Special Issue

Advances in Superferromagnetic Nanocomposites

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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