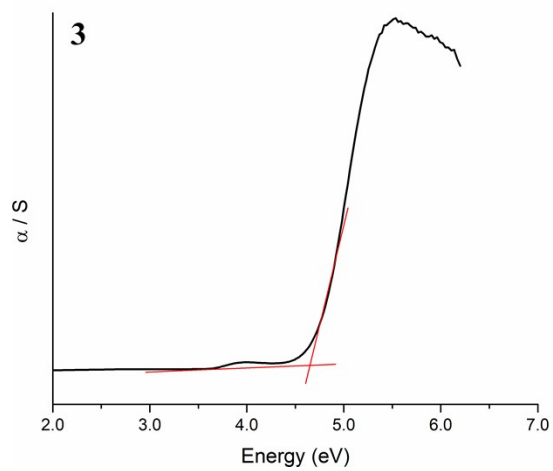
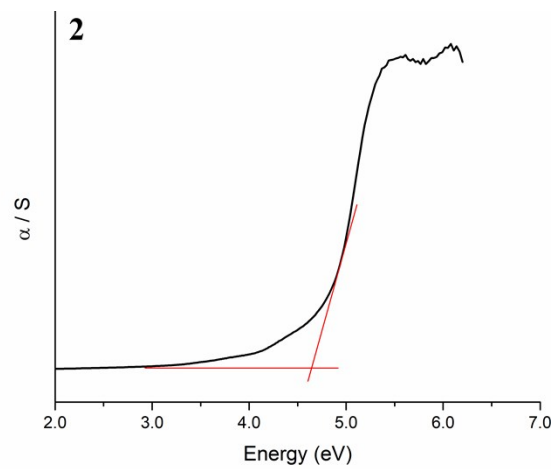
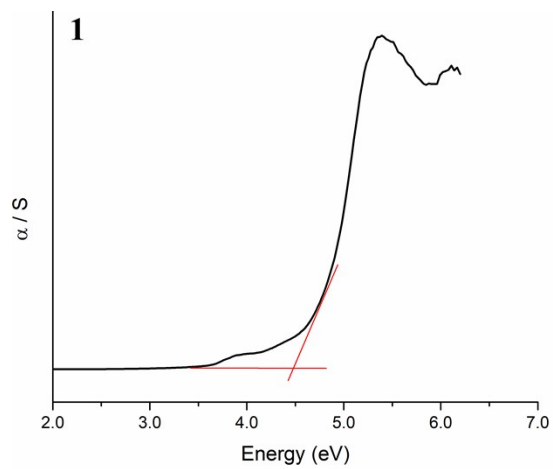


Figure S2. Solid-state optical absorption spectra of **1–4**.

