

Supplementary information for the article:

Ristić, P., Filipović, N., Blagojević, V. A., Ćirković, J., Holló, B. B., Đokić, V. R., Donnard, M., Gulea, M., Marjanović, I., Klisurić, O. R., & Todorović, T. R. (2021). 2D and 3D silver-based coordination polymers with thiomorpholine-4-carbonitrile and piperazine-1,4-dicarbonitrile: structure, intermolecular interactions, photocatalysis, and thermal behavior. *CrystEngComm*, Royal Society of Chemistry (RSC), 23(27), 4799-4815. <https://doi.org/10.1039/D1CE00394A>



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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) $x-1, y, z$.

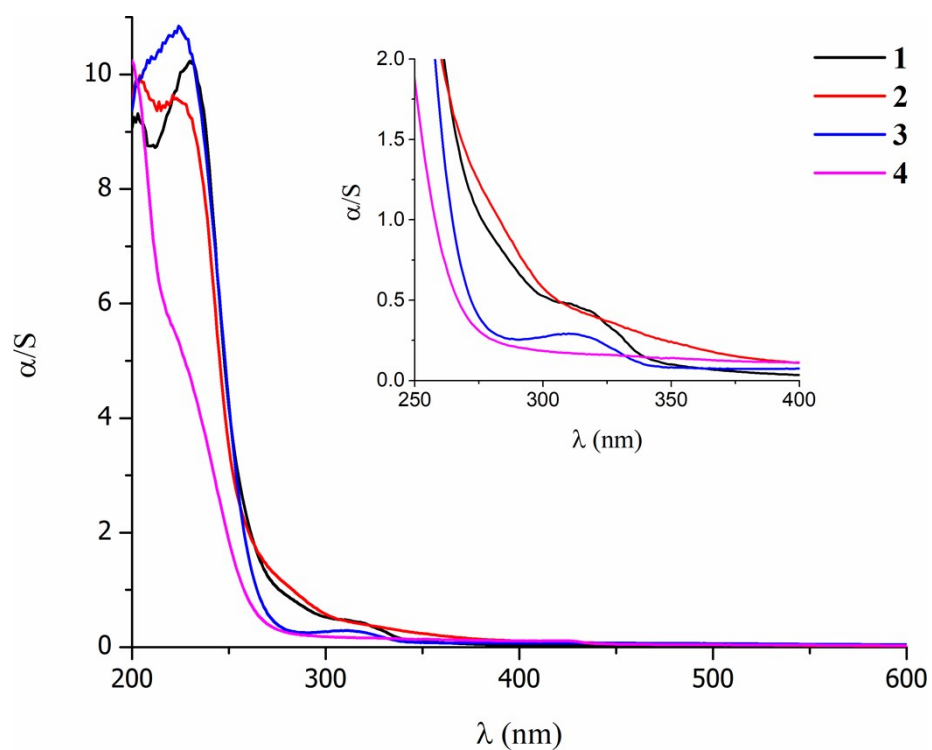


Figure S1. Solid-state optical absorption spectra for crystalline samples of **1–4**.

