

MIXED SURFACE PLASMON-PHONON MODES  
ON ADSORPTION OF MOLECULES  
ON THE SURFACE OF SEMICONDUCTOR.  
1. DISPERSION OF SURFACE WAVES

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S u m m a r y

In the framework of the oscillator model, the possibility of excitation of surface electromagnetic waves in a semiconductor - molecular covering is considered. The dispersion properties of waves are studied with taking into account the decay processes in the system. The influence of lateral interactions in the molecular layer on the characteristics of dispersion curves is studied. The influence of a doping level of the semiconductor substrate on the dispersion of surface waves is analyzed.