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Organic Matter Degradation, Biomass Conversion and CO2 Reduction

Guest Editors:

Dr. Qiang Wang

2020 X-Lab, Shanghai Institute of Microsystem and Information Technology, Chinese Academy of Sciences, Changning Road 865, Shanghai 200050, China

Dr. Cheng-Chao Jin

School of Chemistry and Materials Science, Hangzhou Institute for Advanced Study, University of Chinese Academy of Sciences, 1 Sub-lane Xiangshan, Hangzhou 310024, China

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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 highly efficient for 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 the combination welcome Moreover 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.



Specialsue





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Prof. Dr. Marc A. Rosen

Faculty of Engineering and Applied Science, University of Ontario Institute of Technology, Oshawa, ON L1G 0C5, Canada

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