

SUPPORTING INFORMATION

Carbamazepine degradation mediated by light in the presence of humic substances-coated magnetite nanoparticles.

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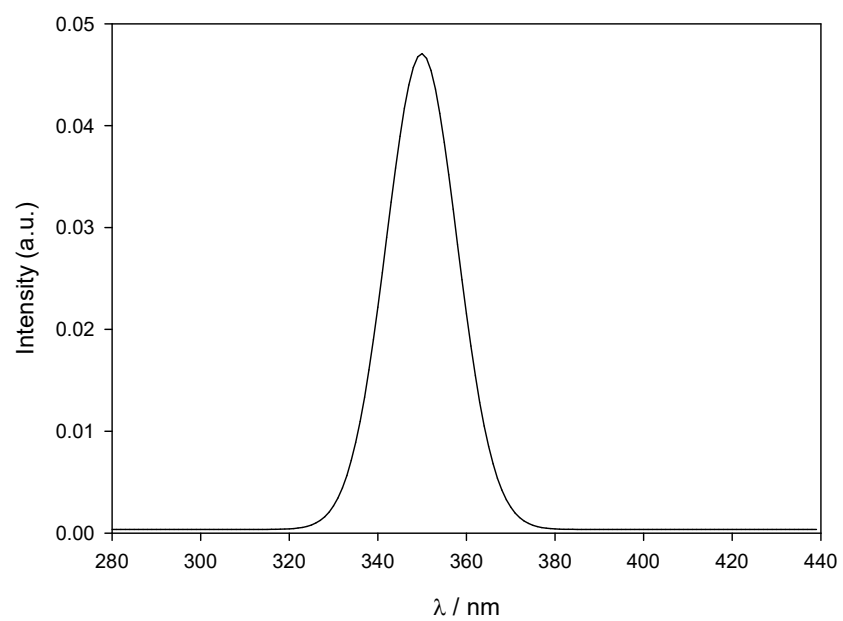


Figure S1. Emission spectrum of the lamps.

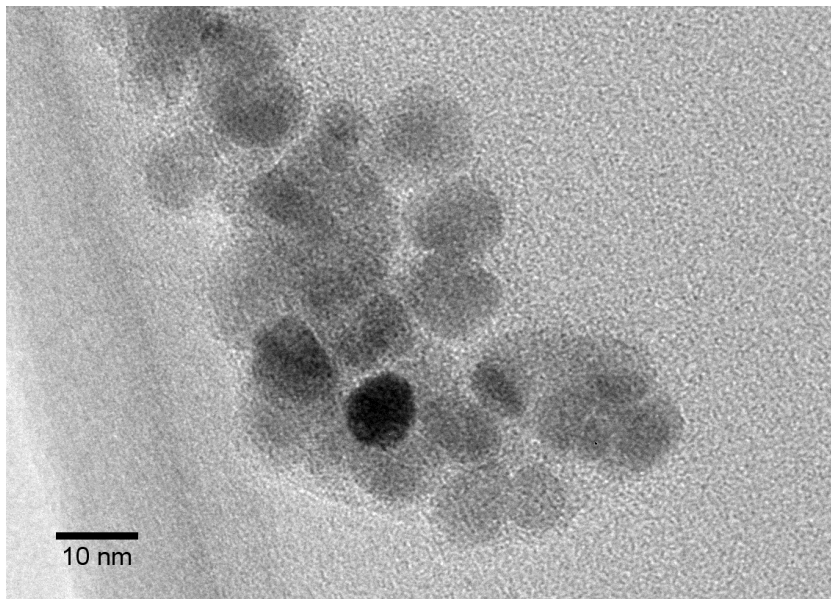
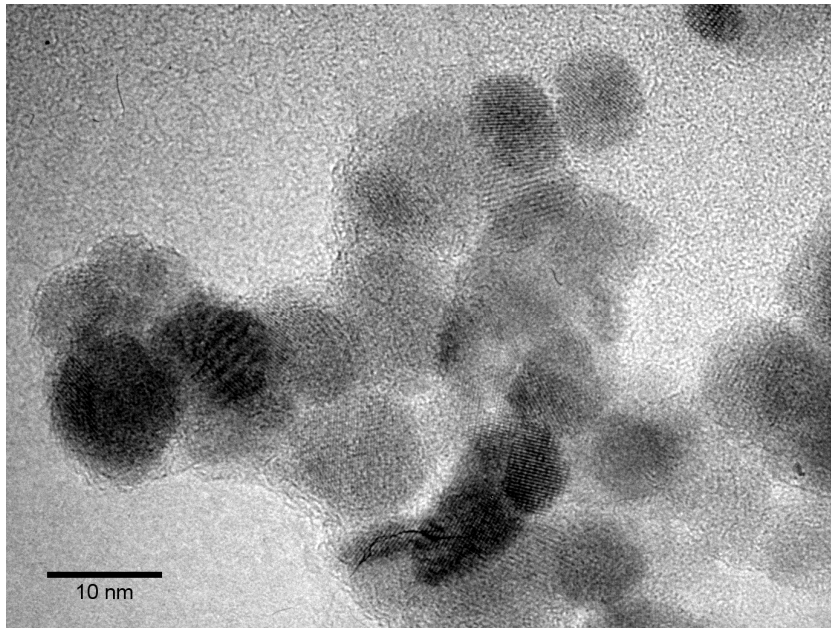


