Optics & Photonics

GDR Telecom Site Energy Systems

Dual-wavelength fiber optic sensing

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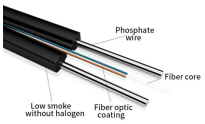


In this paper, we propose a fiber-based two-wavelength heterodyne interferometer as a compact and highly sensitive displacement sensor that can be used in inertial sensing applications.

In this paper, an in-line Mach-Zehnder interferometer embedded in a fiber Bragg grating (FBG) is fabricated by a tiny offset-core splicing technique and inserted into a fiber ring laser to effectively ...

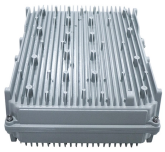
This work presents a compact hybrid fiber-optic sensor that integrates the packaged ring-shape MFI with the TFBG to realize wavelength–intensity dual demodulation for simultaneous pressure and ...

We report a dual-wavelength fiber laser sensor based on a uniform fiber Bragg grating (UFBG) and a Polyvinyl alcohol (PVA) film-coated long-period grating (LPG) as sensor probe for ...

With this new fabrication technique, it is possible to desing optical fiber reflectors, with a tailored wavelength response, to achieve a flat and stable wavelength emission.

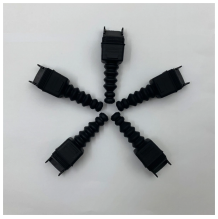
This work presents a dual-wavelength C-band erbium-doped fiber laser assisted by an artificial backscatter reflector. This fiber-based reflector, inscribed by femtosecond laser direct writing, was ...

In this paper, an in-line Mach-Zehnder interferometer embedded in a fiber Bragg grating (FBG) is fabricated by a tiny offset-core splicing technique and inserted ...



Imagine a world where the Internet doesn''t just connect but senses—detecting earthquakes, monitoring battery health, or safeguarding ...

Imagine a world where the Internet doesn''t just connect but senses—detecting earthquakes, monitoring battery health, or safeguarding critical infrastructure. This is the power of ...



With this new fabrication technique, it is possible to desing optical fiber reflectors, with a tailored wavelength response, to achieve a flat and stable ...

This study aims to propose an efficient design for a distributed polymer optical fiber system. This system combines traditional intensity-based measurement with wavelength-based ...

	This study proposes the development of a dual-wavelength optical fiber sensor (DWOFS) that integrates two optical fiber structures in a multimode transmission line to measure the ...
	Here, we demonstrate simultaneous frequency locking of two wavelengths of the multi-channel hybrid-integrated laser source to the resonance frequencies of a high Q-factor SiN ...

Contact Us

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