Special Issue

Research on Hard Magnetic Materials: Synthesis, Properties, and Applications

Message from the Guest Editors

The Green Transition is the most important challenge of 21st-century society. Magnetic materials play a vital role in this modern transformation. This Special Issue will provide a comprehensive overview and the most recent advances in topics related to the synthesis, properties and applications of magnetic materials. We invite contributions that identify novel synthesis approaches, eco-friendly and/or reduction in energy consumption, and/or improved properties of hard magnetic materials precisely tailored to be used in applications for the Green Transition. The included topics (but not limited to):

- Permanent magnets for electric motors (electric traction, vehicles and wind generation);
- Magnetic nanomaterials for biomedical applications, green catalysis and water purification;
- Designed materials and applications;
- Magnetocaloric materials for eco-friendly cooling technologies;
- Materials for IoT and spintronics for energy efficiency improvement;
- Recycling techniques of magnetic materials.

It is our pleasure to invite you to submit full papers, communications, or reviews.

Guest Editors

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Deadline for manuscript submissions

closed (20 December 2024)

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About the Journal

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.

Editor-in-Chief

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