



water



an Open Access Journal by MDPI

Photocatalytical Behavior of Metal NPs over Wastewater Treatment

Guest Editors:

Dr. Awais Ahmad

Department of Chemistry,
University of Lahore, Lahore,
Pakistan

awaisahmed@gcuf.edu.pk

Prof. Dr. Shahid Hussain

School of Materials Science and
Engineering, Jiangsu University,
Jiangsu, China

shahid@ujs.edu.cn

Prof. Dr. Muhammad Bilal

School of Life Science and Food
Engineering, Huaiyin Institute of
Technology, Huaian 223003,
China

bilaluaaf@hotmail.com

Deadline for manuscript
submissions:

28 February 2022

Message from the Guest Editors

Dear Colleagues,

Process of photocatalysis involves green chemistry, because all energy obtained from photons are utilized into chemical energy. In last few decades, an increase in use of photoreactors was emerged. In present era several modifications were brought for designing a diversified modification in those materials from which semiconductors could be formed, with efficient activity to be employed for photocatalysis of heterogenous materials. Based on modification, band gap, composition and charge transfer process semiconductors to be used in photocatalysis are categorized into four types. These include Z scheme, solid solutions, intrinsic semiconductors and electrical junction created between variant materials termed as heterojunction type II. Photocatalysis involves phenomena of oxidation. In this process, semiconductors capable of photocatalytic activity deteriorate contaminants that are organic in nature. These photocatalysts include zinc oxide and titanium oxide etc. Along with semiconductors, the agent [...]

For further reading, please follow the link to the Special Issue Website at:

https://www.mdpi.com/journal/water/special_issues/Photocatalytical_Behavior



[mdpi.com/si/90958](https://www.mdpi.com/si/90958)

Special Issue



water



an Open Access Journal by MDPI

Editor-in-Chief

Dr. Jean-Luc PROBST

ECOLAB, Centre National de la
Recherche Scientifique (CNRS),
University of Toulouse, campus
ENSAT, Auzeville Tolosane,
France

Message from the Editor-in-Chief

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.

Author Benefits

Open Access:— free for readers, with [article processing charges \(APC\)](#) paid by authors or their institutions.

High Visibility: indexed within [Scopus](#), [SCIE \(Web of Science\)](#), [Ei Compendex](#), [GEOBASE](#), [GeoRef](#), [AGRICOLA](#), [AGRIS](#), [CAPlus / SciFinder](#), [Inspec](#), and many other databases.

Journal Rank: [JCR](#) - Q2 (*Water Resources*) / [CiteScore](#) - Q1 (*Geography, Planning and Development*)

Contact Us

Water
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
Fax: +41 61 302 89 18
www.mdpi.com

mdpi.com/journal/water
water@mdpi.com
[@Water_MDPI](https://twitter.com/Water_MDPI)