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# Photocatalytic Disinfection of Water: Mechanism and Application

Guest Editors: Message from the Guest Editors **Dr. Giusy Lofrano** Dear Colleagues, Prof. Dr. Dionysios (Dion) D. The development of water disinfection technology is still a Dionvsiou scientific and technical challenge. A process included in a special class of oxidation techniques defined as advanced Dr. Giovanni Libralato oxidation processes (AOPs), characterized by the production of •OH radicals. Photocatalytic disinfection has **Dr. Patrick Dunlop** been reported to efficiently inactivate different kinds of Dr. Pilar Fernandez pathogenic microorganisms as well as to remove multidrug-resistant bacteria. Dr. Sami Rtimi Several studies have been carried out to the mechanisms Prof. Dr. J. Anthony Byrne acting during the process of photocatalytic disinfection and on experimental systems designed to optimize this disinfection technology. Efforts have also been devoted to Deadline for manuscript the development of composite materials to be utilized in submissions: immobilized photocatalytic systems, looking for an closed (30 September 2020) alternative to allow continuous wastewater treatment without the need of a post-treatment catalyst separation step. The topics of this Special Issue include (but are not limited to): Recent advances in antimicrobial photocatalysts

Antimicrobial photocatalytic materials

New generation of antimicrobial catalysts

Water treatment in coated reactors

Mechanistic understanding of photocatalytic disinfection

**Classue** 



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#### Message from the Editor-in-Chief

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