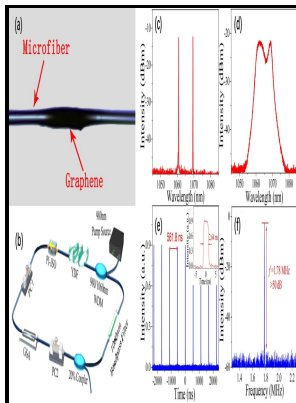


Experiment and theory of a novel, multiple wavelength, erbium-doped fiber laser.

National Library of Canada - Room-temperature multiwavelength operation of an elliptical core erbium-doped fiber laser, *Microwave and Optical Technology Letters*



Description: -

-Experiment and theory of a novel, multiple wavelength, erbium-doped fiber laser.

-

Canadian theses = -- Thèses canadiennes Experiment and theory of a novel, multiple wavelength, erbium-doped fiber laser.

Notes: Thesis (M.A.Sc.) -- University of Toronto, 2001.

This edition was published in 2001



Filesize: 37.24 MB

Tags: #SNU #LASER #LABORATORY

Nonlinear Frequency Generation and Conversion: Materials and Devices XX, Conference Details

However a change in peaks shape and absorption intensity has been observed. Pulsed high power fiber lasers are current topic of research as pump sources for nonlinear frequency conversion using optical parametric generation.

SNU LASER LABORATORY

The analytical results prove that the proposed code has totally removed the multiple access interference MAI , in addition the phase induced intensity noise PIIN influence is highly reduced due to the zero cross correlation ZCC property. We propose and demonstrate a novel way to achieve directional backward emission through nonlinear Raman interactions.

Nonlinear Frequency Generation and Conversion: Materials and Devices XX, Conference Details

Combining diode lasers with second-order nonlinear crystals used for sum-frequency generation SFG is promising thanks to their relatively low cost, small footprint and long lifetime. Optical fiber is a waveguide made of very thin tubes of glass whose diameter is of the order of a few micrometers. Phase matching was shown in the fundamental transverse mode of the waveguide for wavelengths between 851 nm and 862 nm.

Nonlinear Frequency Generation and Conversion: Materials and Devices XX, Conference Details

The hybrid configurations involve fluoride and Raman amplifiers along with silica-based EDFA.

SNU LASER LABORATORY

When the pump power increases to 100mW, the laser has a stable multi-wavelength comb output. Four-wave-mixing effect is a good way to suppress the homogenous broadening of the erbium-doped fiber at room temperature. In this case, the tunable resolution equals to the separation

of peaks in the transmission.

Advanced experiments with an erbium

By using wavelength division or polarization combining techniques, it is possible to further increase the available pump power in the erbium fiber. Tunable Fabry-Perot filter using hollow-core photonic bandgap fiber and micro-fiber for a narrow-linewidth laser.

Multiwavelength erbium

It makes use of InGaAsP lattice-matched to InP as a nonlinear ridge waveguide. Additionally, we find that filamentation plays an important role in SC generation, especially in the normal dispersion regime, and we correlate filamentation-induced luminescence and with spectral broadening. Switchable and tunable multiwavelength erbium-doped fiber laser with fiber Bragg gratings and photonic crystal fiber.

Related Books

- [Physical chemistry.](#)
- [Evening walk in Roehampton](#)
- [Droit du travail](#)
- [Validation of the Keno and su-Hammer Codes For Plutonium Systems.](#)
- [The big fella - the rise and rise of BHP Billiton](#)