

Diffraction of electromagnetic wave by two-layer grating

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Abstract

© 2015 I.E. Pleshchinskaya and N.B. Pleshchinskii. The electromagnetic wave diffraction problem by the two-layer grating of thin conductive strips is reduced to an infinite set of linear algebraic equations for the coefficients of the decomposition of the desired field by Floquet harmonics. The properties of quasi-periodic solutions of Maxwell equations are investigated. Method of integral-summatorial identities is used for the regularization of dual summatorial equations.

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Keywords

Diffraction problem, Dual equations, Electromagnetic wave, Two-layer grating