



Enhancement of water remediation by innovative photocatalytic luminous textiles reactor: Performance, kinetic modeling, and mechanistic insights	
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Abstract: Industrial wastewater containing organic contaminants poses a significant threat to	
human health and environment [1]. These hazardous organic compounds are chemically	
stable and non-biodegradable [2], making their removal from aquatic environments	
challenging using non-destructive techniques, such as flocculation [3], adsorption [4],	
coagulation and/or filtration [5,6]. Chemical and biological processes like chemical oxidation,	
plasma, disinfection/ozonation and chlorination, although effective for water treatment, can	
generate toxic by-products [7,8]. Therefore, there is a need for innovative treatment methods	
capable of completely removing persistent contaminants.	

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