Special Issue

Modeling of Coupled Phenomena in Novel Ferromagnetic Materials

Message from the Guest Editor

Modeling of coupled nonlinear effects (e.g., magnetoelastic, magnetocaloric ones) in novel soft and hard magnetic materials is of practical and theoretical interest. There is a stringent need to develop new types of sensors and actuators for practical applications; on the other side, it is important to understand the mutual interactions within materials in deeper detail.

Keywords

- hysteresis models
- magnetoelastic effect
- effect of temperature
- pressure on magnetic properties
- eddy currents
- magnetostriction
- novel sensors and actuators
- nondestructive testing
- diagnostic methods

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.

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