Special Issue

Magnetic Topological Insulators

Message from the Guest Editor

Topological insulators (TIs) are materials with insulating bulk states and robust conducting edge modes protected by time reversal symmetry, and offer opportunities for spintronics, non-Abelian quantum computing and energy-efficient electronic devices. This Special Issue aims to understand the QAHE in magnetic topological insulators, which will inspire more quantum devices based on this phenomenon. Emphasis is placed on the sample fabrication, magnetism, electronic band structure and transport properties of magnetic topological insulators. The electronic band structure is highly dependent on magnetic ordering in a magnetic TI, which suggests that the magnetic characterization via magnetometer, optical spectroscopy and neutron scattering are also very important to this Special Issue. We welcome the submission of original research articles, reviews and communications related to DFT calculation, crystal structure and magnetic structure study, as well as electronic properties.

Guest Editor

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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.

Editor-in-Chief

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