Special Issue

Organic Matter Degradation, Biomass Conversion and CO_2 Reduction

Message from the Guest Editors

The rapid development of industry and its over-reliance on carbon-rich fossil fuels have resulted in a series of energy and environmental problems, including a shortage of resources, the energy crisis, water pollution, air pollution, and global climate change (due to the massive emission of CO2 gas). The aim of this Special Issue is to collect new ideas on the controllable synthesis of state-of-the-art nanomaterials for highly efficient photocatalytic, photoelectrochemical and electrocatalytic pollutant degradation and fuel production. Furthermore, we would like to highlight the current achievements in mechanism studies about CO2 reduction, biomass conversion and the photodegradation of organic pollutants in water and air. To promote the large-scale application of solar photo(electro)catalytic technology, studies focused on the design of related reaction cells and devices are particularly welcome. Moreover, the combination of photo(electro)catalysis with other green and sustainable approaches for efficient pollutant degradation and fuel production also falls within the scope of this Special Issue.

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I encourage you to contribute a research or comprehensive review article for consideration for publication in *Sustainability*, an international Open Access journal which provides an advanced forum for research findings in areas related to sustainability and sustainable development. *Sustainability* publishes original research articles, review articles and communications. I am confident you will find the journal contributes to enhancing understanding of sustainability and fostering initiatives and applications of sustainability-based measures and activities.

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