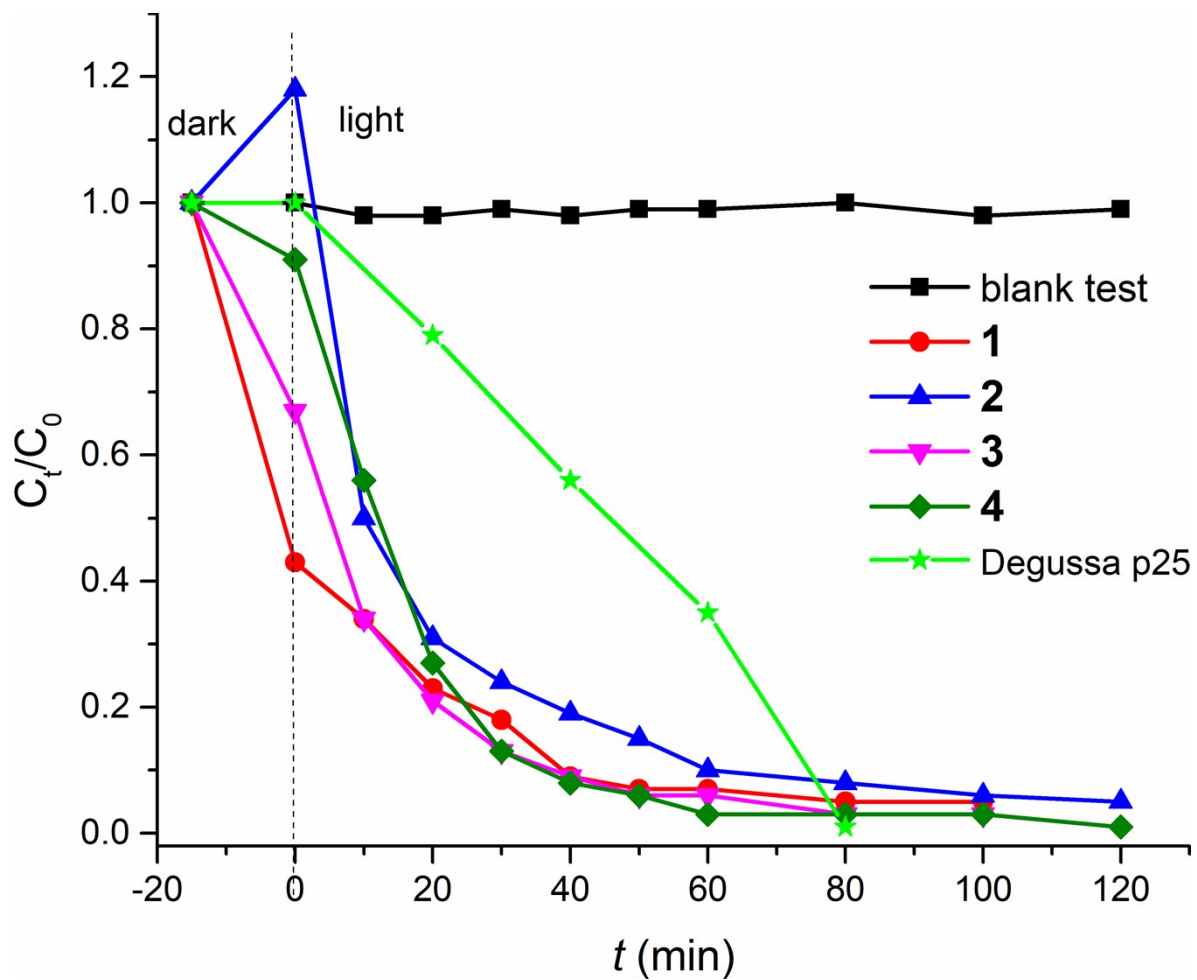


Figure S3. Plots of concentration ratios against irradiation time.

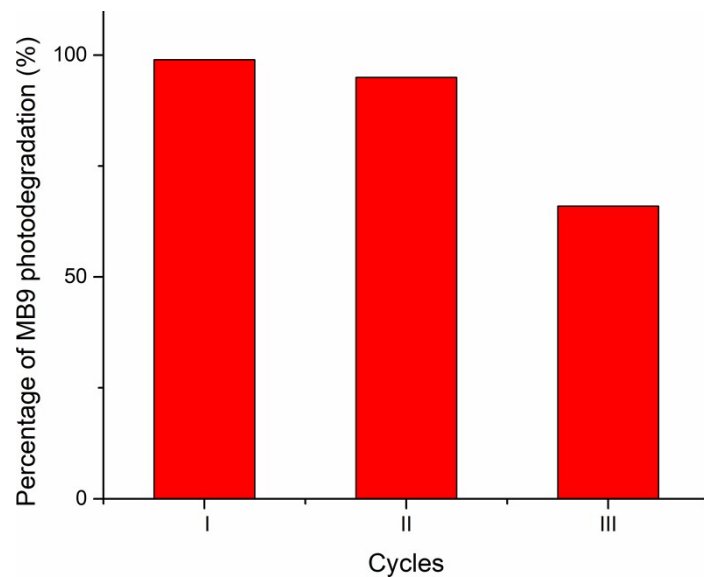


Figure S4. The changes in photodegradation percentage of MB9 after three successive cycles.

