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# State-of-the-Art Materials toward Efficient Solar Energy Harvesting

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Deadline for manuscript submissions:

31 October 2024

# **Message from the Guest Editors**

Dear Colleagues,

Solar energy applications continue to be studied, particularly as the sun provides one of the most bountiful energy sources via its utilization as sunlight. The abundance of energy in sunlight allows many types of semiconductors to be employed as energy harvesters, spanning a wide range of solar radiation wavelengths to be exploited. Sunlight can be applied in numerous ways, as the cost-free energy source can be utilized semiconductors to generate electricity in photovoltaic cells, to split water molecules to generate hydrogen and degrade pollutants via photocatalytic reactions. This Special Issue will focus on state-of-the-art materials that generate further variations of materials that may be employed in solar energy applications. Contributions to this Special Issue may attend to topics that include, but are not limited to, the following:

- Semiconductors for solar energy application
- Synthesis
- Nanoparticles
- Nanostructured thin films
- Nanocomposites
- Characterization and applications
- Photovoltaic materials
- Photodegradation
- Hydrogen generation



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## Message from the Editor-in-Chief

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