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Accession number:20123415356008

Title:Transformation of the polarization of THz waves by their reflection and transmission through a finite layered superconductor

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Source title:Fizika Nizkikh Temperatur

Abbreviated source title:Fiz Nizk Temp

Volume:38

Issue:9

Monograph title:(Part II) To the 80-th birthday of V.V. Eremenko

Issue date:September 2012

Publication year:2012

Pages:1109-1118

Language:Ukrainian

ISSN:01326414

E-ISSN:18160328

CODEN:FNTEDK

Document type:Journal article (JA)

Publisher:Institute for Low Temperature Physics and Engineering, 47 Lenin Avenue, Kharkov, 310164, Ukraine

Abstract:The reflection and transmission of the terahertz electromagnetic waves propagating in the waveguide, through a sample of a layered superconductor of a finite length are studied theoretically. The excitation of two types of the Josephson plasma waves, ordinary and extraordinary, in the sample leads to a partial or a complete transformation of the incident wave polarization. The conditions of the complete transformation of polarization are found.

Number of references:32

Main heading:Superconductivity

Controlled terms:Plasma waves - Polarization - Superconducting materials - Waveguides

Uncontrolled terms:Finite length - Incident wave polarization - Josephson plasmas - Layered superconductor - Reflection and transmission - Tera Hertz - THz waves

Classification code:708.3 Superconducting Materials - 711.1 Electromagnetic Waves in Different Media - 714.3 Waveguides - 932.3 Plasma Physics

Database:Compendex

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