Special Issue

New Semiconductor Materials for Energy Conversion, 2nd Edition

Message from the Guest Editor

I am delighted to invite researchers worldwide to contribute to the second edition of our Special Issue, entitled “New Semiconductor Materials for Energy Conversion, 2nd Edition”. It seeks to capture the latest breakthroughs in advanced semiconductor systems for sustainable energy conversion.

We welcome submissions focused on a broad spectrum of topics, including, but not limited to, the following:

- Electronically and optically active inorganic semiconductors (e.g. chalcogenide perovskites, 2D heterostructures, metal oxides, oxynitrides, sulfides);
- Innovative synthesis, nanostructuring, and fabrication techniques;
- Device architectures spanning solar cells, thermoelectric generators, photoelectrochemical cells, and hybrid energy-harvesting systems;
- Mechanistic studies on charge transport, recombination dynamics, interface processes, and band engineering;
- High-throughput material discovery, theoretical modeling, and machine learning assisted design;
- Emerging concepts such as excitonic photovoltaics, up-conversion/down-conversion systems, and multifunctional energy devices.

We look forward to receiving your valuable contributions!

Guest Editor

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About the Journal

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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