

Low noise of arrayed waveguide gratings





Low noise of arrayed waveguide gratings



Arrayed Waveguide Grating

Introduction Arrayed Waveguide Gratings (AWG) are optical devices. Due to their ability to multiplex large numbers of wavelengths into a planar device that is usually used as a multiplexer/ demultiplexer.

[Contact Us](#)

(PDF) Cavity-enhanced scalable integrated temporal

Moreover, the single-microring is realized with a high-Q factor by introducing ultra-low-loss broadened optical waveguides designed with modified

[Contact Us](#)



4 Arrayed Waveguide Gratings

Application- and cost dependent. A silica-based AWG with particularly low insertion loss of only 0.75dB has been achieved using a structure with vertically tapered waveguides in the intersection region.

[Contact Us](#)

Crosstalk reduction for Arrayed waveguide gratings on Silicon-on

Ultra-compact silicon-based arrayed waveguide gratings (AWGs) with low loss and low crosstalk are essential for on-chip optical interconnect and miniaturized spectroscopic analysis systems.



Design and characterization of arrayed waveguide gratings using ultra

Abstract Planar waveguides with ultra-low propagation loss are necessary for integrating optoelectronic systems that require long optical time delay or narrowband optical filters. In this paper, we review an

[Contact Us](#)



Custom Arrayed Waveguide Gratings with Improved Performance

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 advantages

[Contact Us](#)



Tunable up-conversion single-photon detector at telecom wavelengths

Abstract: Up-conversion single-photon detectors (UCSPD) are based on sum-frequency generation of the telecom band single-photons to near-infrared wavelengths at which efficient and low-noise silicon

[Contact Us](#)



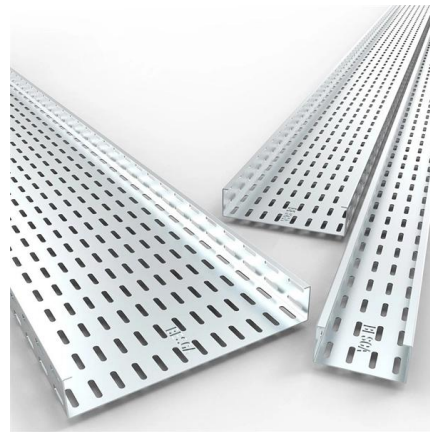
Ultra-high-Q racetrack microring based on



silicon-nitride

Key wavelength filtering and routing components, including high-Q ring resonators, Mach-Zehnder interferometers, and arrayed waveguide gratings, are analyzed.

[Contact Us](#)



(PDF) Design and characterization of arrayed

Planar waveguides with ultra-low propagation loss are necessary for integrating optoelectronic systems that require long optical time delay or narrowband optical

[Contact Us](#)



Redundancy-free integrated optical convolver for optical neural

Here, we present a redundancy-free on-chip optical convolution scheme based on arrayed waveguide grating (AWG). It entails encoding input information into intensities at various wavelengths and

[Contact Us](#)



Modeling and design of arrayed waveguide gratings

An, Z.; Zhang, S.; Zhang, C.; Zhang, Z.; Mao, Q.; Prades García, J.D. 2022: Design and fabrication of SU-8 polymer arrayed waveguide gratings based on flexible PDMS substrates *Applied Optics* 61 (9):

[Contact Us](#)





Monolithically integrated optical devices with amorphous silicon

The optical waveguide assembly includes a waveguide, an amorphous silicon arrayed waveguide grating communicative with the waveguide, and an integrated amorphous silicon waveguide grating

[Contact Us](#)



Design and characterization of arrayed waveguide gratings

Abstract Planar waveguides with ultra-low propagation loss are necessary for integrating optoelectronic systems that require long optical time delay or narrowband optical filters. In this paper, we review an

[Contact Us](#)

Low-loss Silicon Arrayed Waveguide Grating Using Dual-etched

We design and experimentally demonstrate a low-loss 4-channel SOI horseshoe-shaped AWG, with a channel spacing of 400 GHz, based on dual-etched waveguide apertures. The minimum insertion

[Contact Us](#)



Compact Silicon-Arrayed Waveguide Gratings with Low Nonuniformity

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

[Contact Us](#)



Compact Silicon-Arrayed Waveguide Gratings with Low

Array waveguide gratings (AWGs) have been widely used in multi-purpose and multi-functional integrated photonic devices for Microwave photonics

[Contact Us](#)



Design and characterization of arrayed waveguide gratings

Planar waveguides with ultra-low propagation loss are necessary for integrating optoelectronic systems that require long optical time delay or narrowband optical filters. In this paper,

[Contact Us](#)

Filling the frequency gaps of a planar optical spectrum analyzer using

A vernier configuration in a 2.5-GHz-spaced 128-channel arrayed-waveguide grating (AWG) for use as a secondary demultiplexer in a planar optical spectrum analyzer was incorporated with a tandem

[Contact Us](#)



Compact Silicon-Arrayed Waveguide Gratings with Low

Array waveguide gratings (AWGs) have been widely used in multi-purpose and multi-functional integrated photonic devices for Microwave photonics (MWP) systems.

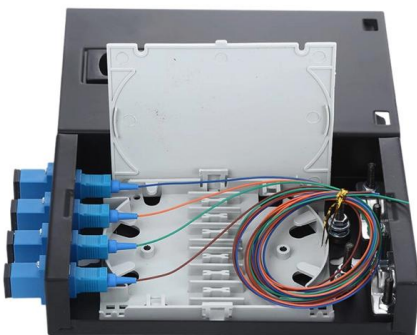
[Contact Us](#)



Anisotropy-free arrayed waveguide gratings on X-cut

The best insertion loss of 2.4 dB and crosstalk of -24.1 dB is obtained for the fabricated arrayed waveguide grating devices.

[Contact Us](#)



Silicon Nitride Photonics for High-Density WDM Applications

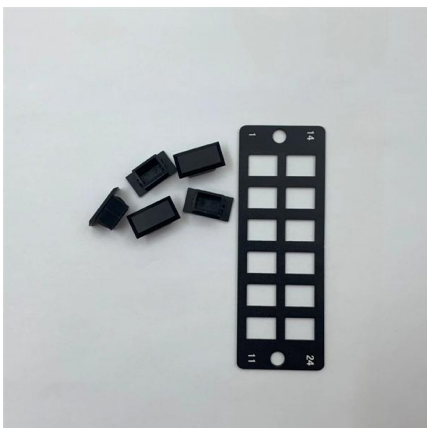
Advanced silicon nitride platforms target propagation losses below 0.1 dB/cm and quality factors exceeding one million for resonant structures. These specifications enable the implementation of

[Contact Us](#)

Design and characterization of arrayed waveguide

Silicon nitride (Si₃N₄) arrayed waveguide gratings (AWGs) have been widely used for dense wavelength division multiplexing systems because of their

[Contact Us](#)



Real time 10Gb-ethernet transmission over 2D indoor passive beam

Summary We demonstrate the real-time 10Gb Ethernet data delivery to multiple users simultaneously over an indoor optical wireless system based on 2D passive optical beam-steering using high-port

[Contact Us](#)



Design of an Arrayed Waveguide Grating with flat

Although chirping only the arm lengths of the waveguide grating router allows each input-output port combination to have a dominant passband in one

[Contact Us](#)



Design and characterization of arrayed waveguide gratings

In particular, we discuss the performance of arrayed waveguide gratings (AWGs) fabricated with the platform. We propose the use of a practical design method that takes the

[Contact Us](#)

Contact Us

For datasheets, pricing, or custom fiber access solutions, please visit:
<https://frindel.es>