

DUSTY PLASMA NEAR THE SURFACE OF THE MOON

WAVE PROCESSES IN DUSTY PLASMA NEAR THE SURFACE OF THE MOON ARE SHOWN IN CREATIVE AND UNDERSTANDABLE WAY



Dusty plasma near the surface of the Moon. Levitating dust

A plasma–dust system in the near-surface layer on the illuminated side of the Moon is shown. The system involves photoelectrons, solar-wind electrons and ions, neutrals, and charged dust grains. Levitating dust particles near lunar surface are presented. Linear waves in the plasma near the Moon's surface are discussed. The anisotropy of the electron velocity distribution function is distorted due to the solar wind motion with respect to photoelectrons and dust grains, which leads to the development of instability and excitation of high-frequency oscillations with frequencies in the range of Langmuir and electromagnetic waves. In addition, dust acoustic waves can be excited. In creative wave Langmuir waves and ion sound waves in plasma are shown.

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