

Determination of cavity length of cavity-resonator-integrated guided-mode resonance filter

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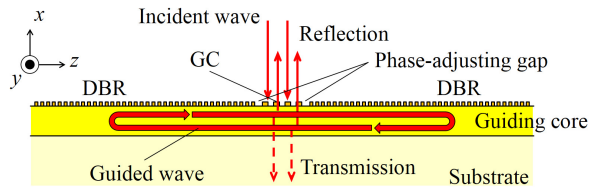


Fig. 1. Basic configuration of CRIGF and light wave propagation.

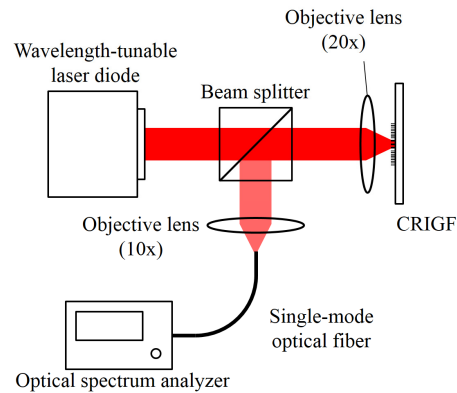


Fig. 4. Experimental setup for measuring a reflection spectrum.

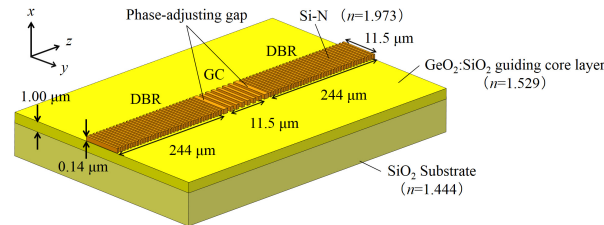


Fig. 2. Schematic view of designed CRIGF.

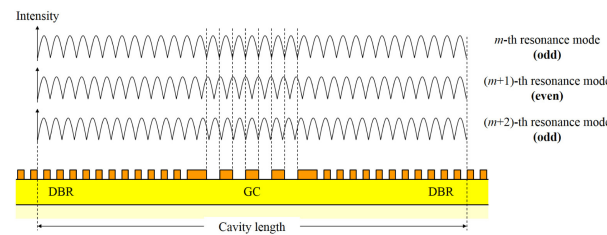


Fig. 6. Resonance-mode intensity distributions of CRIGF.

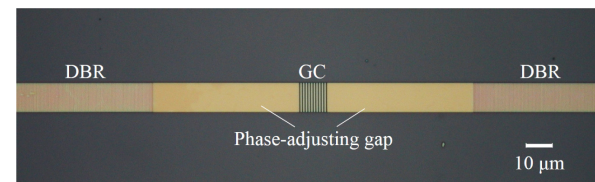


Fig. 8. Optical microscope photograph of fabricated CRIGF of phase-adjusting gaps of 54.3 μm.

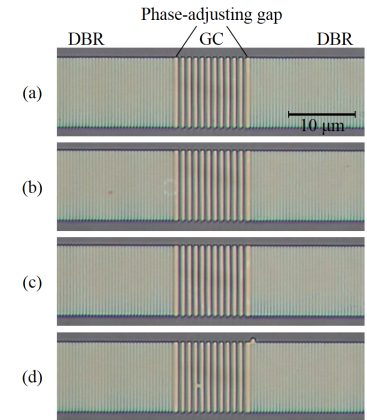


Fig. 3. Optical microscope photographs of fabricated CRIGFs of phase-adjusting gaps of (a) $3\Lambda/8-3\Lambda/15$, (b) $3\Lambda/8-2\Lambda/15$, (c) $3\Lambda/8-\Lambda/15$, and (d) $3\Lambda/8$.

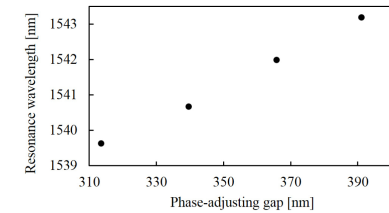


Fig. 5. Resonance wavelength at each phase-adjusting gap.

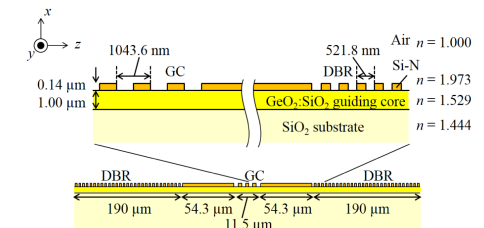


Fig. 7. Interference fringes obtained for device with buffer layer thickness of 1.99 μm.

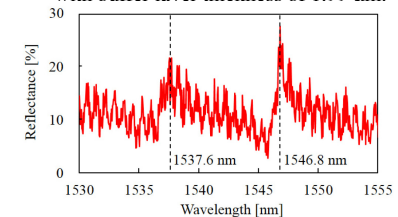


Fig. 9. Measured reflection spectrum of the fabricated CRIGF.