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Advances in Nanocomposite Photocatalysis: Design, Synthesis and Mechanism

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Message from the Guest Editors

Photocatalysis has become one of the key fields of interest in catalysis. It has a wide range of applications, such as water splitting, degradation of environmental pollutants, carbon dioxide reduction, and hydrogen peroxide production. At the same time, nanomaterials have long been considered promising photocatalysts that can eliminate environmental pollution and produce hydrogen from water via photocatalysis under sunlight. These nanomaterials are not harmful to the environment and are therefore considered a "green" catalyst, such as metal oxides, metal sulfides, and metallic organic frameworks (MOFs). To achieve a rational application of photocatalysts, it is necessary to understand the relationship between the mechanism properties of nanomaterials and their photocatalytic performances, as well as the fundamentals of photocatalytic activity. Therefore, we would like to invite you to submit to this Special Issue on the synthesis of advanced nanomaterials for photocatalysis, including electronic properties, the mechanism of photocatalysis, and so on.



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Special Issue



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Message from the Editor-in-Chief

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