Photonic Crystal Wavelength Demultiplexer

This paper introduces a four-channel optical demultiplexer employing a cascade connection of four compact photonic crystal ring resonators. The design of the ring resonator ...

This paper attempts to investigate the design of a modified Y-shaped demultiplexer based on photonic crystal. The designed structure is used to select four telecommunication ...

A 4-channel wavelength division demultiplexer based on photonic crystal ring resonators suitable for WDM applications is proposed in this paper. For performing the demultiplexing task, we ...

In this paper, a four-channel demultiplexer based on photonic crystals with an ultra-high quality factor is realized by simulation. The plane-wave expansion and finite element method are used to ...

The proposed device is composed of an inverse-designed meta-structure with the wavelength splitting function and cascaded photonic crystal filters with the crosstalk reduction function.

Photonic crystals (PCs) have an excellent ability to confine and control the manipulation of light. PCs are periodic or aperiodic arrangement of dielectric, metallo dielectric or super conductor micro and ...

Compact wavelength demultiplexing devices are of great interest for several integrated photonic applications including optical information processing, optical communications and networking, as well ...

This paper attempts to investigate the design of a modified Y-shaped demultiplexer based on photonic crystal. The designed structure is used to select ...

A novel 8-Channel DWDM demultiplexer device is proposed based on ring resonators in silicon photonic crystal slab. Coupling holes outside the resonators are used to tune the output ...

Compact wavelength demultiplexing devices are of great interest for several integrated photonic applications including optical information processing, optical ...

With the increasing number of internet users, Wavelength Division Multiplexing (WDM) technology is the most promising solution in optical communication systems. It enables multiple ...

In this work, we have successfully designed and modeled a high efficiency wavelength demultiplexer for two different argon laser lines, 514.5 nm and 496.5 nm, using a triangular photonic lattice in a planar ...

Photonic Crystal Wavelength Demultiplexer

Web: https://www.busydoniemiecwaldii.pl