Comparison of Low Noise and Reliability Performance of Arrayed Waveguide Gratings

In this paper, we designed and demonstrated AWGs utilizing a 200-nm-thick-Si3N4-core platform with a moderate confinement factor (33 %) to realize relatively low-loss, low-crosstalk and small footprints. ...

Array waveguide gratings (AWGs) have been widely used in multi-purpose and multi-functional integrated photonic devices for Microwave photonics (MWP) systems. In this paper, we compare the ...

In this letter, a novel WDM structure by integrating an AWG and a heat-turning MRR is demonstrated on silicon-on-insulator (SOI) wafer.

This paper presents an optimal design of the waveguide separation and the orientation angle of the slabs for the arrayed waveguide gratings (AWGs) with low crosstalk and low loss.

discuss the performance of arrayed waveguide gratings (AWGs) fabri-cated with the platform. We propose the use of a pr ctical design method that takes the statistical nature of worst-case crosstalk ...

There are several examples of custom AWG designs in the literature aiming for improved system performance. In this review, we will provide an overview of the available methods for ...

We compare the performance of silicon-based arrayed waveguide gratings (AWGs) with star couplers of Rowland and Confocal configurations, respectively, for both TE and TM polarizations.

In this paper, we compare the effect of output waveguide configurations on the performance of AWGs. The AWG with an output waveguide converging on the grating circle had ...

This leads to the first implementation of arrayed waveguide gratings on X-cut thin-film lithium niobate with various configurations and high-performances.

In this review, an overview of the available methods for improving the bandwidth, spectral resolution, and transmission function shape of AWGs is provided. The working principle as well as the...

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