Figure S2. TEM images of Fe₃O₄/LHA.

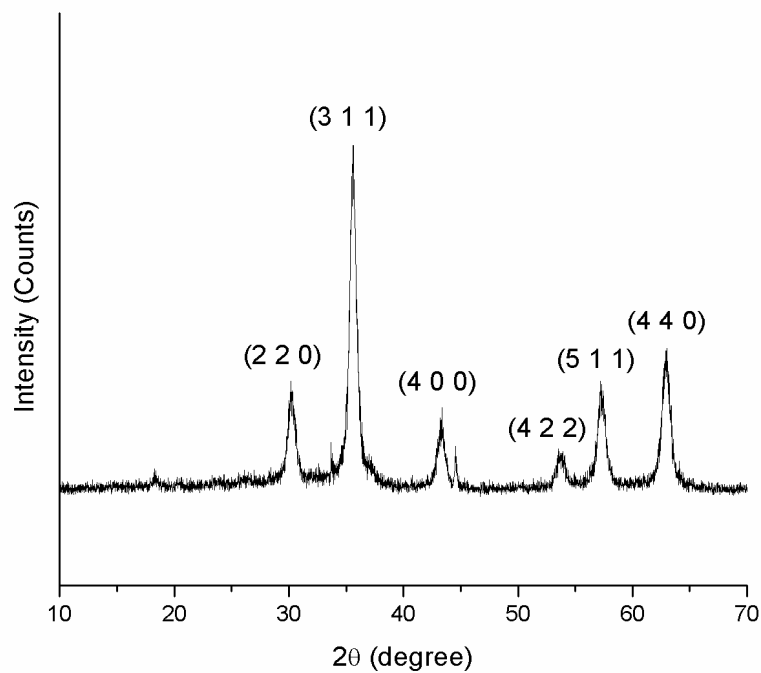


Figure S3. XRD pattern of $\text{Fe}_3\text{O}_4/\text{LHA}$. Magnetite/maghemite crystalline planes reflections are highlighted.

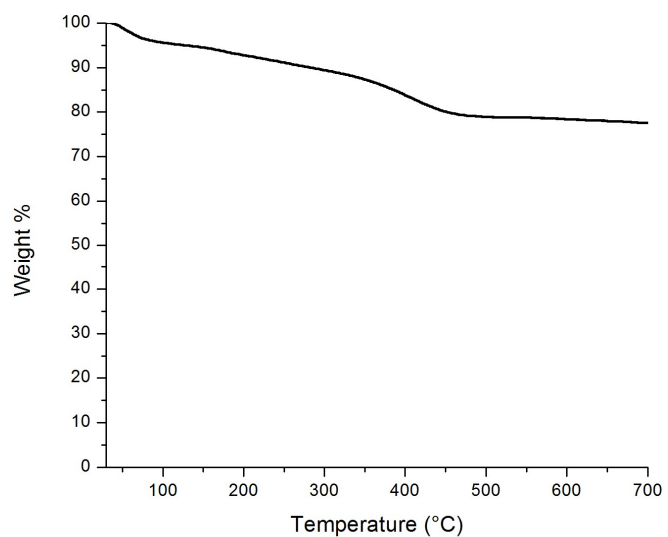


Figure S4. TGA curve obtained for $\text{Fe}_3\text{O}_4/\text{LHA}$ under N_2 atmosphere.

