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Comparison of Ten Metal-Doped $LaFeO_3$ Samples on Photocatalytic Degradation of Antibiotics in Water under Visible Light: Role of Surface Area and Aqueous Phosphate Ions

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Supporting Information

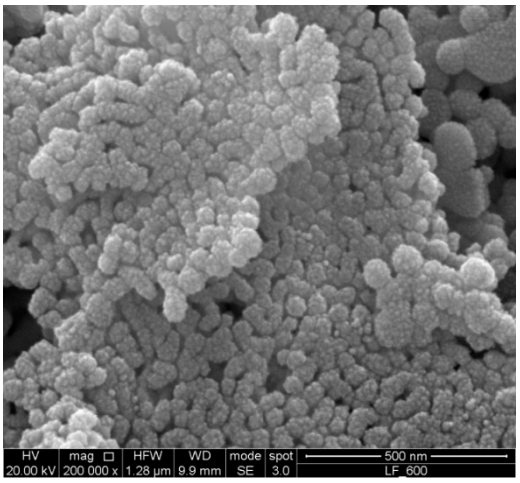

Figure S1. SEM picture of LF.

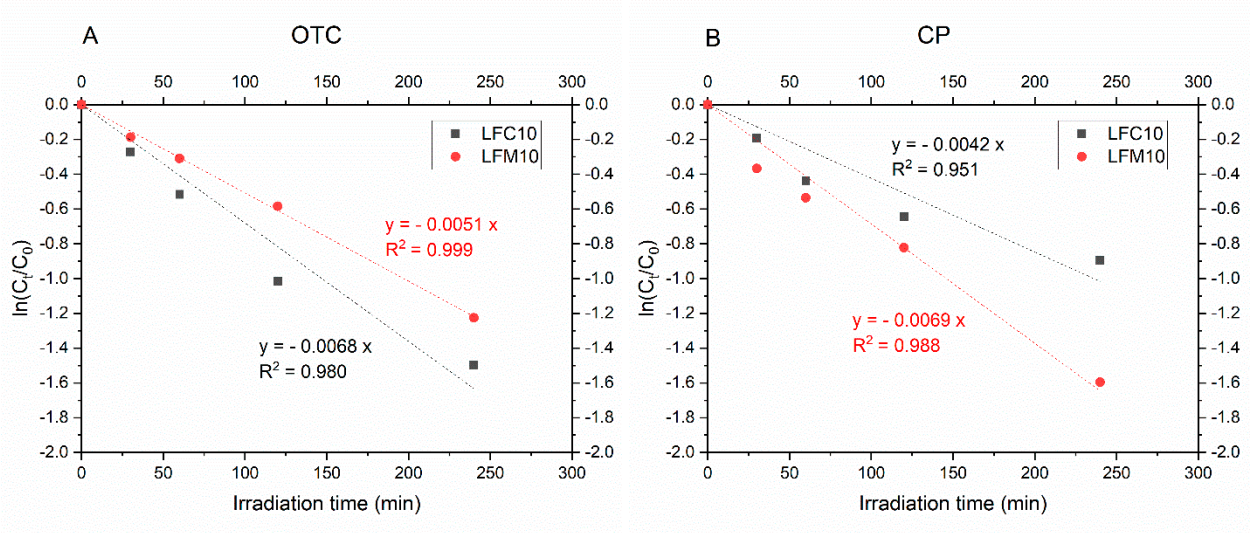

Figure S2. Kinetics for the photocatalytic degradation of OTC ($5 \cdot 10^{-6}$ M) in the presence of LFC10 and LFM10 photocatalysts with the presence of 10^{-2} M H_2O_2.

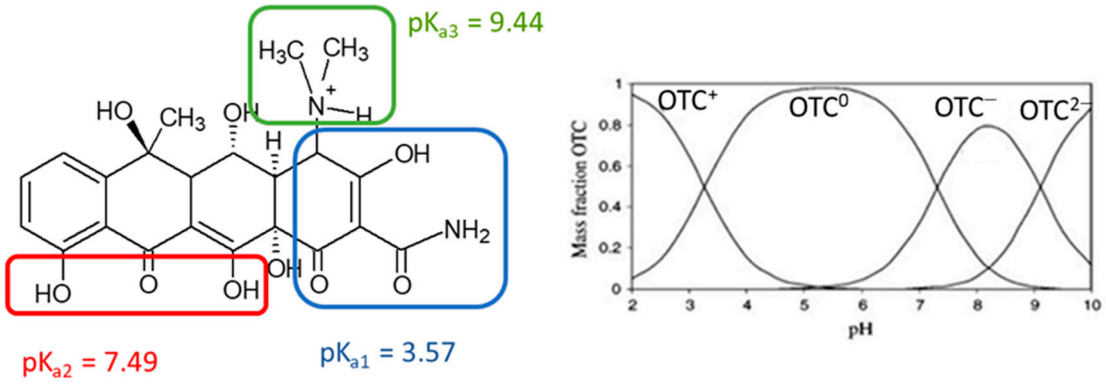

Figure S3. Ionization of OTC at various pH [1].

Table S1: Comparison of the experimental conditions for degradation of OTC. For comparison also OTC photolysis results are shown.

Entry	Photocatalyst	Light source	OTC concentration	Catalyst concentration	Removal %	Time (min)	*k* (min^{-1})	Ref
1	(Photolysis)	UV Hg 500 W	10 mg/L	–	95	240	0.0141	[2]
2	Ti-MCM-41	UV Hg 100 W	50 mg/L	1 g/L	87	180	0.012	[3]
3	Graphene/TiO2/ZSM5	Visible 300 W	10 mg/L	0.2 g/L	100	180	0.04	[4]
4	Co_3O_4/TiO_2/GO	(311-600 nm) Xe 300 W	10 mg/L	0.25 g/L	91	90	0.0272	[5]
5	TiO_2	Simulated solar Xe 1000 W	20 mg/L	0.5g/L	100	40	?	[6]
6	graphitic C_3N_4/ $NiFe_2O_4$	Solar radiation	50 mg/L	0.5 g/L	97	60	0.036	[7]
7	$Fe_{2.8}Ce_{0.2}O_4$/GO	Visible 220 W	30 mg/L	0.8 g/L	78	120	0.0119	[8]
8	2wt% $LaFeO_3$/g-C_3N_4 nanosheets	Visible light 40W white LED	40 mg/L	-	90	120	Second order	[9]
9	N and F doped TiO_2 film	Visible light	5 mg/L	-	70	420	-	[10]

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