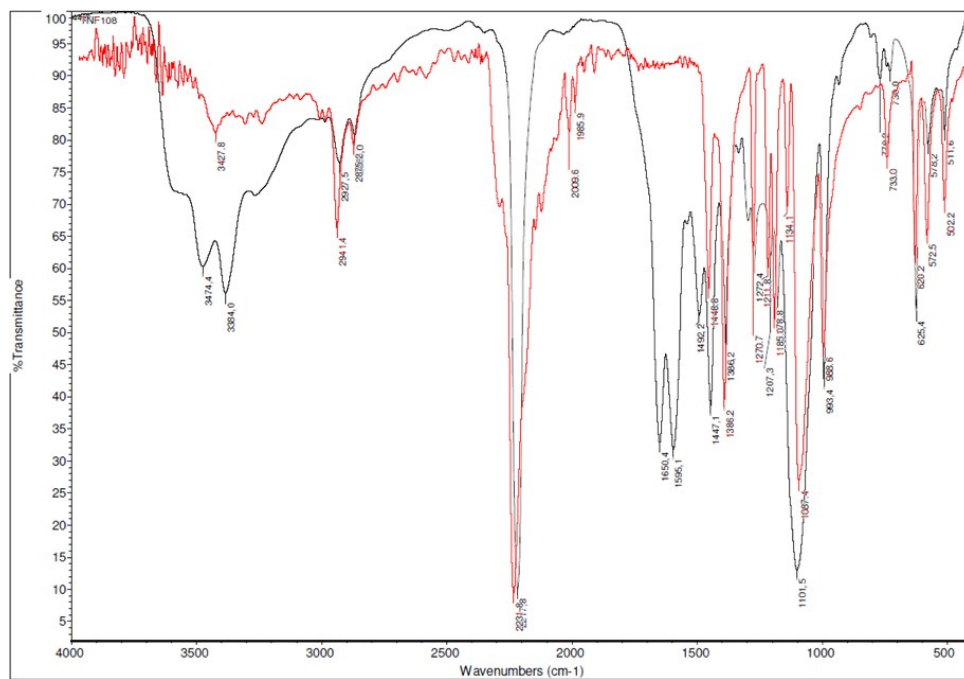


Figure S5. IR spectra of pristine **4** (black) and **4** after third cycle (red).

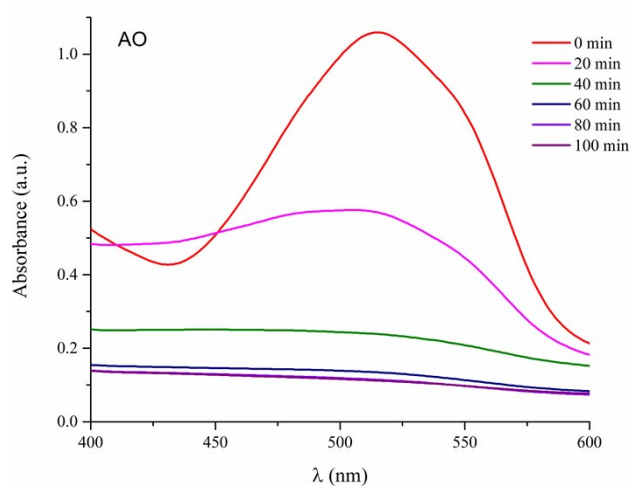
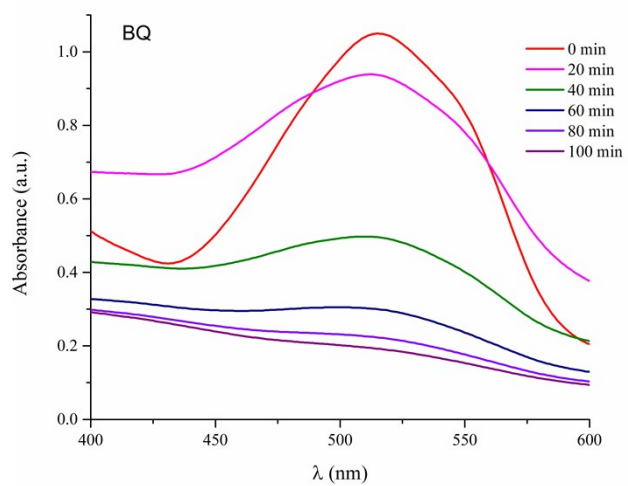
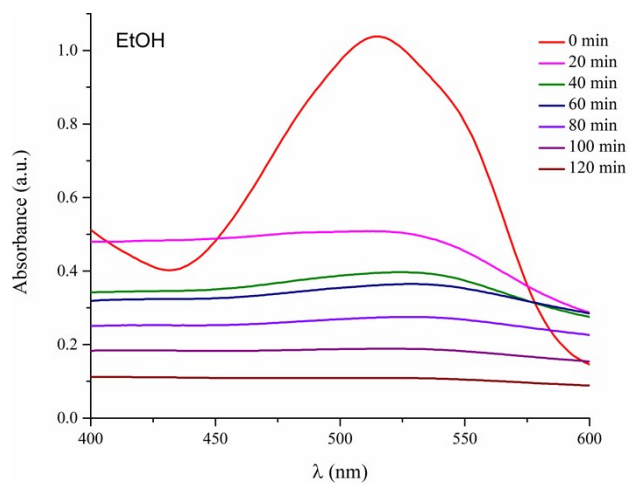


Figure S6. UV-vis spectra for the MB9 solution in the presence of **4** and quenchers ethyl alcohol (EtOH), benzoquinone (BQ), or ammonium oxalate (AO).