

عنوان مقاله:

Optical Filter Based on Sagnac Effect Using Optical Ring Resonator

محل انتشار:

اولین کنفرانس مهندسی فوتونیک ایران (سال: 1387)

تعداد صفحات اصل مقاله: 5

نویسندگان:

Faramarz E. Seraji - *Optical communication Group, Iran Telecom Research Center, Tehran*

Fatemeh Asghari - *Physics Group, Arak Univ., Arak*

خلاصه مقاله:

Abstract- In this paper, a double optical ring resonator is used to demonstrate theoretically an optical filter response, that is based on phase shift in a Sagnac interferometer. The given filter structure permits the Sagnac rotation to control the filter response. It is shown that by changing the Sagnac rotation rate, we can tune the filter response for desired wavelengths. To increase the wavelength selectivity of the filter, the phase shift should be as small as possible. For $\theta = 0.1$ rad., the obtained FWHM is 220 GHz

کلمات کلیدی:

Ring Resonator, Bending Loss, Tunable Filter, FWHM

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/65220>

