The Influence of Anisotropy.Controlled Neel Relaxation on Magnetostatic Properties of Ferrofluids

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Sufficiently small ferromagnetic particles dispose of a non-rigid coupling between particle and particle magnetic dipole moment and thus exhibit the phenomenon of Neel relaxation. In a theoretical analysis the influence of anisotropy-controlled Neel relaxation effects on magneto-static properties of a ferrofluid in thermodynamic equilibrium is investigated.