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Advances in Superferromagnetic Nanocomposites

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Message from the Guest Editors

The widespread interest in the superferromagnetic nanocomposites began with the observation that their magnetoresistance can be dominated by interparticle electron tunneling. However, the opportunities for magnetotransport through nanocomposites are still being explored. For instance, the metallic ions in the matrix, which mediate interparticle ferromagnetic interactions, can be movable under external forcing near the percolation threshold. This allows for an induced metal–insulator transition, thus controlling the magnetoresistivity. While they have been extensively studied for three decades, perhaps superferromagnetic nanocomposites are only just emerging as a significant research area in the field of magnetic (high-density) information storage and processing.

This Special Issue of *Magnetochemistry* aims to create a forum of discussion for sharing the latest advances and addressing current challenges in superferromagnetic nanocomposites.

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Message from the Editor-in-Chief

Magnetochemistry constitutes a multidisciplinary field where chemists and physicists not only study magnetic properties but also design and synthesize chemical compounds with desired magnetic properties. *Magnetochemistry* is inviting contributions in any field related with this area, such as theoretical models, crystal engineering, molecular magnetism, SMM, SIM, SCM, SCO, magnetic nanostructures, magnetic MOFs, magnetic recording, qubits, magneto-caloric materials, etc. Our goal is to share your contribution in a timely fashion and in a manner that will be valued by the scientific community.

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