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Magnetic Materials: Key Roles in Green Energy

Guest Editor:

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Deadline for manuscript submissions: **31 January 2025**

Message from the Guest Editor

Climate change and environmental degradation threaten our entire society. Magnetic materials are key elements in this challenge, due to the essential role they play in energy efficiency, pollution reduction, health, and quality-of-life applications.

The purpose of this Special Issue is to compile cutting-edge scientific research on hard and soft magnetic materials, encouraging multidisciplinary research, rigorous methodologies, machine learning methods, and theoretic studies, contributing to the development and implementation of green and sustainable technologies.

Potential topics for this Special Issue include but are not limited to (1) Magnetocaloric materials for eco-friendly applications in heating, refrigeration, and magnetic energy conversion technologies; (2) Hard magnetic materials for motors, generators, transformers, and actuators; (3) Soft magnetic materials for electronics, energy conversion, information processing, and sensor applications; (4) Magnetic shape alloys and related applications; (5) Recycling techniques for magnetic materials.

Specialsue



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