Special Issue

Synthetic, Natural and Natural-Synthetic Hybrid Magnetic Structures: Technology and Application

Message from the Guest Editors

This issue is devoted to the study of magnetic structures, including magnetic nanoparticles, of three main classes: synthetic structures, natural structures, and hybrid natural–synthetic structures. The issue also addresses theoretical modeling tasks, the practical use of these magnetic structures in solving technical and biomedical problems is also considered.

In this Special Issue, original research articles and reviews are welcome. Research areas may include (but are not limited to) the following:

- Magnetotactic bacteria, being in nature, cultivation, isolation of magnetosomes;
- Features of physical and chemical properties and magnetic state of magnetosomes;
- Magnetic structures based on natural magnetic ores, their study, and possible applications;
- Synthetic magnetic structures, including nature-like and biomimetic;
- Hybrid magnetic structures based on synthetic and natural components for microwave absorption, biomedicine, and other applications;
- Micromagnetic modeling of natural, synthetic, and hybrid magnetic structures;
- New methods of synthesis and study of magnetic structures.

Guest Editors

Dr. Kamil Gareev

Department of Micro and Nanoelectronics, Saint Petersburg Electrotechnical University "LETI", 197022 Saint Petersburg, Russia

Dr. Ksenia Chichay

International Research Center "X-ray Coherent Optics", Immanuel Kant Baltic Federal University, 236022 Kaliningrad, Russia

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

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Editor-in-Chief

Prof. Dr. Carlos J. Gómez García

Department of Inorganic Chemistry, Faculty of Chemistry, University of Valencia, C/Dr. Moliner 50, 46100 Burjasot, Spain

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