# Special Issue

# Inorganic Materials for Solar Energy Conversion

## Message from the Guest Editor

The photolysis of water on a semiconductor electrode reported by Fujishima and Honda in the 1970s triggered intense research into semiconducting oxides for solar energy conversion. During the last decade, remarkable progress has been achieved in integrated photoelectrochemical devices, resulting in a solar-to-hydrogen efficiency above 19%. The rapid progress in perovskite-based solar cells and electrocatalysis has also opened new opportunities for solar-driven electrolysers. Beyond water-splitting, solar-driven CO2 reduction to chemical fuel is an environmentally-friendly solution for future energy demands. Buried junction geometry enables us to expand the scope of chemical reactions beyond water-splitting toward other chemical reactions depending on the type of catalyst. These advances have been driven by the synthesis of new materials and their integration into photochemical devices. This also includes materials for surface protection, membranes and immobilized molecular catalysts on semiconductor electrodes. This Special Issue is dedicated to emerging inorganic materials for solar energy conversion.

## Guest Editor

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## Message from the Editor-in-Chief

Inorganic chemistry remains a lynchpin of modern chemistry, not only embracing the function and reactivity of combinations of most elements of the periodic table, but also providing a footing for studies of materials, catalysts, drugs, fuels and industrial chemicals. Arguably, the role and reach of inorganics in society have never been as great as today. Adventurous research at the heart and at the extremes of inorganic chemistry is vital to further advances and Inorganics offers authors the opportunity to publish exciting new research in an open access format.

## Editor-in-Chief

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