

Special Issue

Advanced Oxidation Technologies for Water and Wastewater Treatment from Organic Pollutants by Nanostructure Materials

Message from the Guest Editors

Water resources are coming under increasing pressure due to population growth, over-use and wastage. AOPs are particularly attractive as a method for removing organic pollutants from water using nanostructure materials because they utilize hydroxyl radicals as a major oxidizing agent. Therefore, they can destroy hazardous contaminants, not simply transfer them to another phase, as do air stripping and granular activated carbon adsorption. The nanostructure semiconductor materials can degrade most kinds of persistent organic pollutants, such as detergents, dyes, pesticides and pharmaceutical drugs, under light illumination. Semiconductors can act as sensitizers for light-induced redox processes due to the electronic structure of the metal atoms. The aim of the Special Issue “Advanced Oxidation Technologies for Water and Wastewater Treatment from Organic Pollutants by Nanostructure Materials: Latest Advances, Challenges, and Prospects” is to serve scientists through the Latest Advances, Challenges, and Prospects in solving environmental problems.

Guest Editors

Dr. George Tzvetkov

Faculty of Chemistry and Pharmacy, Sofia University “St. Kliment Ohridski”, 1 James Bourchier Blvd., 1164 Sofia, Bulgaria

Dr. Nina Kaneva

Laboratory of Science and Technology of Nanoparticles, Faculty of Chemistry and Pharmacy, University of Sofia, J. Bourchier 1, 1164 Sofia, Bulgaria

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Water
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
water@mdpi.com

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In the context of global changes, the sustainable management of water cycles, going from global and regional water cycles to urban, industrial and agricultural water cycles, plays a very important role on the water resources and on their relationships with food, energy, biodiversity, ecosystem functioning and human health. *Water* invites authors to provide innovative original full articles, critical reviews and timely short communications and to propose special issues devoted to new technological and scientific domains and to interdisciplinary approaches of the water cycles. We ensure a critical review process and a quick turnaround between submission and final decision.

Editor-in-Chief

Dr. Jean-Luc PROBST

Centre de Recherche sur la Biodiversité l'Environnement (CRBE) UMR CNRS/UPS/INPT/IRD, Centre National de la Recherche Scientifique (CNRS), University of Toulouse, Campus ENSAT, Auzeville Tolosane, Toulouse, France

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