

## Special Issue

# Metal Oxides as Photocatalysts: Processes, Properties, and Applications

### Message from the Guest Editors

The important components of photocatalysis are the catalysts used—as a rule. Among the most commonly studied compounds as photocatalysts are the oxides of Ti(IV), Zn(II), Sn(IV), Ce(IV), which have shown efficiency in the decomposition of pollutants and their mineralization to harmless products. The metal oxides with properties of semiconductors are not limited to those mentioned above, and there remains the possibility to find new oxides which can lead to the development of new photocatalysts. That is why we are initiating the presented Special Issue “Metal Oxides as Photocatalysts: Processes, Properties, and Applications”. The intention is to cover research in the field of oxidation processes under light irradiation, modeling, and application of metal oxides as photocatalysts. Among the possible topics considered, but not limited to:

- Synthesis and characterization of metal and mixed metal oxide semiconductors;
- Application of metal and mixed metal oxides as photocatalysts for decomposition of water pollutants;
- Processes of water purification under UV and Vis light irradiation.

### Guest Editors

Prof. Dr. Maria Milanova

Laboratory for Chemistry of Rare and Rare Earth Elements, Department of Inorganic Chemistry, Faculty of Chemistry and Pharmacy, University of Sofia, 1164 Sofia, Bulgaria

Dr. Martin Tsvetkov

Laboratory for Chemistry of Rare and Rare Earth Elements, Department of Inorganic Chemistry, Faculty of Chemistry and Pharmacy, University of Sofia, 1164 Sofia, Bulgaria

### Deadline for manuscript submissions

closed (20 November 2022)



## Applied Sciences

an Open Access Journal  
by MDPI

Impact Factor 2.5  
CiteScore 5.5



[mdpi.com/si/85100](https://mdpi.com/si/85100)

*Applied Sciences*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[applsci@mdpi.com](mailto:applsci@mdpi.com)

[mdpi.com/journal/applsci](https://mdpi.com/journal/applsci)





# Applied Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.5  
CiteScore 5.5



[mdpi.com/journal/  
applsci](https://mdpi.com/journal/applsci)



## About the Journal

### Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

---

### Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo  
Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32,  
20133 Milano, 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), Ei Compendex, Inspec, CAPlus / SciFinder, and other databases.

#### Journal Rank:

JCR - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering )