The properties of the anisotropic Kondo lattice model

M. Sidowski and S. Robaszkiewicz

Division of Electronic States of Solids, Institute of Physics Adam Mickiewicz University, ul. Umultowska 85, 61-614 Pozna

The study of the properties of the magnetic Kondo lattice model with anisotropic exchange interactions J_{XY} and J_Z has been performed. In our investigations we have used an extended mean-field approximation, analogous to that used in the treatments of the isotropic Kondo model. We have made analysis of the phase diagrams and ground state characteristics of this model for arbitrary, positive and negative J_{XY} and J_Z , and the interaction with external magnetic field H.

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Corresponding author:

M. Sidowski

Address for correspondence:

Institute of Physics Adam Mickiewicz University, ul. Umultowska 85 61-614 Pozna

Email address:

masi@amu.edu.pl