

Devices that can manipulate the polarization of light are important components of an integrated photonic system. This model demonstrates the design of a compact polarization splitter-rotator that consists of ...

This notebook demonstrates how to model a compact polarization splitter-rotator in Tidy3D FDTD.

In this session, we will demonstrate the capabilities of Optiwave's finite-difference time-domain (FDTD) tool by walking through the setup, execution, and analysis of a polarization beam...

In the work presented, the design of a polarization splitter and rotator (PSR) is improved and made fabrication tolerant. Alternate structures and design parameters for the PSR are discussed. The PSR ...

An ultracompact and low loss polarization-independent 1 × 2 power splitter based on multimode interference (MMI) is designed and analyzed using Eigenmode expansion (EME) and ...

In the present study, we delve into the exploration of a broadband PSR. This device employs a bi-level taper to transition the TM₀ mode input light into the TE₁ mode.

Based on coupled-mode theory (CMT) and the finite-difference time-domain (FDTD) approach, we propose a graphene metasurface-based and multifunctional polarization beam splitter that is ...

We propose a novel method to implement a compact and fabrication-tolerant polarization splitter and rotator (PSR) on the silicon-on-insulator platform. The PSR consists of a silicon wire...

In this application note, we demonstrate how a silicon-based polarization converter-splitter can be efficiently and accurately simulated using BPM. Benchmarking with FDTD shows that BPM can ...

We present the design and optimization of a wide-angle and broadband operational polarization beam splitter by simultaneously satisfying a high reflection of the transverse magnetic (TM) wave and high ...

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