



Correction to: Statistical parameter optimization and modeling of photodegradation of methyl orange using a composite photocatalyst prepared by thermal synthesis

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Published online: 30 September 2020

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Correction to: *Environmental Science and Pollution Research*
<https://doi.org/10.1007/s11356-020-10301-5>

Table 3 Proposed reaction scheme of the photocatalytic oxidation mechanism

Step	Reaction	Reaction rate	Reference
Activation	$TiO_2 \xrightarrow{h\nu} TiO_2 + e^- + h^+$	$r_{uv} = \varphi e_{\lambda}^a$	Satuf et al. 2008
Recombination	$e^- + h^+ \xrightarrow{k_2} heat$	$k_2[e^-][h^+]$	Satuf et al. 2008
Electron trapping	$e^- + O_2 \xrightarrow{k_3} O_2^-$	$k_3[e^-][O_2]$	Satuf et al. 2008
Hole trapping	$h^+ + H_2O \xrightarrow{k_4} \cdot OH + H^+$	$k_4[h^+][H_2O]$	Satuf et al. 2008
Hydroxyl attack	$TOC + \cdot OH \xrightarrow{k_5} \dots \rightarrow H_2O + CO_2$	$k_5[TOC][\cdot OH]$	Present study

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The online version of the original article can be found at <https://doi.org/10.1007/s11356-020-10301-5>

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