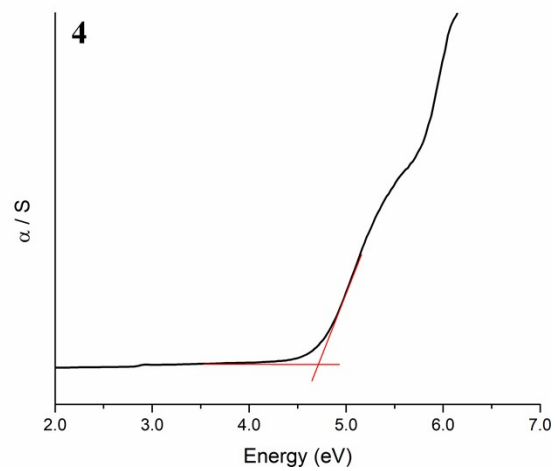
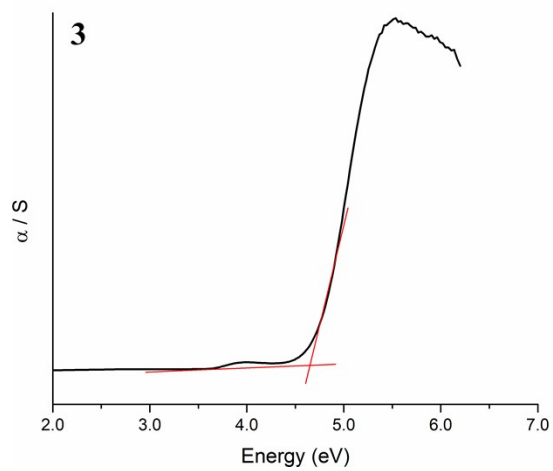
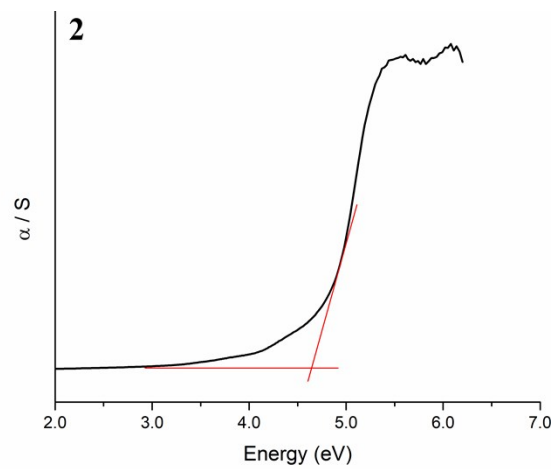
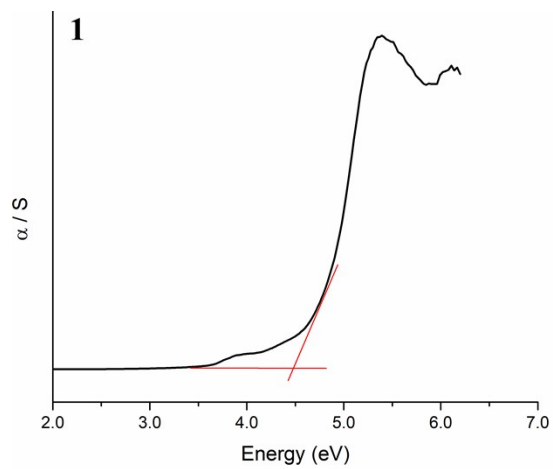


Figure S2. Solid-state optical absorption spectra of **1–4**.

