



Supplementary Materials

# AuAg Nanoparticles Grafted on TiO<sub>2</sub>@N-Doped Porous Carbon: Improved Depletion of Ciprofloxacin under Visible Light through Plasmonic Photocatalysis

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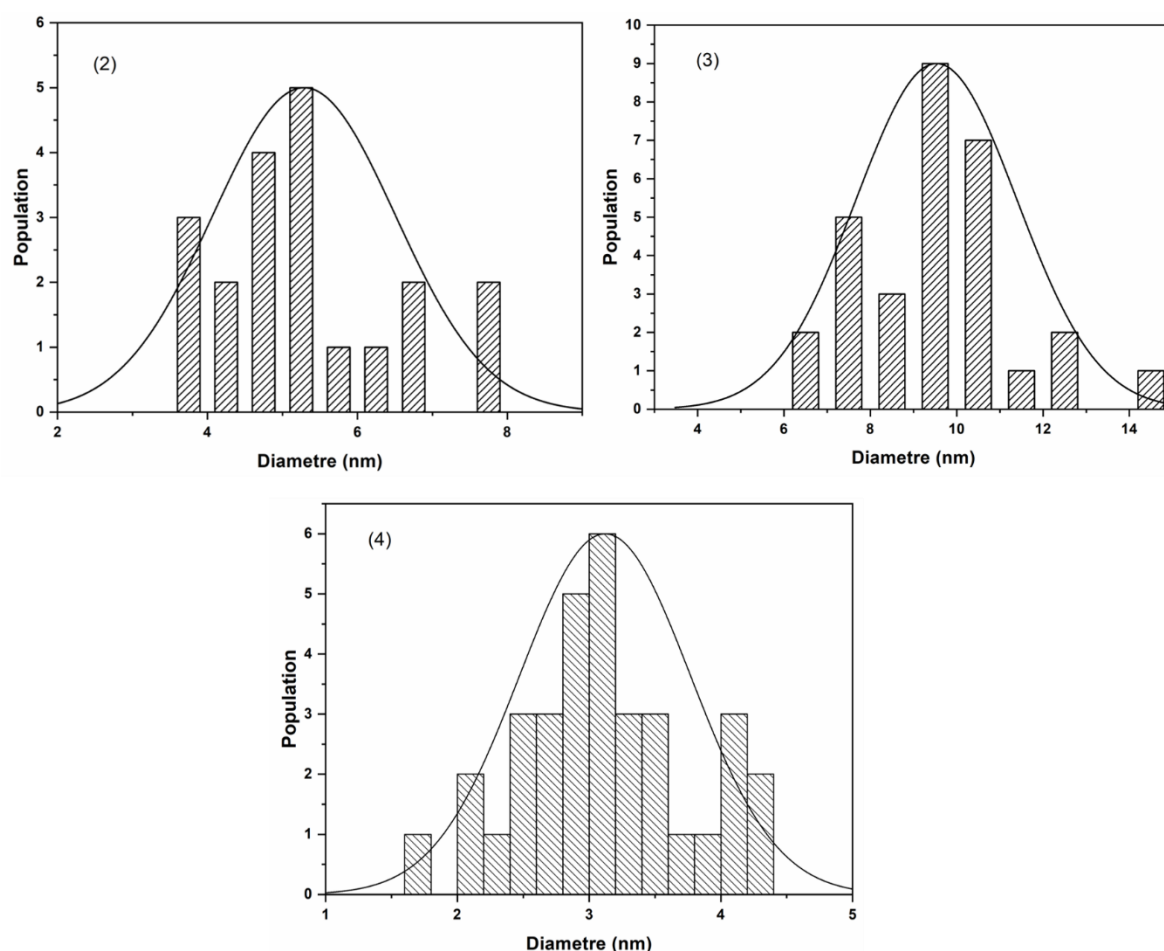
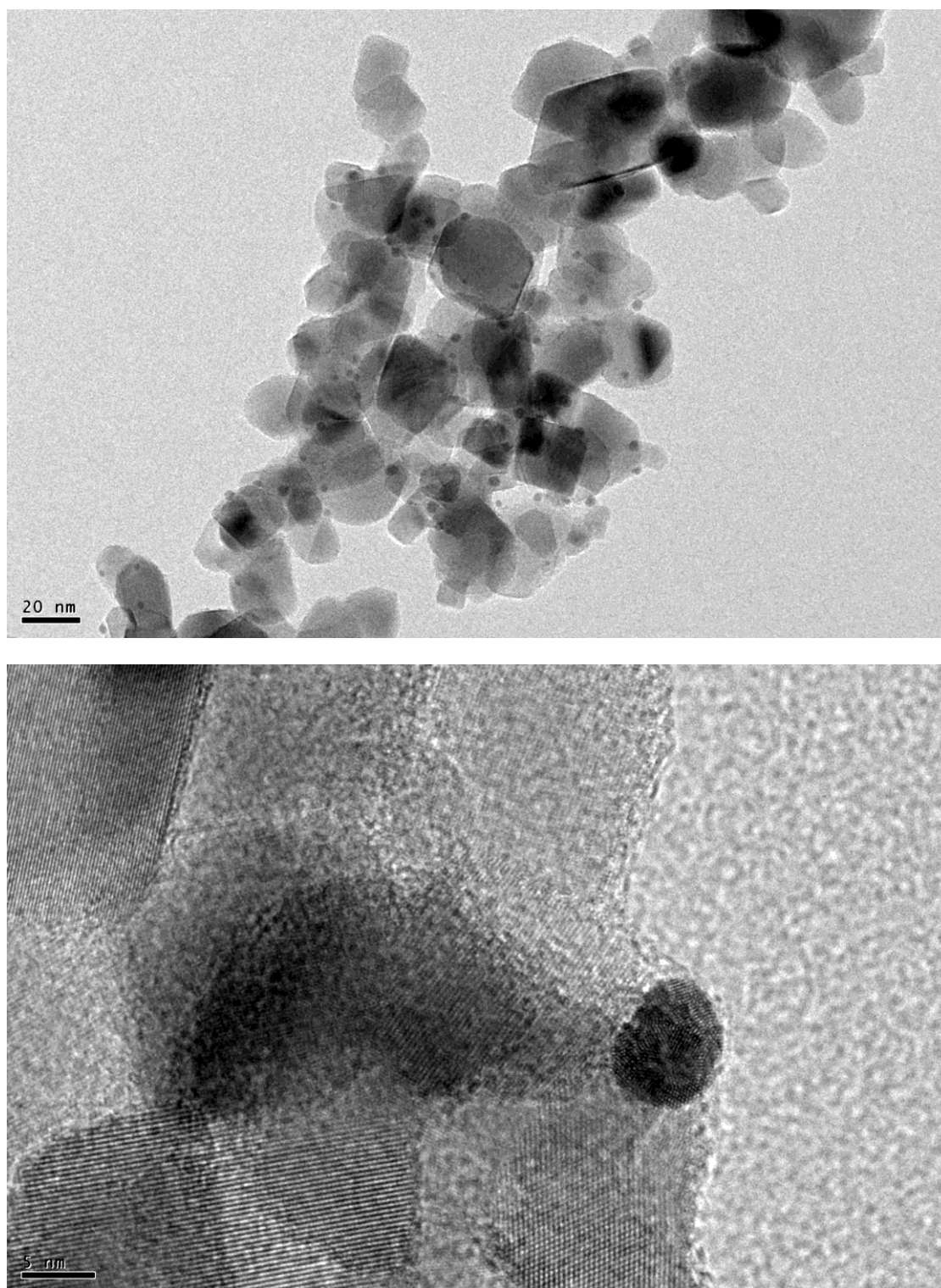
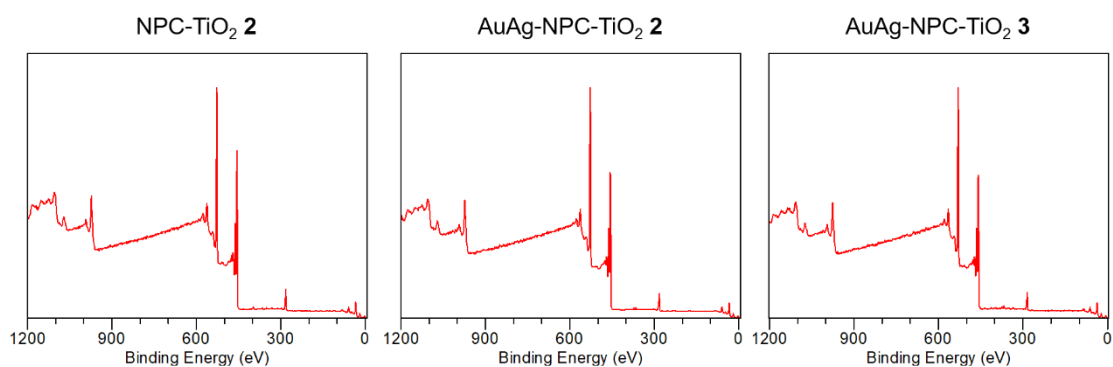


