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Spin Relaxation in Kondo Lattice Systems with Anisotropic Kondo Interaction

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Abstract

© 2016 Springer Science+Business Media New York We study the influence of the Kondo effect on the spin relaxation in systems with anisotropic Kondo interaction at temperatures both high and low as compared with the static magnetic field. In the absence of the Kondo effect, the electron spin resonance linewidth is not narrowed in the whole temperature range due to the high anisotropy of the Kondo interaction. The Kondo effect leads to the universal energy scale, which regulates the temperature and magnetic field dependence of different kinetic coefficients and results in a mutual cancelation of their singular parts in a collective spin mode.

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Keywords

ESR, Kondo effect, Kondo interaction, Kondo lattice, Spin relaxation