# Special Issue

# Recent Advances in Conductor Materials for Energy Storage and Electrocaloric Applications

## Message from the Guest Editor

Solid ionic conductors are critical for the development of green energy storage technologies, such as solid-state batteries, fuel cells, and supercapacitors. These materials enable the efficient transport of ions within energy storage devices, which is essential for maintaining high energy density, fast charging times, and long cycle life.

In the context of solid-state batteries, solid ionic conductors replace traditional liquid electrolytes, offering several advantages. They are safer, reducing the risk of leakage, flammability, and thermal runaway. They also allow for the use of metal anodes, which significantly increases the energy density.

This Special Issue on “Recent Advances in Conductor Materials for Energy Storage and Electrocaloric Applications” is dedicated to exploring recent advancements in material development and application, with a focus on addressing the primary challenges related to ceramic and glassy materials, aiming to pave the way for the next generation of green energy storage devices.

## Guest Editor

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