

## Special Issue

# Semiconductor Photocatalysts

### Message from the Guest Editors

Photocatalysts based on semiconductors are a rapidly progressing field of catalytic science, attracting a large number of chemists and physicists from all around the world. Although semiconductor materials have recently gained enormous interest in photocatalysis, more heterostructures with p–i–n-structure-based semiconductors are still rare in this field, especially for photocatalysts of CO<sub>2</sub>, H<sub>2</sub>O, H<sub>2</sub>, and N<sub>2</sub>. Under the great pressure of environmental pollution and the ongoing energy crisis, the development of low-cost devices based on semiconductors is vital to decompose water into hydrogen and oxygen, carbon dioxide into carbon and oxygen, and to obtain ammonia, decomposing nitrogen and hydrogen. Here, we focus on the works of heterostructures with the p–i–n structure for this Special Issue on Semiconductor Photocatalysts.

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### Guest Editors

Prof. Dr. Sib0 Wang

Prof. Dr. Guangzhao Wang

Dr. Tingwei Zhou

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### Deadline for manuscript submissions

closed (30 September 2022)



## Crystals

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## 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.

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### Editor-in-Chief

Prof. Dr. Alessandra Toncelli  
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