

Supplementary Figures for:

Duality in the mechanism of hexagonal ZnO/Cu_xO nanowires inducing sulfamethazine degradation under solar or visible light.

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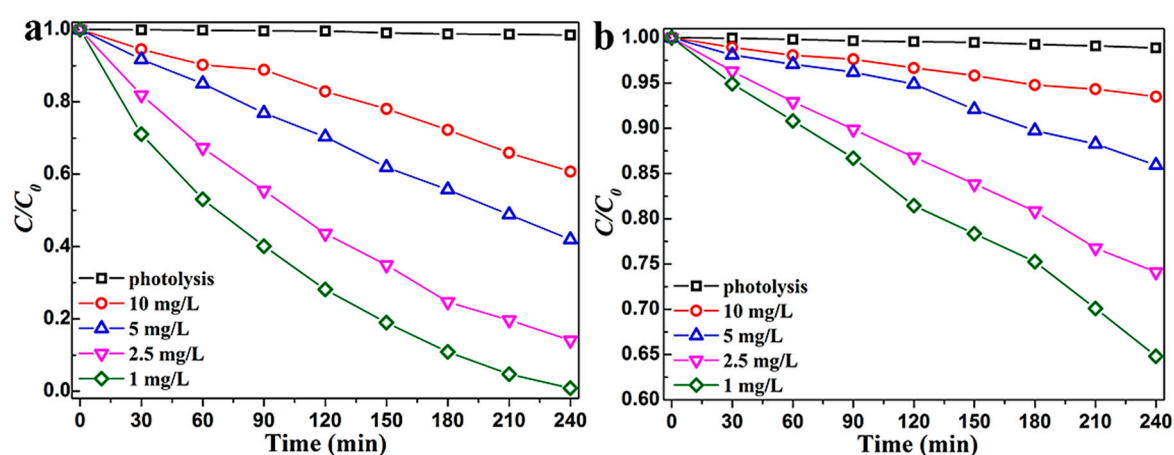


Figure S1. Effect of SMT-concentration on the degradation kinetics under (a) simulated solar light and (b) visible light irradiation. Solution parameters: [catalyst]=500 mg/L, initial pH 7.0, solar light intensity 50.1 mW/cm² and visible light intensity 38.9 mW/cm².

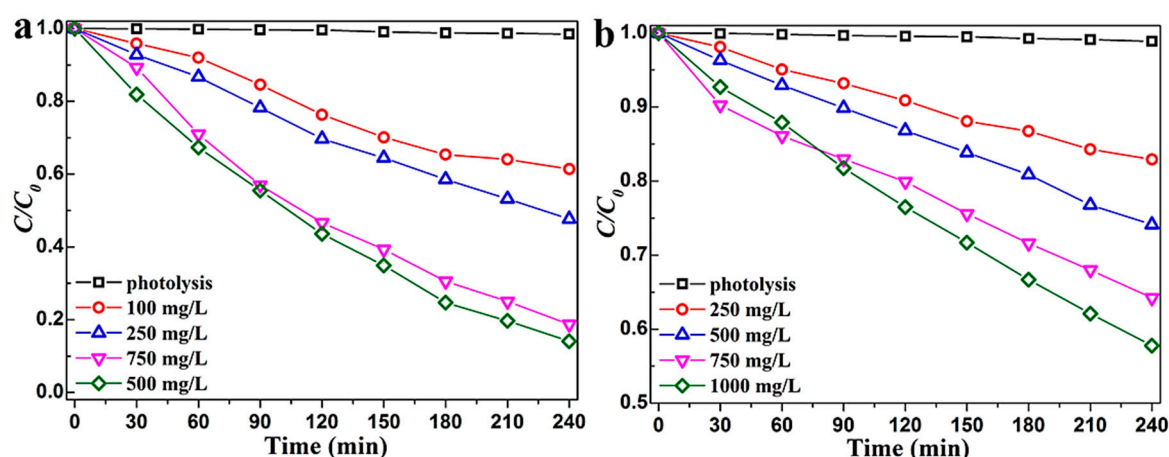


Figure S2. Effect of ZnO/Cu_{x=1.25}O concentration on the SMT-degradation kinetics under (a) simulated solar light and (b) visible light irradiation. Solution parameters: [SMT]=2.5 mg/L, initial pH 7.0, solar light intensity 50.1 mW/cm² and visible light intensity 38.9 mW/cm².

