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Novel Approaches to Photoelectrochemical and Electrochemical Nanomaterials

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Message from the Guest Editors

Carbon nanomaterials (carbon nanotubes, graphene oxide, graphene, carbon dots, etc.), transition metal dichalcogenides, MXenes, earth-abundant non-noble-metal nanostructures, metal oxides from metal–organic frameworks (MOFs), and other types of nanostructures are gaining profound attention due to their remarkable activity in various electrochemical processes and reactions. Advancements in the preparation of new nanomaterials and nanotechnology can improve various photoelectrochemical and electrochemical applications such as water splitting, CO_2 conversion, water treatment, photovoltaics, electrochemical sensing, optoelectronic devices, metal–air batteries, fuel cells, electrochemical flow batteries, and other critical processes.

Currently, it is widely accepted that the poor energy conversion efficiency of nanomaterials is the predominant constraint of photo-electrochemical catalysts. This Special Issue, entitled "Novel Approaches to Photoelectrochemical and Electrochemical Nanomaterials", aims to provide a comprehensive account of the recent developments in innovative nanomaterials that have a major impact on the photo and/or electrochemical performance of catalysts.

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Message from the Editor-in-Chief

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