

## Special Issue

# Ultra-Low-Temperature Magnetic Refrigeration Materials: Synthesis, Characterization and Mechanism Research

### Message from the Guest Editors

Ultra-low-temperature magnetic refrigeration materials are mainly various paramagnetic salts or quantum magnets that exhibit prominent magnetocaloric effects through adiabatic demagnetization in sub-Kelvin temperatures. They are important coolants in applications such as deep-space explorations, quantum computations, etc., especially in the context of persistent concerns about global helium shortages. In this Special Issue, we invite submissions that explore cutting-edge research and recent advances in the fields of synthesis, characterizations, and mechanism research of ultra-low-temperature magnetic refrigeration materials. Both theoretical and experimental studies are welcome to be submitted, as well as comprehensive review and survey papers.

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### Guest Editors

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### Deadline for manuscript submissions

closed (20 January 2026)



## Applied Sciences

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As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal *Applied Sciences* has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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### Editor-in-Chief

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