



Advanced-Photocatalytic Materials: New Perspectives and Challenges

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Message from the Guest Editors

After several years of intense research, heterogeneous photocatalysis remains a promising technology for a wide range of applications. The current status of heterogeneous photocatalysis faces new perspectives and challenges. From a materials point of view, a continuing breakthrough in synthetic protocols has been reported. Besides, new characterization and quantification approaches have been recently described. In this collection, we are particularly interested in new green synthetic protocols as well as biomass and waste valorization opportunities. Besides, we aim to rationalize new advanced-characterization technics such as (e.g., in-situ/operando conditions) and advanced-photocatalytic quantification (e.g., photonic and quantum efficiency and theoretical calculations). Potential topics include, but are not limited to:

- Novel photocatalytic materials and synthetic protocols
- Novel characterization approaches of photocatalytic materials
- Full use of light (UV-Vis, UV-VIS-IR) or efficient illumination sources (e.g., LEDs).
- Theoretical calculation and simulation of photocatalytic materials
- Light-matter interaction modelling and photocatalytic efficiency calculation

