Wavelength Selective 3D Topology Optimized Photonic Crystal Devices

A compact photonic crystal drop filter has been designed using 3D topology optimization and fabricated in silicon-on-insulator material. Measurements and modeling are in excellent agreement showing a low-loss ~11nm 3dB bandwidth of the filter.

General information
Publication status: Published
Organisations: Department of Photonics Engineering, Nanophotonic Devices, Solid Mechanics, Department of Mechanical Engineering
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Publication date: 2013

Host publication information
Title of host publication: Proceedings of 2013 Conference on Lasers and Electro-Optics (CLEO)
Publisher: IEEE
Article number: CTh4L.6
Keywords: Mathematical methods in physics, Photonic crystal waveguides, Wavelength filtering devices
DOIs: 10.1364/CLEO_SI.2013.CTh4L.6
Source: Bibtex
Source ID: urn:a00f41f75e8c28a15dedfd04cf9dac3b
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2014 › Research › peer-review