

## 10.9.

### **Title**

DETERMINATION OF REFRACTIVE INDEX IN  
PLANAR WAVEGUIDES

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### **Description**

Nanolayered waveguides with quantum wells possess birefringence properties, even those based on isotropic materials

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[1 - 3]. The most sensitive methods of studying birefringence properties in nanowaveguides are the methods of interference spectroscopy. A typical image of interference can be observed in the interference spectra of birefringent nanostructures. The elaborated method permits to analyze the spectral dependence of the refractive index for the ordinary ( $E_p$ ) and extraordinary ( $E_s$ ) lightwaves from absorption or reflection interference spectra of nanolayers. The maxima and minima positions of the interference spectra can be determined using simple PC software „Origin”.