

Special Issue

Advances in Photocatalysis: Photocatalytic Materials and Applications

Message from the Guest Editor

Photocatalysis represents an important class of chemical transformation that uses the energy provided by light to drive reactions that are difficult to carry out in the dark. Photocatalysis is defined as a change in the rate of a photochemical reaction by the activation of a semiconductor photocatalyst with sunlight or artificial light (ultraviolet or visible radiation). This is an advanced technique with several applications, such as solar energy conversion, photo-sensible sensors, wastewater and air treatment, organic and inorganic synthesis, surface science and storage devices, etc. In this context, this Special Issue will cover various topics, such as:

- Synthesis and characterization of novel photocatalysts.
- Applications of photocatalysts in different areas:
 - wastewater and air treatment
 - energy conversion
 - drug delivery
 - others
- Photocatalytic materials to address specific sustainability challenges.
- Photocatalytic synthesis of organic and inorganic compounds.
- Critical reviews and perspectives on photocatalyst applications.

Guest Editor

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About the Journal

Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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