Special Issue

Emerging Materials for Quantum Devices and Computation

Message from the Guest Editor

The current silicon-based technology is reaching the limit of size minimization. Therefore, new technologies that can be integrated into or completely replace the well-established silicon-based technology are highly required. Low-dissipation or dissipation-less devices via low-power spintronics, magnetic oscillations, and condensations are emerging as potential platforms for next-generation memory and computing devices. Simultaneously, solid-state quantum devices and computing are rapidly developing. Furthermore, neuromorphic devices are appearing as a new approach not only for low-power electric devices but also hardware for artificial intelligence.

In this Special Issue of Magnetochemistry, we call for highlights of the recent achievements and research reports in the fields of spintronic devices, synthesis, and characterization of quantum materials and their heterostructures, molecular devices, quantum emitters and metrology, qubits/p-bits, and quantum and neuromorphic computing. The published papers include research papers, communications, and perspectives/progress report review articles.

Guest Editor

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About the Journal

Message from the Editor-in-Chief

Magnetochemistry constitutes a multidisciplinary field where chemists and physicists not only study magnetic properties but also design and synthesize chemical compounds with desired magnetic properties. *Magnetochemistry* is inviting contributions in any field related with this area, such as theoretical models, crystal engineering, molecular magnetism, SMM, SIM, SCM, SCO, magnetic nanostructures, magnetic MOFs, magnetic recording, qubits, magneto-caloric materials, etc. Our goal is to share your contribution in a timely fashion and in a manner that will be valued by the scientific community.

Editor-in-Chief

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