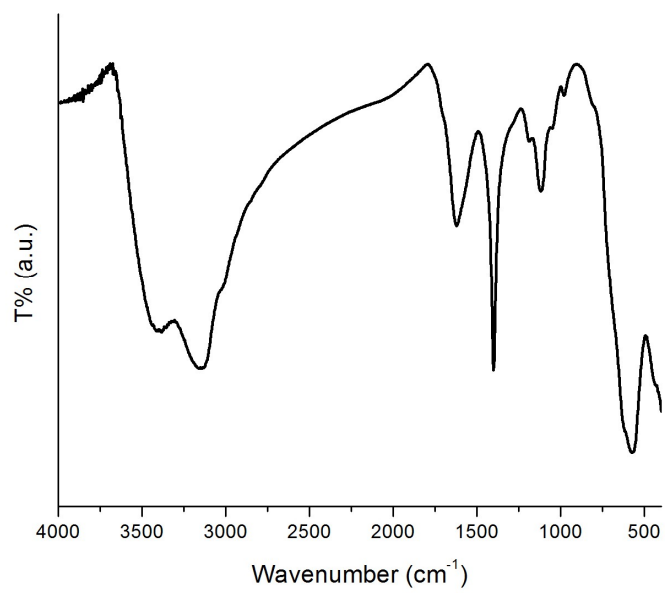


Figure S5. FT-IR spectra of Fe₃O₄/LHA nanoparticles.

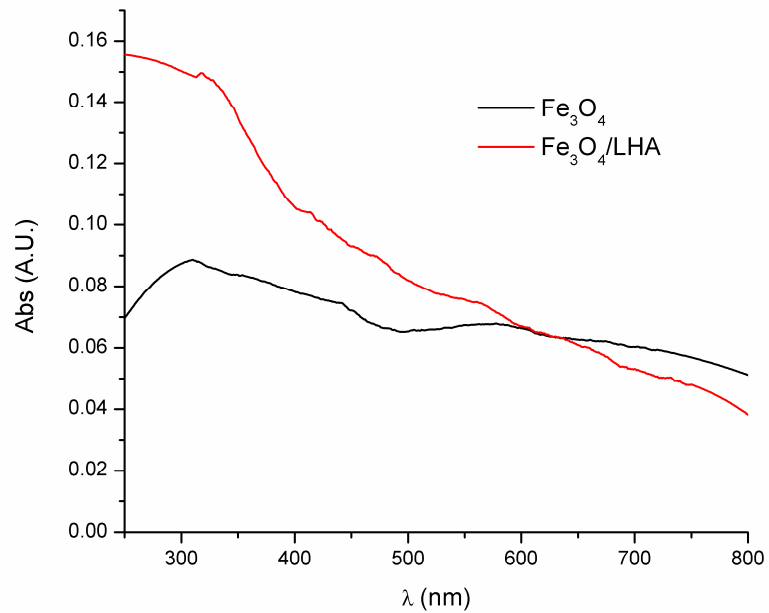


Figure S6. UV-Vis absorption spectra of Fe_3O_4 and $\text{Fe}_3\text{O}_4/\text{LHA}$.

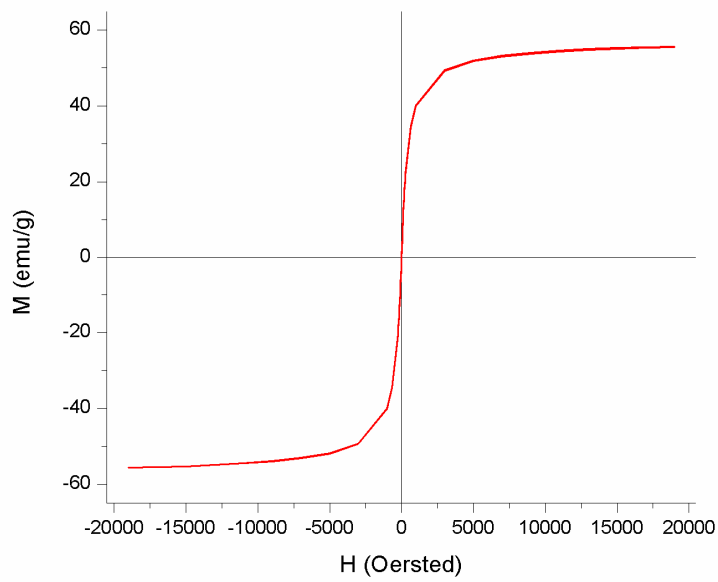


Figure S7. Magnetization curve of $\text{Fe}_3\text{O}_4/\text{LHA}$.

