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Semiconductors Design, Synthesis and Applications in Energy/Environmental Photocatalysis

Guest Editor:

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Deadline for manuscript submissions: 10 December 2024 Message from the Guest Editor

With the world's demand for energy and environmental costs have constantly increased, the development of efficient catalysts for clean energy production is, therefore, of significant importance. Heterostructured photocatalysts/photoelectrodes exhibit а hetter performance than the corresponding single-component counterparts. The construction of heterostructured materials with a close contact interface and strong interfacial interactions is, thus, vital for developing highly efficient catalysts for clean energy production, relieving future energy and environmental crises.

This Special Issue, titled "Semiconductors Design, Synthesis and Applications in Energy/Environmental Photocatalysis", invites high-quality papers on topics including but not limited to:

- Process of constructing heterostructure materials with strong interfacial interactions;
- Designed construction of novel heterostructure for photocatalytic water splitting;
- Design of efficient heterojunction photoanodes for water oxidation;
- Mechanism of charge transfer within heterostructures;
- Theoretical calculation of interfacial interactions in inorganic/organic heterostructures.





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Message from the Editor-in-Chief

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