

## Annotation

This work considers reflection of an optical beam from the hyperbolic metamaterial — subwavelength diffraction grating. Based on the semianalytical coupled-mode approach, a program is developed for solving the problem of spatially limited optical beam diffraction on the diffraction grate-shaped hyperbolic metamaterial which is located on a dielectric substrate. Frequency-angular reflection and transmission spectra of the hyperbolic metamaterial are calculated for various parameters of the structure. Complex reflection coefficient phases for various diffractive orders are shown to have different convex directions in the same incident angle interval. Thus beam wavefront curvatures for the different diffractive orders will vary. Diffraction of the flat p-polarised gaussian beam from the hyperbolic metamaterial in the coplanar diffraction scheme is calculated. Reflection of the flat p-polarised gaussian beam from the hyperbolic metamaterial — subwavelength diffractive grating — is calculated