Special Issue

Spin-Orbitronic Devices and Integrated Applications

Message from the Guest Editor

At present, the unprecedented boom of data manipulation is pushing information-processing devices forward with the prerequisite nature of the simultaneous high-speed operation and ultra-low energy consumption. The recently developed spin-orbit torque (SOT)-induced magnetization switching paradigm has been fueling opportunities for spin-orbitronic devices enabled with new electrical control of magnets via spinorbit interaction under sub-nanosecond and subpicojoule regimes. This Special Issue aims to further the momentum of both fundamental research and integrated applications of spin-orbitronic devices. The enrichment topics to be covered include (but are not limited to): (1) Cutting-edge SOT memory in CMOScompatible and scalable methodologies for field-free magnetization switching. (2) The scientific and technological development of spin-orbitronics towards emerging applications; (3) Extensive research of spinorbitronic device modeling, process integration, and the interdisciplinary spintronic fields engaged in silicon circuits. (4) Investigations of futuristic spintronic materials and devices -spin-orbit logic, magnonics, topotronics, skyrmionics etc.

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

Prof. Dr. Carlos J. Gómez García

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