

# Magnetic Field Effects on Surface Ion Plasma Wave in Semi-bounded Magnetized Dusty Plasmas

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The effects of magnetic field strength on low-frequency surface ion plasma wave are investigated in semi-bounded magnetized dusty plasmas. The dispersion relation of the surface ion plasma wave is obtained by the plasma dielectric function with the specular reflection boundary condition. The results show that a transition from linear increase into the final level, i. e., the occurrence of a wave resonance. At a given frequency the phase velocity stays almost constant as long as the frequency remains below the respective resonance frequency.

*Key words:* Surface Waves; Magnetized Dusty Plasmas.