

Magnetic Relaxation in Nanostructures

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Resumen

Nanostructured magnetic materials present a wide range of magnetic relaxation phenomena. One of the problems in studying magnetic nanostructured materials is the fast dependence of the relaxation with the anisotropy barrier, so even a narrow distribution of sizes of the nanoparticles brings difficulties in interpreting the experimental data. On the other hand molecular magnetism, with the chemists bottom-up approach to build molecular nanostructures, provides this field with some beautiful model systems, well ordered crystals of Single Molecule Magnets, Molecular Magnetic Chains, multilayers and even single ion. Most of these systems present hysteretic behaviour at low temperatures. The study of these well characterized nanomaterials helps to elucidate many features that are difficult to grasp in the non-molecular materials.