

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 ...

We propose a novel resonance frequency mapping for a real-time quasi-distributed fiber optic sensor based on identical weak fiber Bragg gratings (FBG), which has stronger reflection...

A temperature-insensitive quasi-distributed fiber-optic high-pressure sensing technique based on cascaded extrinsic Fabry-Perot (EFP) sensing units and an optical carrier based ...

This paper presents a novel hybrid demodulation scheme for quasi-distributed fiber-optic acoustic sensor utilizing ultra-weak fiber Bragg grating (UWFBG) arrays as the discrete reflectors.

Fiber Bragg grating (FBG) array is a powerful technique for quasi-distributed sensing along the entire length of sensing fiber with fast response and high precision.

Here we reported a quasi-distributed fiber-optic sensor for both static and dynamic signal measurement based on weak reflector array.

Quasi-distributed sensors enhance coverage by multiplexing multiple FBGs through time-division or wavelength-division schemes, enabling efficient long-distance monitoring.

Distributed and quasi-distributed fiber optic sensors are systems that connect opto-electronic interrogators to an optical fiber (or cable), converting the fiber to an array of distributed sensors. The ...

We proposed a real-time quasi-distributed fiber optic sensor with identical weak FBGs, based on resonance frequency mapping. The proposed system can successfully and efficiently interrogate up ...

This paper demonstrates a high performance quasi-distributed fiber-optic sensor based on a communication-grade semiconductor laser other than a narrow linewidth fiber laser.

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