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Soft Magnetic Materials and Their Application

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Message from the Guest Editor

Soft magnetic materials are widely used in electronics, energy conversion, information processing, and many other application scenarios. Recently, technological progress in soft magnetic materials has been focused on the processing of rapidly quenched amorphous and nanocrystalline materials (either in the form of ribbon or powder) as well as the improvement of magnetic properties of soft magnetic composites and soft ferrites. Moreover, newly soft magnetic devices have also been designed fast for the rapid development of fabrication methods and new applications.

To strengthen the research and development process of soft magnetic materials and magnetic devices, this SI integrates the presentation of recent advances in following areas:

- Silicone steels;
- Soft ferrites;
- Soft magnetic composites;
- Amorphous soft magnetic alloys;
- Nanocrystalline soft magnetic alloys;
- High-frequency soft magnetic materials;
- Processing technology of soft magnetic materials;
- Applications of soft magnetic materials in power conversion:
- Applications of soft magnetic materials in motors;
- Applications of soft magnetic materials in sensors;
- Applications of soft magnetic materials in communication.











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Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The iournal covers twenty-five comprehensive biomaterials, energy materials, advanced composites. advanced materials characterization, porous materials, manufacturing processes and systems. 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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