

Special/Thematic Issue for the journal Current Organic Chemistry (COC)

Semiconductor-Based Composite Photo catalysts for Organic Synthesis.

Guest Editors: Dr. Bo Weng

Scope of the Thematic Issue:

Developing environmentally benign synthetic protocols for organic synthesis is in the tenet of green chemistry. Photo catalysis, as a green technique, has attracted considerable attention and is demonstrated to exhibit significant advantages for organic synthesis as compared with conventional approaches, such as milder reaction conditions, shorter reaction sequences, and minimized undesirable side reactions et al. Therefore, the immense effort has been devoted to the application of solar energy in the field of organic synthesis, like photo catalytic selective organic oxidation/reduction reaction, C-C bond/carbon–hetero bond formation reactions and so on. This thematic issue aims to provide an overview of the most common, purely heterogeneous semiconductor-based composite photo catalysts applied in organic synthesis.

Keywords: Photo catalyst; Semiconductor; Composite; Organic Synthesis; Green Chemistry.

Sub-topics:

The sub-topics to be covered within the issue should be provided:

- Photo catalytic selective organic oxidation reaction
- Photo catalytic selective organic reduction reaction
- Photo catalytic C-C coupling reaction
- Photo catalytic carbon–hetero bond formation reactions
- Photo catalytic biomass conversion
- Photo catalytic organic synthesis coupled with energy conversion
- Novel photo catalysts for organic conversion
- Light-mediated decarboxylation of carboxylic acids.

Schedule:

Complete Thematic issue submission deadline: 1st Sep. 2022.

Details of Guest Editors:

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