Special Issue

Metal Oxide-Based Photocatalysts – from Synthesis to Application

Message from the Guest Editors

Nowadays, as a result of globalization and the development of industry, more and more pollutants containing harmful substances are produced. Therefore, it is necessary to develop techniques for their removal or neutralization. It is well known that the removal of environmental pollutions (e.g., sewage) by conventional, physicochemical, and biochemical methods, such as adsorption, oxidation, ozonation, etc., is expensive and ineffective. Hence, in recent years, an increased interest in new wastewater treatment technologies that are based on photo-oxidation processes using oxide-based materials has been observed. The proposed scope of Special Issue includes:

- Synthesis of novel photocatalysts based on oxide materials;
- Surface treatment (modification/grafting/doping) to enhancement photocatalytic properties;
- Surface chemistry and functionality;
- Physicochemical characterization of photocatalysts;
- Degradation of harmful impurities (for example, metal ions, detergents, pesticides, pharmaceuticals, organic dyes, etc.) using novel, synthesized photocatalysts;
- Application and characteristics of novel light sources.

Guest Editors

Dr. Adam Kubiak

Faculty of Chemistry, Adam Mickiewicz University in Poznan, Uniwersytet Poznanskiego 8, PL-61614 Poznan, Poland

Dr. Katarzyna Siwińska-Ciesielczyk

Faculty of Chemical Technology, Institute of Chemical Technology and Engineering, Poznan University of Technology, Berdychowo 4, PL-60965 Poznan, Poland

Deadline for manuscript submissions

closed (31 December 2022)

Crystals

an Open Access Journal by MDPI

Impact Factor 2.4
CiteScore 5.0

mdpi.com/si/105542

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

mdpi.com/journal/crystals

Crystals

an Open Access Journal by MDPI

Impact Factor 2.4
CiteScore 5.0

mdpi.com/journal/crystals

MDPI

About the Journal

Message from the Editor-in-Chief

Welcome to *Crystals*, the journal dedicated to the fascinating world of crystallographic research! Crystals are more than mere decorative elements; they hold the key to understanding the fundamental structure of matter. Our mission is to explore the crucial significance of this research across various fields. From medicine to technology, chemistry to geology, crystals play a vital role. Their structure provides insights into new advanced materials, innovative drugs, and groundbreaking technologies. Through *Crystals*, we delve into the microscopic world to discover solutions that will shape the future. Join us on a journey through the *Crystals*, where science merges with beauty and innovation.

Editor-in-Chief

Prof. Dr. Alessandra Toncelli
Department of Physics, University of Pisa, 56126 Pisa, PI, Italy

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), Inspec, Ei Compendex, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Crystallography) / CiteScore - Q2 (Condensed Matter Physics)