

漸變式光纖元件之模擬

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摘要

在本論文中我們想要瞭解漸變式光纖元件的特性並利用 3D Full-Vectorial Beam Propagation Method 來模擬光在元件中傳播情形。漸變式光纖元件是一種新型、可應用在光纖通訊中作為 WDM 的 OADM 元件，優點是全光纖、低損耗、結構簡單、不需額外光學元件、花費低、驅動功率小。

Simulation of Adiabatic Fiber Devices

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ABSTRACT

In the thesis we want to know the characteristics of an adiabatic fiber device. 3D full-vectorial beam propagation method is used to simulate lights propagating in the device. Adiabatic fiber device is a new kind of devices which can be applied as an optical add-drop multiplexer (OADM) of wavelength division multiplexing (WDM) in fiber communications. The advantages of the device are all-fiber, low loss, simple structure without extra components, low cost, low driving power.

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