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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