Special Issue

Advanced Research of Nanoparticles for Photoelectrochemical Applications

Message from the Guest Editors

The development of environmentally friendly energy such as hydrogen via photoelectrochemicals can be generated by regulating catalytic activity in response to external stimuli (i.e., pH, temperature, light, morphology). The integration of novel materials in a new generation of catalysts could allow us to develop breakthrough systems characterized by unique functional properties, such as adaptability, stability, a high generation of photocurrents, temporal control on the occurrence of the reactions, and dynamic specificity towards particular interfaces. Photoelectrochemical techniques are unique and simple compared with other hydrogen production techniques. For those reasons, photoelectrochemical method deserves more extensive investigations. This Special Issue intends to cover the most recent progresses in the preparation of "advanced research of nanoparticles for photoelectrochemical Applications" with particular emphasis on new synthetic and design-driven approaches that enable the success of dynamic, stimuli-responsive systems.

Guest Editors

Dr. I. Neelakanta Reddy

School of Mechanical Engineering, Yeungnam University, Gyeongsan 712749, Korea

Dr. Adem Sreedhar

Department of Physics, Gachon University, Seongnam 461701, Gyeonggi-do, Korea

Deadline for manuscript submissions

closed (30 June 2023)

Crystals

an Open Access Journal by MDPI

Impact Factor 2.4
CiteScore 5.0

mdpi.com/si/112978

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

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)