Special Issue

Magnetic Nanomaterials and Their Biomedical Applications

Message from the Guest Editors

In recent years, nanomaterials have garnered increasing attention due to their unique physical and chemical properties. The application of nanotechnology and magnetic nanoparticles (MNPs) represents an effective alternative in the simultaneous diagnosis and treatment of cancer; this is via the use of nanotheranostic particles that facilitate the early-stage detection and selective destruction of cancer cells. This Special Issue of *Materials* aims to provide an overview of recent advances in the synthesis, design, processing and application of magnetic nanoparticles and nanomaterials with biomedical applications, including hyperthermia, MRI contrast, magnetic bio-separation or targeted drug delivery. We welcome the submission of full papers, communications, and reviews. Potential topics include, but are not limited to, the following:

- Magnetic nanomaterials in medicine (biomedical devices, drug delivery, imaging etc.)
- Magnetic nanomaterials for separation technologies;
- Magnetic nanomaterials in sensing systems;
- Design of nanomaterials for biomedical applications.

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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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