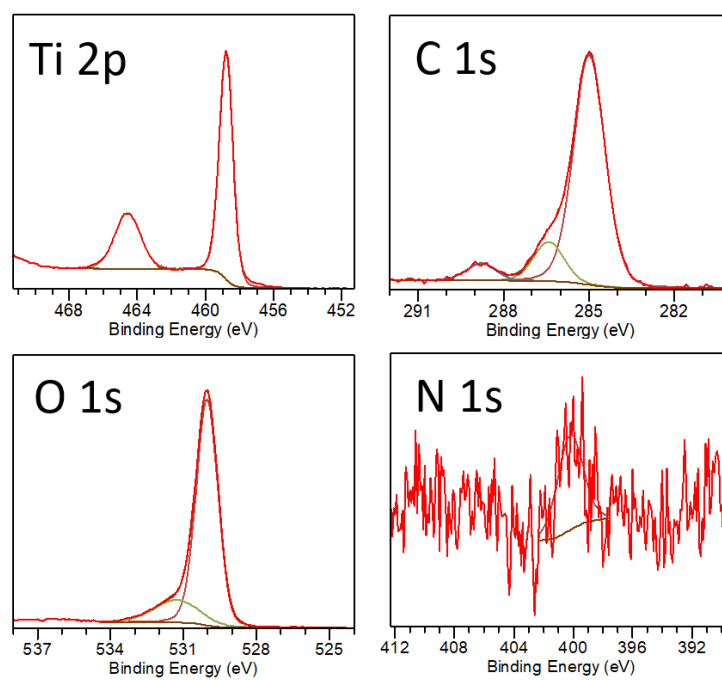
Figure S1. Size histograms of nanohybrids 2–4.