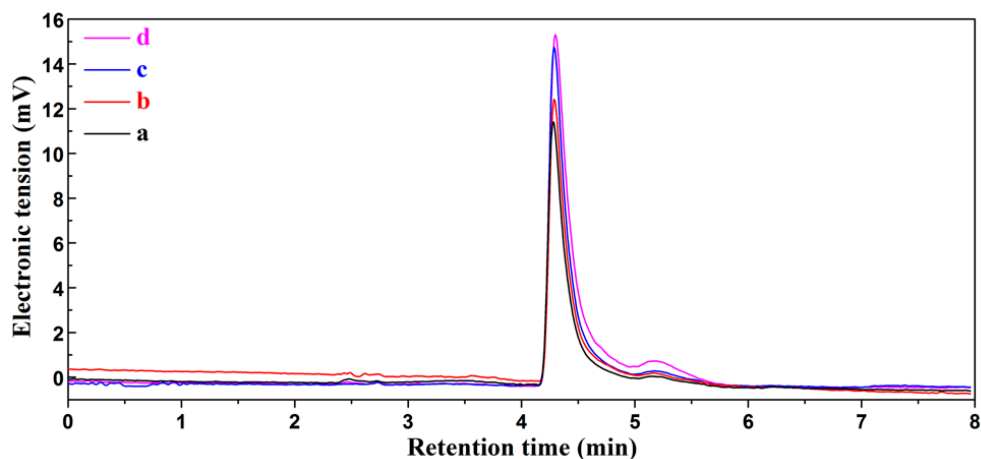


Figure S3. HPLC spectra of 2.5 mg/L sulfamethazine in the presence of (a) no NaN₃, (b) 0.01 mM NaN₃, (c) 0.1 mM NaN₃ and (d) 0.5 mM NaN₃. Note that the peak areas of (a), (b), (c) and (d) are 122.7, 131.5, 163.0 and 184.1.

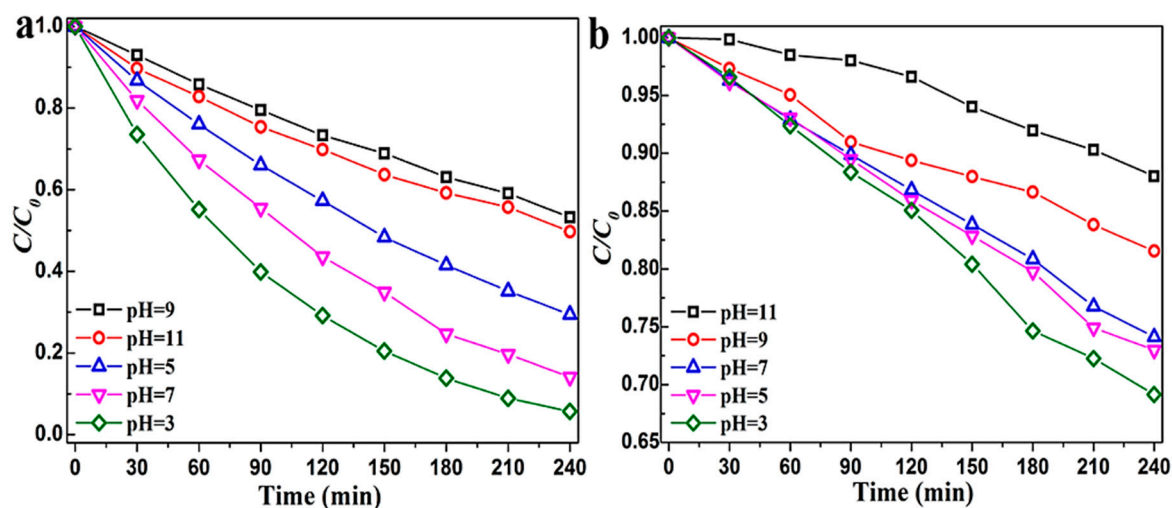


Figure S4. Effect of solution pH on the SMT-degradation kinetics by ZnO/Cu_{x=1.25}O under (a) simulated solar light and (b) visible light irradiation. Solution parameters: [catalyst]=500 mg/L, [SMT]=2.5 mg/L, solar light intensity 50.1 mW/cm² and visible light intensity 38.9 mW/cm².

Supplementary Tables for:

Duality in the mechanism of hexagonal ZnO/Cu_xO nanowires inducing sulfamethazine degradation under solar or visible light.

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Table S1. The pH value of SMT solution after photodegradation by ZnO/Cu_{x=1.25}O under simulated solar light for a certain time.

t= -0.5 h	t=0	t=2 h	t=4 h
4.997	7.284	7.049	6.927
6.956	7.324	7.133	6.809
9.032	8.170	7.306	7.220

Table S2. The pH value of SMT solution after photodegradation by ZnO/Cu_{x=1.25}O under visible light for a certain time.

t= -0.5 h	t=0	t=2 h	t=4 h
4.997	7.304	7.198	7.027
6.956	7.358	7.261	7.149
9.032	8.288	7.886	7.738