398

Accession number:20115114620151

Title:THz-Surface electromagnetic oscillations in plasma-Like media containing the fluxes of charged particles

Authors:Khankina, S.I. (1); Yakovenko, V.M. (1); Yakovenko, I.V. (1)

Author affiliation:(1) A. Usikov Institute of Radio Physics and Electronics, National Academy of Sciences of Ukraine 12, Academician Proskura St., Kharkiv 61085, Ukraine

Corresponding author: Yakovenko, V.M.(yavm@ire.kharkov.ua)

Source title:Telecommunications and Radio Engineering (English translation of Elektrosvyaz and Radiotekhnika)

Abbreviated source title: Telecommun Radio Eng

Volume:70

Issue:20

Issue date:2011

Publication year:2011

Pages:1841-1853

Language:English

ISSN:00402508

CODEN:TCREAG

Document type:Journal article (JA)

Publisher:Begell House Inc., 50 Cross Highway, Redding, CT 06886, United States

Abstract:An interaction between charged particles and surface plasmons in a semiconductor-dielectric (vacuum) structure is considered as a kinetic approximation. The impact of the potential barrier at the interface on this interaction is taken into account. An instability increment of surface plasmons is found. The existence of the potential barrier results in a decreased increment.

Number of references:5