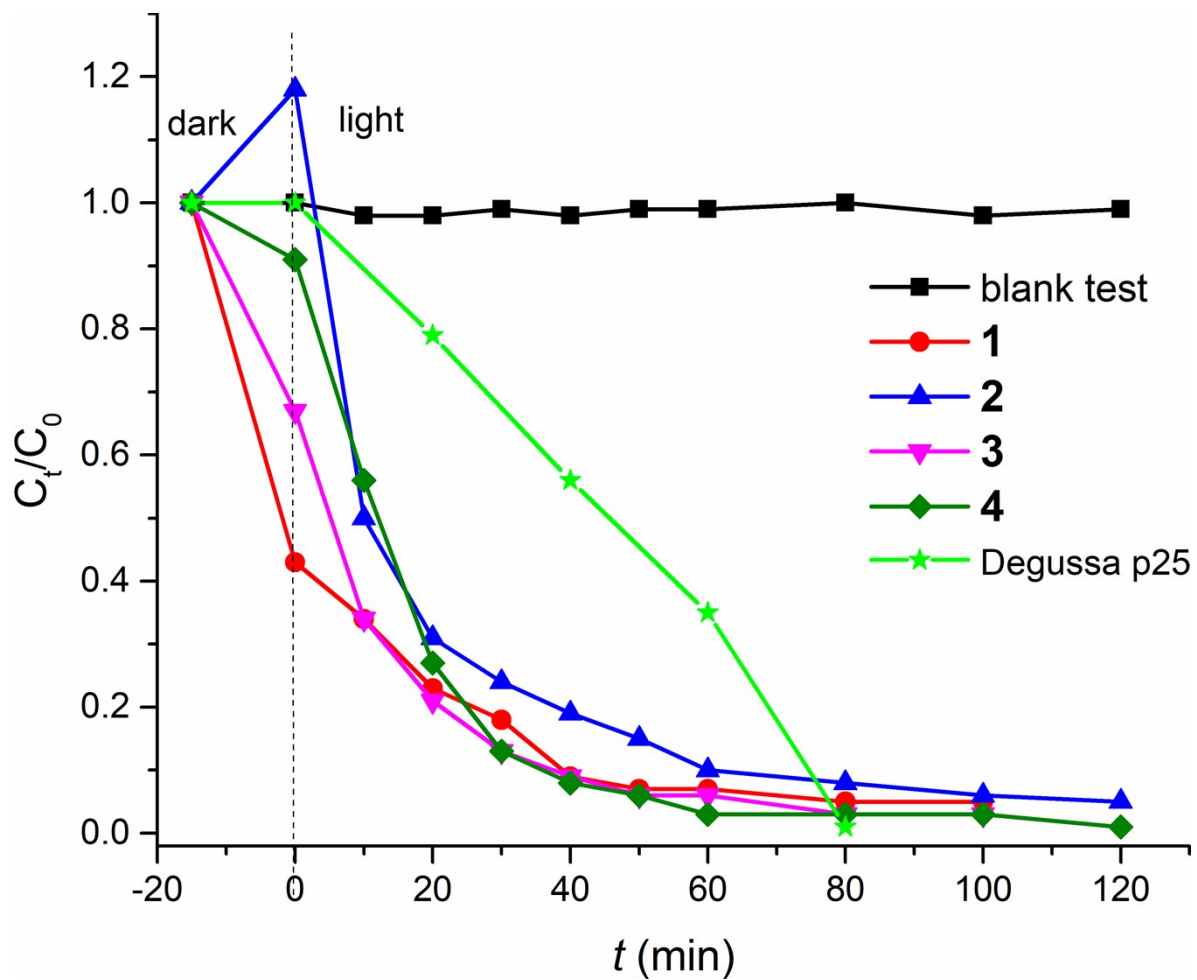


Figure S3. Plots of concentration ratios against irradiation time.

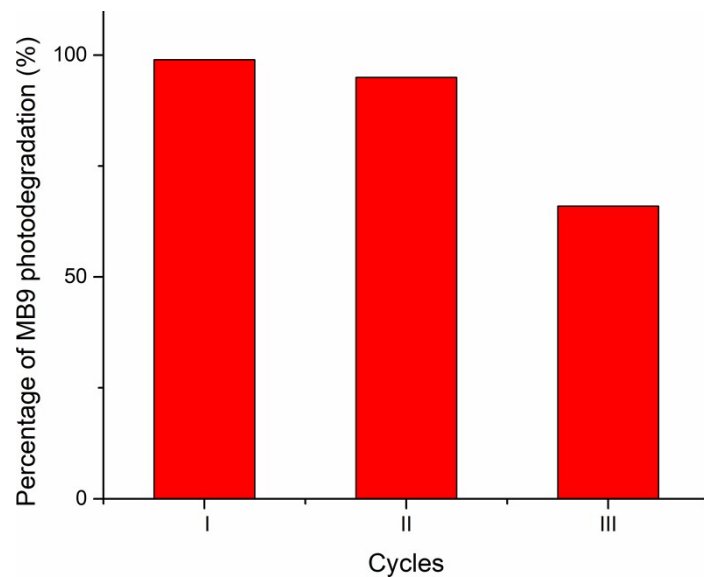


Figure S4. The changes in photodegradation percentage of MB9 after three successive cycles.

