Special Issue

Photocatalytic Activity of TiO_2 and Its Applications

Message from the Guest Editors

The increasing pollution due to a wide range of micropollutants, particularly in the aquatic ecosystem, has become a serious issue for its harmful effects on the environment and health. Currently, attention is focused on the use of photocatalysts for the degradation of pollutants by advanced oxidation processes (AOPs). Titanium dioxide (TiO2) is considered the most promising material for the photocatalytic degradation of organic and inorganic pollutants, being highly efficient, non-toxic, and stable under irradiation; therefore, it has been intensively investigated for environmental applications. The aim of this Special Issue is to present recent progress on the synthesis (with particular interest on metal- and non-metal-doped TiO2 and noble metal-modified TiO2), characterization, and photocatalytic properties of TiO2-based nanostructures. We invite authors to contribute with research papers, reviews, or communications, with special emphasis on visible-light photocatalysis, plasmonic photocatalysis, photodegradation of pharmaceuticals and other emerging contaminants in water, self-cleaning treatments, and conservation of Cultural Heritage.

Guest Editors

Dr. Laura Bergamonti

Department of Chemical Science, Life and Environmental Sustainability, University of Parma, 43124 Parma, Italy

Prof. Dr. Pier Paolo Lottici

Department of Mathematical, Physical and Computer Sciences, University of Parma, 43124 Parma, Italy

Deadline for manuscript submissions

closed (31 March 2022)

Catalysts

an Open Access Journal by MDPI

Impact Factor 4.0
CiteScore 7.6

mdpi.com/si/67923

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

mdpi.com/journal/catalysts

Catalysts

an Open Access Journal by MDPI

Impact Factor 4.0
CiteScore 7.6

mdpi.com/journal/catalysts

MDPI

About the Journal

Message from the Editor-in-Chief

Editor-in-Chief

Prof. Dr. Keith Hohn
Carl R. Ice College of Engineering, Kansas State University, Manhattan, KS, USA

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), Inspec, Ei Compendex, CAPlus / SciFinder, CAB Abstracts, and other databases.

Journal Rank:

JCR - Q2 (Chemistry, Physical) / CiteScore - Q1 (General Environmental Science)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.6 days after submission; acceptance to publication is undertaken in 2.7 days (median values for papers published in this journal in the first half of 2025).