



MATHEMATICAL MODELING OF LIGHT PULSE WITHIN LINEAR AND NONLINEAR RING RESONATORS

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Abstract

In this paper, the behaviors of light pulse within the linear and nonlinear ring resonators have been simulated and investigated. The transfer function of the linear ring resonator is reviewed, the nonlinear ring resonator and add/drop filter are derived and simulated. The potential applications of the nonlinear behaviors are discussed in details.

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