Special Issue

Spin and Orbital Transport in Magnetic Materials

Message from the Guest Editor

The transport of spin and orbital angular momentum of electrons is fundamentally important in condensed matter physics and material sciences. It is a central topic in magnetism and spintronics and has potential applications for non-volatile low-power memory and logic devices. In recent years, research progress in this area has attracted much attention, such as spin-orbit torques, spin (magnon) transport in antiferromagnets and altermagnets, and orbital currents. This Special Issue focuses on spin and orbital transport in emergent materials, such as ferrimagnets, antiferromagnets, altermagnets, topological materials, van der Waals materials, and two-dimensional materials. Articles, brief reports, communications, essays, opinions, technical notes, perspectives, and reviews are acceptable types of manuscripts. Manuscripts presenting scientifically sound experiments and theoretical results with a substantial amount of new information, cutting-edge preliminary results, significant findings, the development of new technology, methods or materials, and addressing critical problems, arguments, and comments will be suitable for publication.

Guest Editor

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Deadline for manuscript submissions

20 March 2026

Materials

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed

mdpi.com/si/215407

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Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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