Special Issue

Advances in Semiconductor Photocatalysis

Message from the Guest Editors

Semiconductor materials have long been used as photocatalysts for various applications. In recent years, many methods have been developed in order to improve the photocatalytic activity of traditional semiconductor materials such as TiO2. Besides the "old materials", novel semiconductor materials have been explored for photocatalysis applications, and significant advances have been made. New concepts, like "plasmonic photocatalysis" and "photonic photocatalysis" have been devised. The new materials and new methods can significantly enhance photocatalysis efficiency and overcome many drawbacks associated with the traditional semiconductor photocatalysts. This Special Issue aims to provide a platform for scientists and engineers to report the most exciting advances made in this field. We would like to invite colleagues to contribute to this Special Issue. We expect to see amazing studies on semiconductor photocatalysts synthesis, novel methods for photocatalysis enhancement, and novel applications of semiconductor photocatalysts in any form of photocatalytic processes.

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As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

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