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Diffraction properties of transmission binary blazed grating

Hui-Jun Zhou, Qu-Quan Wang

Keywords

binary blazed grating, diffraction efficiency

Abstract

The properties of binary blazed grating were theoretically analyzed with finite-difference time-domain (FDTD) method. The diffraction efficiencies and diffraction angles of –1, 0, and +1 order for the grating varying with wavelength, grating structure, and the etch depth were studied when the incident angle was 30°. The numerical simulations revealed that the binary blazed grating presented high stability of diffraction efficiencies with wavelength shift.

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