Special Issue

Preparation, Electromagnetic Absorption and Shielding Properties of Electromagnetic Functional Materials

Message from the Guest Editors

With the rapid development of quantum precision measurement technology, the measurement limit of human magnetic fields through SQUID and SERF atomic magnetometers has reached the magnitude of fT, which has been widely used in basic physics and biomedicine studies; these often require an experimental environment with an extremely weak magnetic field, necessitating high-performance magnetic shielding devices. Therefore, there is an urgent need to develop new electromagnetic functional materials with high absorption and shielding properties. The main purpose of this Special Issue on “Preparation, Electromagnetic Absorption and Shielding Properties of Electromagnetic Functional Materials” is to detail advances in magnetic shielding materials. Topics of interest include, but are not limited to, the following: ferrite materials, amorphous nanocrystalline materials, ferromagnetic materials, electromagnetic absorbing materials, electromagnetic shielding designs, magnetic shielding structures, demagnetization, and the theoretical modeling of magnetic shielding.

Guest Editors

Dr. Xu Zhang
School of Instrumentation and Optoelectronic Engineering, Beihang University, Beijing 100191, China

Dr. Jianzhi Yang
School of Instrumentation and Optoelectronic Engineering, Beihang University, Beijing 100191, China

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Materials
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
materials@mdpi.com

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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.

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

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