High-frequency mobile fiber optic sensor

We have demonstrated a novel scheme for distributed optical fiber sensing based on the use of a dual frequency comb, which enables the ...

The sensor proposed in this article is characterized by high sensitivity, a large operating bandwidth range, and low lateral interference, making it suitable for monitoring medium- and high ...

Fiber optic sensors are compact because the detection circuit is located in the amplifier, allowing for detection even in narrow spaces. Installation and adjustment are easy and the devices have high ...

Among the wide variety of such devices, FOSs based on fiber Bragg gratings (FBGs) and Fabry--Perot interferometers (FPIs) are the most popular. When exposed to external factors, the ...

Optical fiber sensors (OFSs) have become a key technology in modern sensing systems, offering unique advantages that make them highly suitable for a wide range of industrial, structural, ...

The sensor was fabricated with a short segment of three strongly coupled core optical fiber. The device was protected with capillary tubes and it ...

As a sensing technology based on the principles of optical fiber, fiber optic sensors have gradually become key equipment in many industries due to their advantages, such as high precision, ...

We have demonstrated a novel scheme for distributed optical fiber sensing based on the use of a dual frequency comb, which enables the development of a high-resolution (in the cm range) ...

The ENLIGHT software includes easy-to-use features, such as scaling of optical parameters to engineering units, real-time processing of sensor data, data storage and display, alarming and ...

A novel all-fiber optic current sensor (FOCS) is designed specifically for the measurement of large transient currents based on the Faraday effect.

A scheme of integrated sensing and communication in an optical fibre (ISAC-OF) using the same wavelength channel for simultaneous high-speed data transmission and distributed vibration...

The sensor was fabricated with a short segment of three strongly coupled core optical fiber. The device was protected with capillary tubes and it was placed in cantilever position.

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