**Figure S2.** TEM images of nanohybrid AuAg-PVP-TiO<sub>2</sub> 4.



**Figure S3.** Survey XPS spectrum for nanohybrids 1–3.



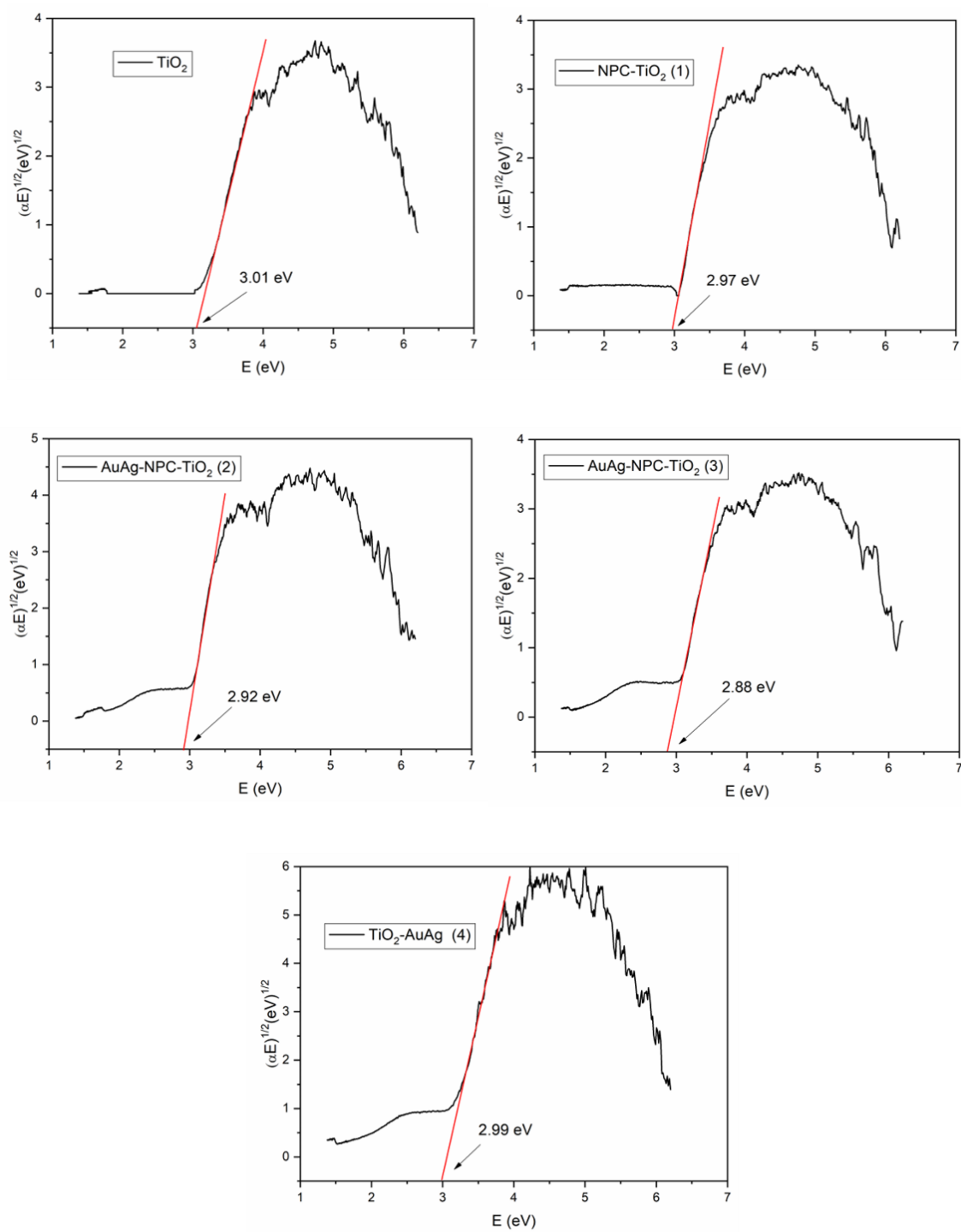
**Figure S4.** Narrow XPS spectrum for Ti 2p, O 1s, C 1s and N 1s in nanohybrid 1.

