



## Preparation and Property Characterization of Novel Photocatalysts

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### Message from the Guest Editor

The aim of this topic is to prepare various new photocatalysts, various composite photocatalysts, or composite heterojunction catalysts for photocatalytic degradation of organic pollutants in dye wastewater, pesticide wastewater, or pharmaceutical wastewater under visible light irradiation or ultraviolet light irradiation. The catalysts can also be used for hydrogen production by water splitting. X-ray diffractometer, transmission electron microscope, scanning electron microscope, X-ray photoelectric spectrometer, and other instruments can be used for characterizing the physical, chemical, and photochemical properties of the above catalysts such as their atomic space coordinates and crystal system structures. At the same time, the intermediate products of these target pollutants can be obtained using a liquid chromatography mass spectrometer. The degradation path of various target pollutants can be obtained, and the degradation mechanism of the organic pollutants can be achieved. Two major problems can be resolved by using the abovementioned catalysts. One is the conundrum of water environment pollution, and the other is producing hydrogen energy.





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## Message from the Editor-in-Chief

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