



## Nanomaterials Catalysis for Hydrogen Production and Water Splitting

Guest Editor:

**Prof. Dr. Yiannis Deligiannakis**

Lab of Physical Chemistry of  
Materials & Environment,  
Department of Physics, University  
of Ioannina, 45110 Ioannina,  
Greece

Deadline for manuscript  
submissions:

**closed (20 October 2021)**

### Message from the Guest Editor

Dear Colleagues,

Areas of interest include, but are not limited to, the following topics:

- Hybrid TiO<sub>2</sub>-based materials for photocatalytic water splitting: mechanisms, materials, and limitations.
- Beyond TiO<sub>2</sub>: the current state-of-the-art developments in non-TiO<sub>2</sub> photocatalysts, addressing fundamental issues
- Rational designing of visible light photocatalysts for efficient photocatalytic water splitting
- Nanoplasmonic interphases for efficient H<sub>2</sub> evolution
- Non-precious metal cocatalysts for water splitting photocatalysis
- Multi-phase homojunctions-heterojunctions for efficient photocatalytic water splitting
- Methods of synthesis of 2D and 3D nanomaterials for photocatalytic water splitting: addressing performance, cost-efficiency, scalable production
- Solar pilot plant scale development for photocatalytic water splitting
- Theoretical computational modeling studies of photocatalytic water splitting process
- Recent developments in the designing of water splitting photo reactors





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### **Prof. Dr. Enrico Sciubba**

Department of Mechanical and  
Aerospace Engineering,  
University of Roma Sapienza, Via  
Eudossiana 18, 00184 Roma, Italy

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*Energies* Editorial Office  
MDPI, Grosspeteranlage 5  
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