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New Developments in Ferromagnetic Materials

Guest Editors:

Prof. Dr. Julián González Estévez

Department Materials Physics,
Faculty of Chemistry, University
of the Basque Country, 3, 20018
San Sebastian, Spain

Dr. Lourdes Dominguez

Department of Applied Physics I,
Faculty of Engineering, University
of the Basque Country, Plaza de
Europa, 1, 20018 Donostia-San
Sebastián, Spain

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Message from the Guest Editors

Dear Colleagues,

Increasing economic and ecological demands, in particular energetic requirements, are compelling the development of novel multifunctional materials for applications in different fields of life and technology. In this context, new ferromagnetic materials are playing a crucial role in strategic industrial sectors, such as electronics, telecommunications, computation, health, etc. The goal of this Special Issue is to present the recent families of ferromagnetic materials:

- Soft/hard magnetic materials;
- materials exhibiting magnetotransport properties;
- low-dimensionality materials: Nanoparticles, nanodots, nanowires, nanotubes, thin films, multilayers;
- superlattices and materials with topological magnetic phases.

It will be reviewed the conventional and modern magnetic properties, effects, responses, behaviors... that present these materials like hysteresis parameters (coercivity, remanence, energy losses, etc.), magnetoelastic parameters, magnetocaloric effect, magnetic memory shape, magnetoimpedance response, giant magnetoresistance, tunnel magnetic junction, spin valves, magnetic vortex, skyrmions, *etc.*



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Special Issue



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Editor-in-Chief

Prof. Dr. Maryam Tabrizian

1. Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada

2. Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

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.

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Contact Us

Materials Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
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