

Heat capacity of spin glasses in the model of random interaction fields

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The nonuniform distribution of the iron ions in titanomagnetites can lead to the fact that in areas with a low concentration of such ions, ordering of the spin glass type and the dependence of the residual magnetization on the time of exposure to an external field are possible. Features of the behavior of spin glasses are reflected in the dependence of the heat capacity on the external field, and this dependence was studied in our work. It is shown that in the vicinity of the critical concentration of ions C less than C_p , when there is no flowing cluster, the dependence of the maximum heat capacity on the external field changes its direction when a certain critical value is reached.