



Optica Applicata 2007(Vol.37), No.3, pp. 305-312

Design of athermal arrayed waveguide grating using silica/polymer hybrid materials

De-Lu Li, Chun-Sheng Ma, Zheng-Kun Qin, Hai-Ming Zhang, Da-Ming Zhang, Shi-Yong Liu

SEARCH

[Advanced search](#)

Keywords

arrayed waveguide grating, temperature-dependent wavelength shift, athermalization

Abstract

This study demonstrates a novel athermal arrayed waveguide grating (AWG) which is composed of silica/polymer hybrid materials on a silicon substrate. The temperature-dependent wavelength shift of the AWG depends on the refractive indices of the materials and the size of the waveguide. The athermalization of the AWG can be realized by selecting the proper values of the material and structural parameters of the device.



231.9 kB

[Back to list](#)

© Copyright 2007 T.Przerwa-Tetmajer All Rights Reserved 2007