

## Special Issue

# Nanomaterials for Photocatalysis and Piezo-Photocatalysis

### Message from the Guest Editors

Water pollution, due to increased agricultural and industrial activities, has affected the quality of life and the ecosystem in recent years. Photocatalysis research is rising to develop green technologies for the remediation of pollutants and for energy production.

Classical photocatalysts are represented by semiconductors, such as  $\text{TiO}_2$ ,  $\text{ZnO}$ ,  $\text{CeO}_2$ ,  $\text{Fe}_3\text{O}_4$ , etc., or a combination of them.  $\text{ZnO}$  is one of the most studied and characterized materials thanks to its piezoelectric features. By using piezoelectric materials, an increase in photocatalytic efficiency can be achieved if piezoelectric photocatalysts are simultaneously subjected to light radiation and mechanical stress. Additionally, interesting optical features have been reported for nanostructured carbon allotropes making them suitable to be integrated in photocatalytic systems. The purpose of the Special Issue is to describe novel, innovative, and environmentally friendly synthesis of nanomaterials for applications in photocatalysis. Articles, reviews, and opinion letters by experts in the field are also welcome.

### Guest Editors

Dr. Rosanna Pagano

Prof. Dr. Ludovico Valli

Dr. Zois Syrgiannis

### Deadline for manuscript submissions

closed (12 May 2023)



## Catalysts

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KS, USA

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