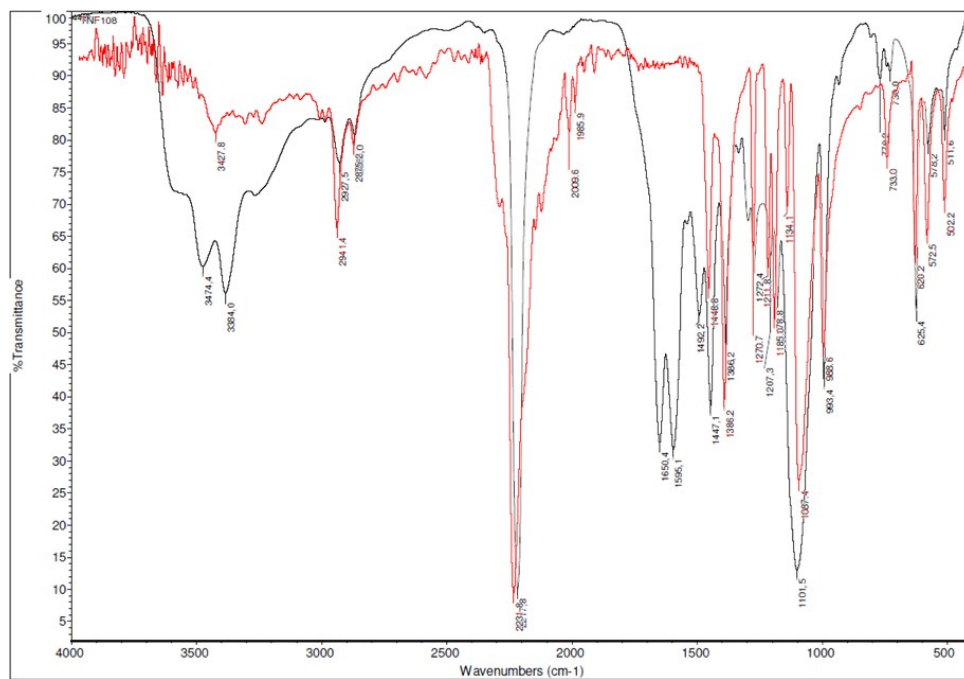


Figure S5. IR spectra of pristine 4 (black) and 4 after third cycle (red).

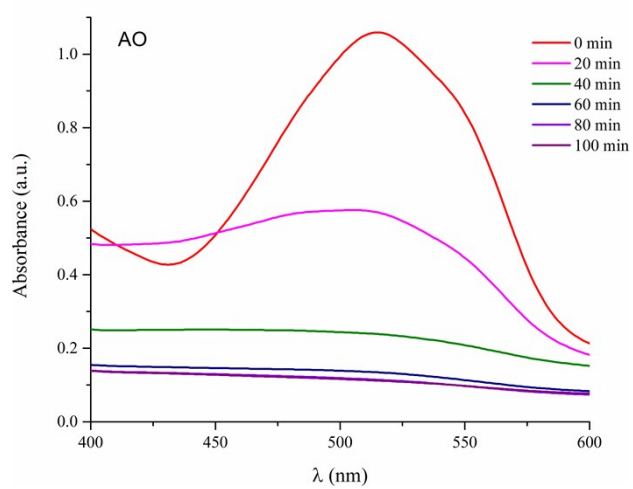
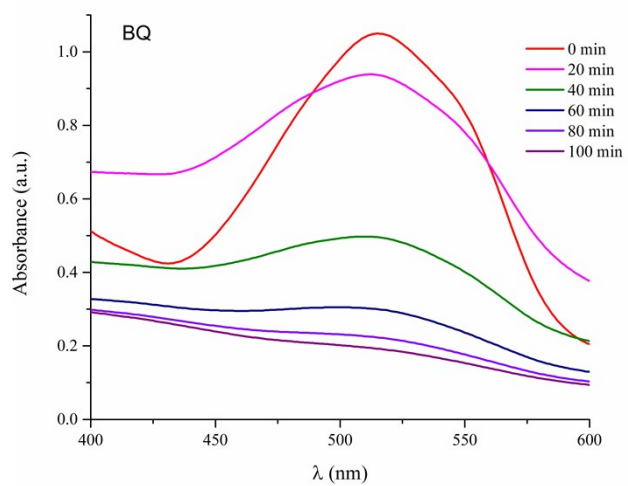
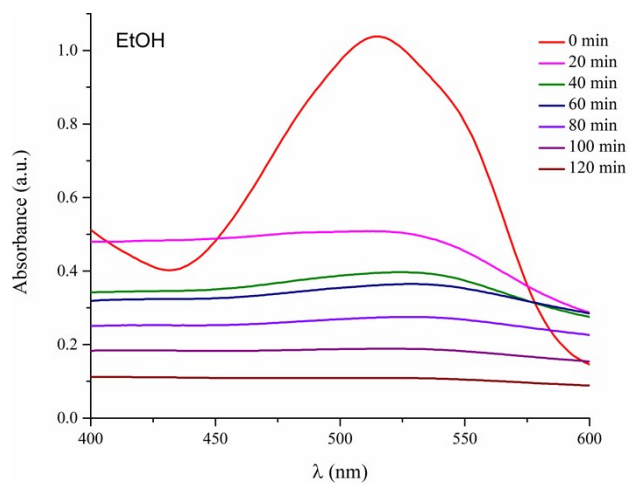


Figure S6. UV-vis spectra for the MB9 solution in the presence of **4** and quenchers ethyl alcohol (EtOH), benzoquinone (BQ), or ammonium oxalate (AO).