

PECULIARITIES OF LOW-FREQUENCY
WAVES IN DUSTY PLASMA
WITH FERROMAGNETIC
GRAINS

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S u m m a r y

We have obtained the dispersion equation for the spectrum of weakly damped electromagnetic waves in the magnetoactive dusty plasma with ferromagnetic grains with a constant magnetic moment. This equation takes into account the dispersion of the magnetic permeability tensor associated with small rotational vibrations of the dipole moments of grains in a strong external magnetic field. In this system, the additional resonance appears in the vicinity of the frequency of rotational vibrations as compared with the case of a conventional magnetoactive electron-ion plasma. This resonance results in the appearance of a narrow nontransparent band for the Alfvén and the fast magnetosonic wave. A possibility of realization of properties of the left-hand media by the magnetoactive dusty plasma with ferromagnetic grains is discussed.