catalysts

an Open Access Journal by MDPI

IMPACT FACTOR 3.8

CITESCORE 6.8

Novel Photo(electro)catalysts for Energy and Environmental Applications

Guest Editors:

Dr. Xiangjiu Guan
International Research Center for Renewable Energy (IRCRE), State Key Laboratory of Multiphase Flow in Power Engineering (MFPE), Xi'an Jiaotong University (XJTU), 28 West Xianning Road, Xi'an 710049, China

Dr. Shichao Zong
Department of Chemical Engineering, School of Water and Environment, Chang'an University, Xi'an 710064, China

Deadline for manuscript submissions:
closed (31 December 2022)

Message from the Guest Editors

Photo(electro)catalysis is an appealing approach to addressing energy and environmental issues to achieve the sustainable development of human society, which could provide cost-effective strategies for energy supply with solar fuel, chemical synthesis with energy-saving processes, and environmental purification with limited emissions. Therefore, developing novel photo(electro)catalysts plays a critical role in this specific research field and is becoming a hot research topic.

This Special Issue on "Novel Photo(electro)catalysts for Energy and Environmental Applications" will cover the most recent progress in design, synthesis, advanced characterization, mechanism investigation, and theoretical analysis of novel photo(electro)catalysts and photocatalytic systems, which includes but is not limited to their energy and environmental application in water splitting, CO_2 reduction, biomass conversion, and pollutant degradation. Review and original research papers within the scope of this Special Issue are welcomed, aiming to inspire more work for further development of this growing and prospering research field.