**Table S1.** Deconvolution of the XPS high-resolution peaks (binding energy in eV) for nanohybrids 1–3.

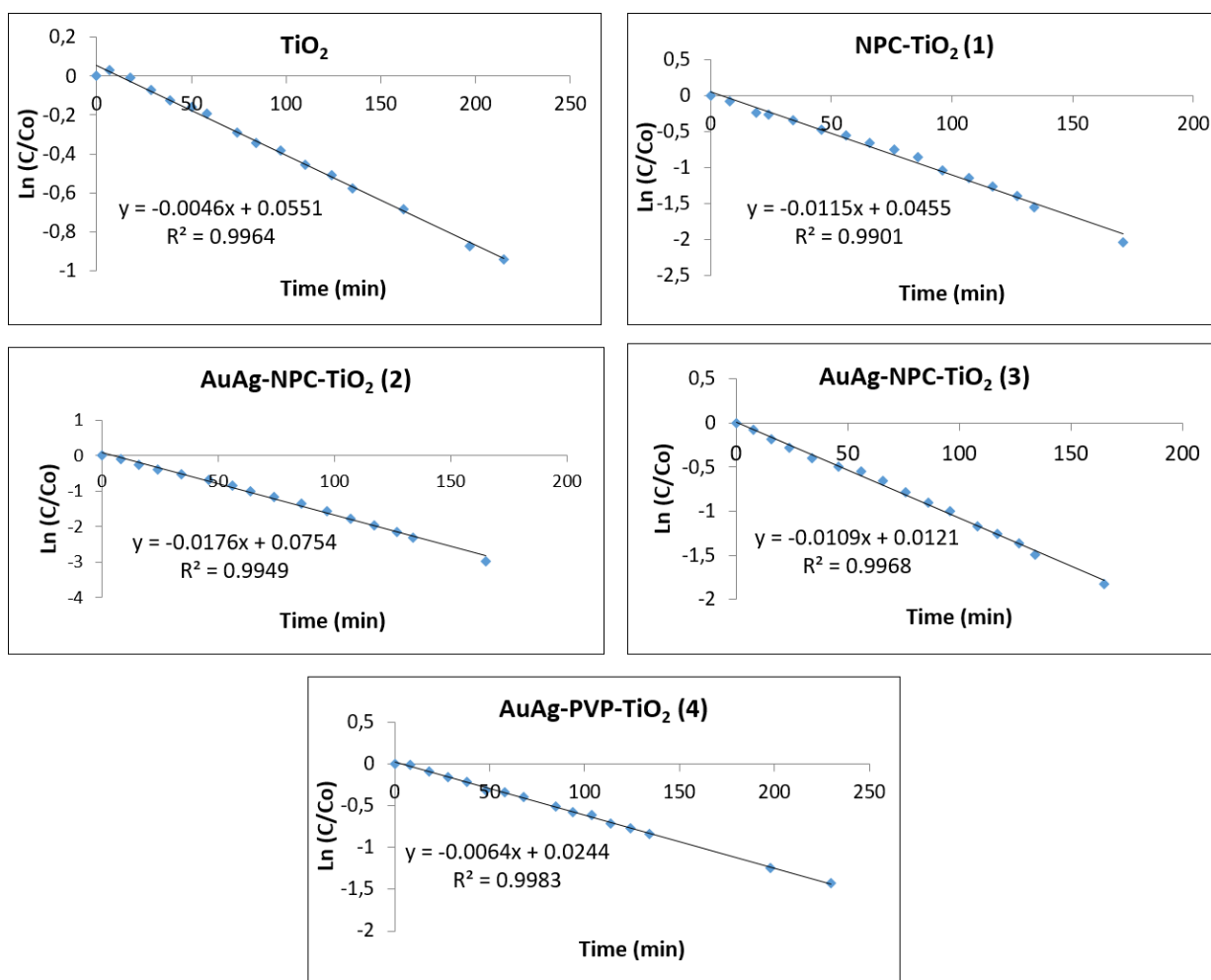
	<b>C 1s</b>	<b>N 1s</b>	<b>Ti 2p</b>	<b>O 1s</b>	<b>Au 4f</b>	<b>Ag 3d</b>
<b>1</b>	285.0, 286.4, 288.8	400.2	458.8, 464.6	530.0, 531.3	-	-
<b>2</b>	285.0, 286.3, 288.8	400.4	458.8, 464.6	529.8, 530.9	83.5, 84.4, 87.2, 87.4	367.6, 373.6
<b>3</b>	285.0, 286.3, 288.5	399.4	458.7, 464.6	530.0, 531.3	83.4, 83.8, 87.1, 87.2	367.5, 373.5

**Table S2.** At% and wt% data for nanohybrids 1–3.

	<b>C 1s</b>	<b>N 1s</b>	<b>Ti 2p</b>	<b>O 1s</b>	<b>Au 4f</b>	<b>Ag 3d</b>
<b>1</b>						
<b>at.%</b>	21.11	0.16	22.78	55.95	-	-
<b>wt.%</b>	11.31	0.10	48.66	39.93	-	-
<b>2</b>						
<b>at.%</b>	20.98	0.32	21.98	56.50	0.09	0.13
<b>wt.%</b>	11.23	0.20	46.89	40.27	0.79	0.62
<b>3</b>						
<b>at.%</b>	20.84	0.47	21.52	56.77	0.17	0.22
<b>wt.%</b>	11.11	0.29	45.74	40.31	1.49	1.05



**Figure S5.** Tauc plots for 1 (up-left), 2 (up-right), 3 (bottom-left) and 4 (bottom-right).



**Figure S6.** Kinetics of the photocatalysts 1–4 under visible light. The fitting results are represented assuming a pseudo-first order reaction.