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Recent Advances in Structural Design and Synthesis of 2D Catalytic Materials

Guest Editor:

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Deadline for manuscript submissions:
closed (20 November 2023)

Message from the Guest Editor

Dear Colleagues,

Nowadays, the energy crisis and associated climate change caused by fossil fuel consumption, as well as the fact of reduced reserves, necessitate an urgent demand for the widespread use of sustainable and clean energy. Photocatalysis and electrocatalysis offer two key renewable, sustainable, and clean technologies that have the potential to meet global energy demands. Exploring efficient, low-cost, and stable catalysts undoubtedly plays an important role in pushing technological advancement. Two-dimensional (2D) materials are an emerging class of nanomaterials with a sheet-like structure. The high aspect ratio, high percentage of exposed atoms, and anisotropic characteristics endows 2D materials with good charge transport, more superficial active sites, stability, modifiability, suitable electronic band structure, and light absorption properties, and they thus have great potential to become high-performance advanced catalysts.

The objective of this Special Issue is to publish outstanding papers that address cutting-edge advances, new ideas, and research results in the field of 2D Catalytic Materials.

Dr. Yanqing Jiao
Guest Editor

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