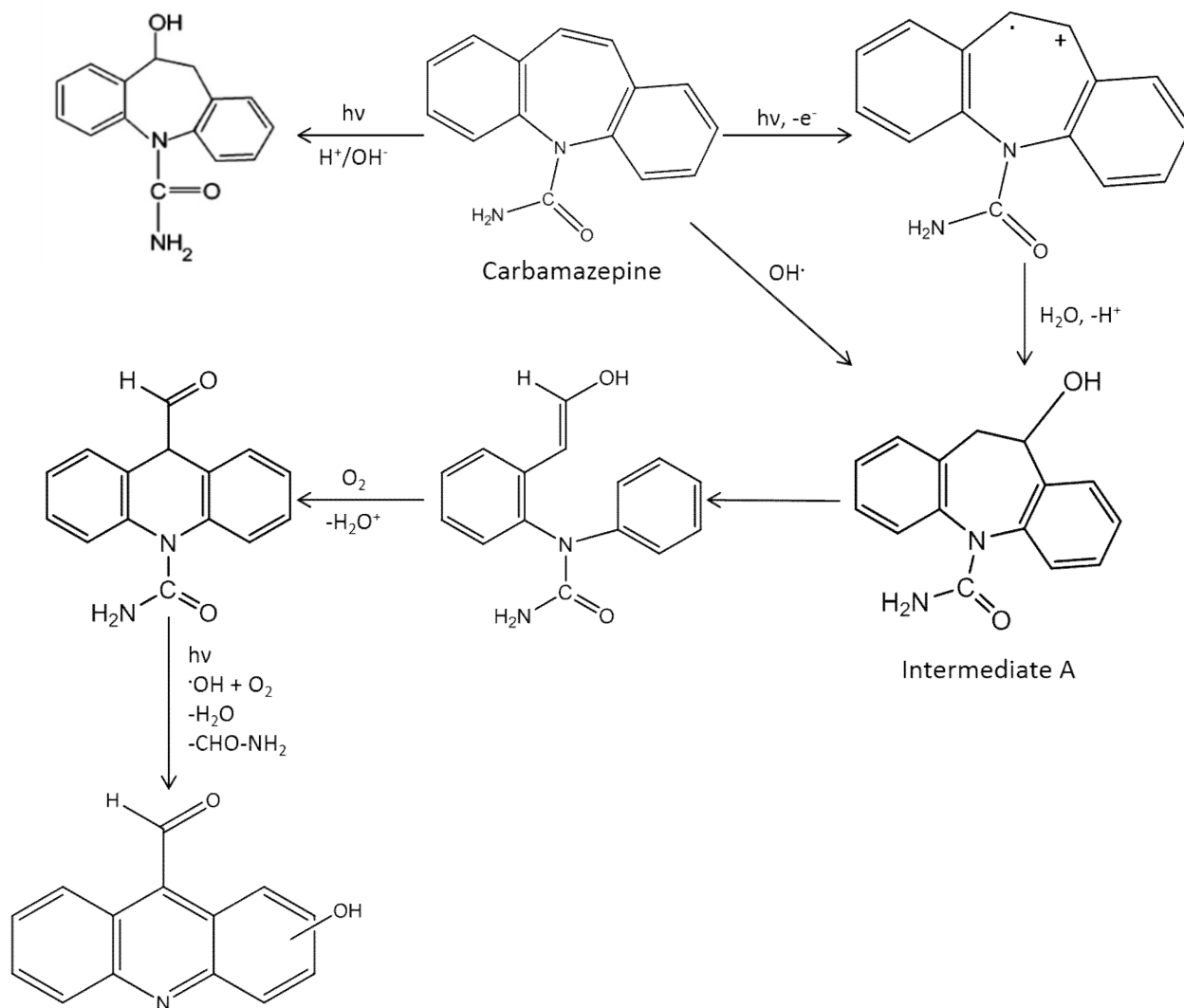


Figure S8: Reaction mechanism proposed for the formation of compound number IV.

Table S1. UPLC-MS/MS conditions for CBZ.

Compound	Cone voltage (V)	Precursor ion (m/z)	Quantification ion		Identification ion	
			Collision energy (eV)	Product ion (m/z)	Collision energy (eV)	Product ion (m/z)
Carbamazepine	26	236.8	20	191.9	20	193.9