Special Issue

The Advanced Spintronics Theory, Devices and Sensors

Message from the Guest Editor

This Special Issue, "The Advanced Spintronics Theory, Devices and Sensors," explores spintronics, a technology utilizing electron spin and magnetic moment in solid-state devices. As a rapidly evolving field, spintronics promises faster, smaller, and more energy-efficient sensors and devices, potentially revolutionizing information technology. We invite scholars on novel materials and theoretical foundations of spintronic devices. We aim to stimulate scholarly discussion and inspire further research in this promising field. Proposed topics include advanced spintronics materials and effects, basic theory and sensor applications, research on quantum sensors, spin-related devices and quantum effects, spin detection and storage technology, and new methods/technologies for spintronics devices. Contributions enriching our understanding of spintronics and its future potential are eagerly anticipated. Here are key topics for this Issue:

- The spintronics materials and their new effects;
- Theory and sensor application research of spintronics;
- Development of quantum sensors

Guest Editor

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Sensors is a leading journal devoted to fast publication of the latest achievements of technological developments and scientific research in the huge area of physical, chemical and biochemical sensors, including remote sensing and sensor networks. Both experimental and theoretical papers are published, including all aspects of sensor design, technology, proof of concept and application. Sensors organizes Special Issues devoted to specific sensing areas and applications each year.

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