

Table S1: EDX elemental analysis for of ZnO nanostructures synthesized using different solvents

Sample	Atomic%		Weight%	
	Zn	O	Zn	O
ZnO sphere	44.97	55.03	58.45	41.55
ZnO rod	44.85	55.15	58.01	41.99
ZnO petal	43.42	56.58	57.04	42.96

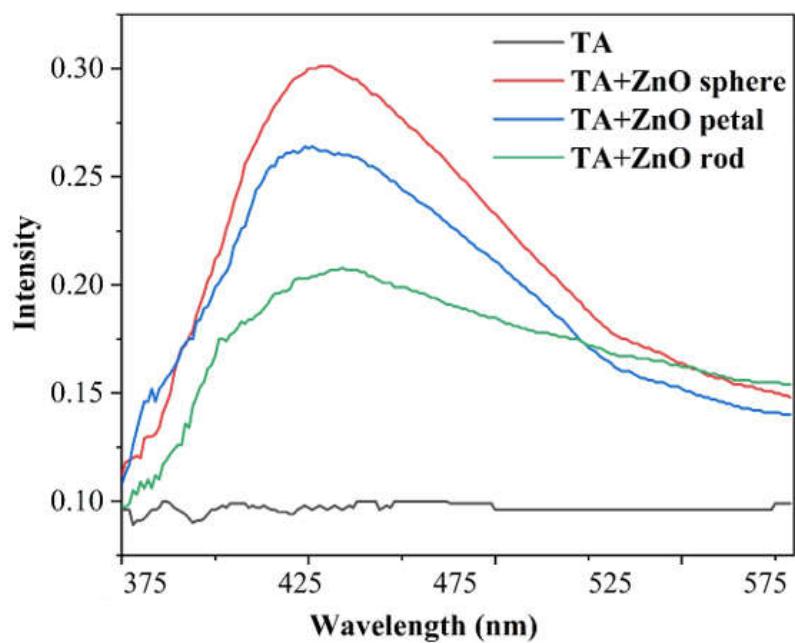


Figure S1: Fluorescence spectra of terephthalic acid (TA) in absence and presence of ZnO nanostructures. Characteristic peak at 425 nm was used as an indicator for hydroxyl radical production.

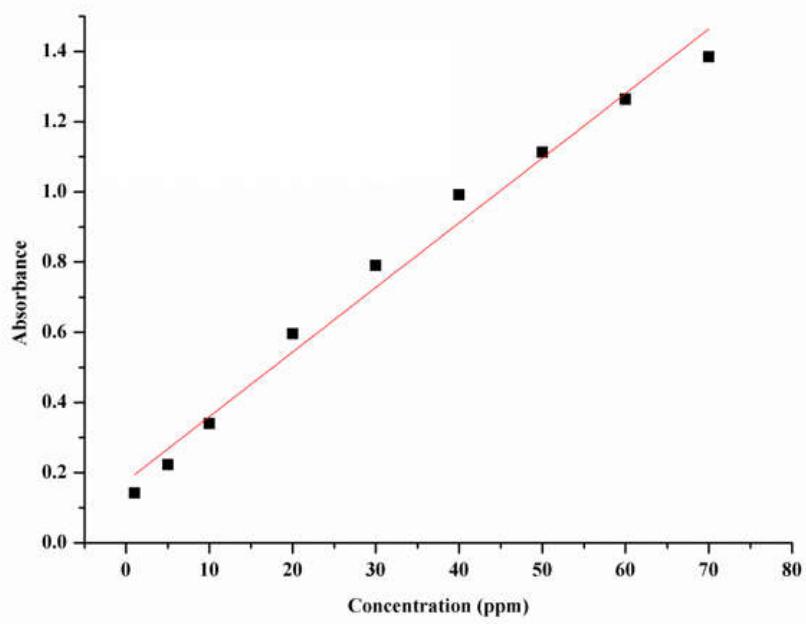


Figure S2: Calibration curve for caffeine

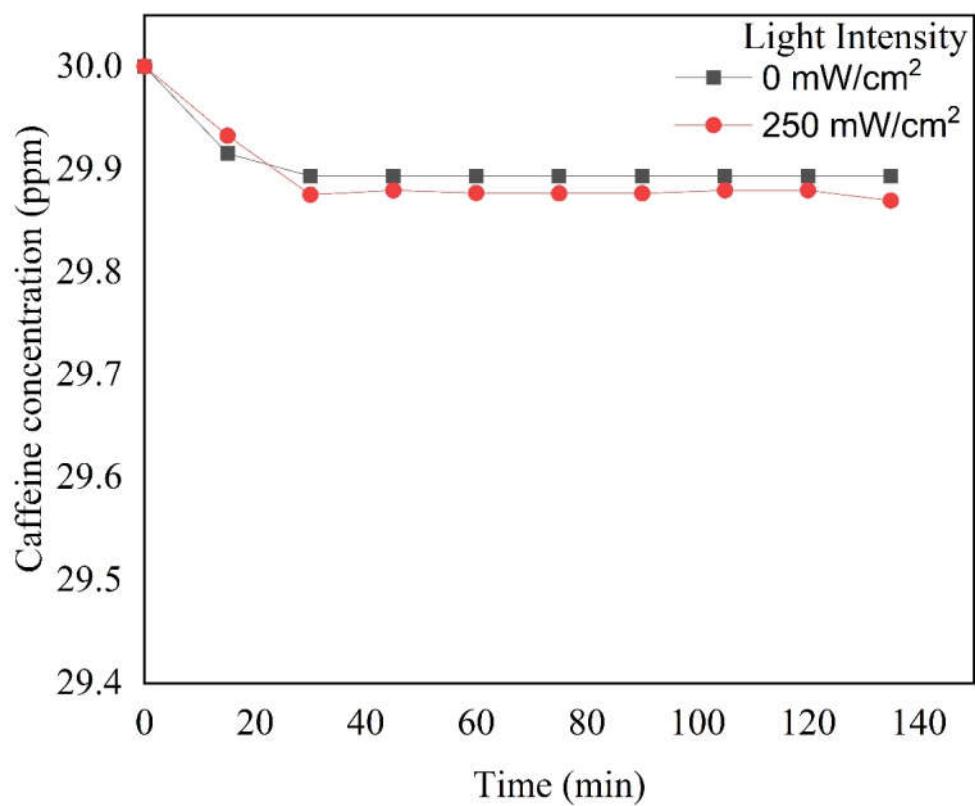


Figure S3: Photolysis of caffeine in absence of nanoparticles