Fiber optic interferometric sensor sensitivity adjustable up to 10 m sÂ²

The experimental results indicate that the proposed FPIs exhibit temperature sensitivity of greater than -0.35 nm/°C within the temperature range of 50 °C to 440 °C.

In this study, we will combine the enhanced VE with the HVE to reduce the difficulty of sensor fabrication while achieving high sensitivity. Two FPIs were constructed using single-mode fiber...

We offer fiber-optic cables in both variants. Our fiber-optic cable systems are the solution when installation space is restricted or operating conditions are hot or dirty. Robust sheath and fiber ...

An optical fiber strain sensor with adjustable sensitivity is proposed and demonstrated. The strain sensing setup employs a fiber optic Michelson interferometer (sensing element) and an ...

Fiber Bragg gratings may be used in interferometric fiber sensors, where they merely serve as reflectors, and the measured phase shift results from fiber spans between them.

In this review, we examine and compare over 400 fiber optic interferometers as well as more than 60 fiber optic refractive sensors based on fiber optic cavities.

In this paper, each type of interferometric sensor is reviewed in terms of operating principles, fabrication methods, and application fields.

LGFOSs are based on two low-coherent double Michelson interferometers (Fig. 2). Both sensors measure the average strain between two fixed points along the gage with optional temperature ...

These are reliable and easy-to-use devices that have high power, can automatically adjust to real-time conditions, and have a straightforward display that eliminates any guesswork. This series is able to ...

This paper aims to review and categorize fiber optic interferometric sensors according to their operating principles, fabrication methods, and application fields.

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