Photonics and Nanostructures - Fundamentals and Applications
Volume 25, July 2017, Pages 14-18

Invited Paper

Two dimensional tunable photonic crystal defect based drop filter at communication wavelength

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Received 10 November 2016, Revised 15 March 2017, Accepted 12 April 2017, Available online 24 April 2017.

https://doi.org/10.1016/j.photonics.2017.04.002

Highlights

- Theoretically designed a two dimensional photonic crystal (PhC) based drop filter at communication wavelength with more than 90% transmission.
- The filtering is achieved by introducing line and point defects in a two dimensional ferroelectric photonic crystal.
- Good tuning of this filter is achieved by the application of external electric field.
- The above properties are analyzed using finite difference time domain method and plane wave expansion method.
- The different possible configurations of this filter are also considered.