

Preview

We provided an effective method that optical fiber surface plasmon resonance (SPR) can be used to displacement measurement. By fabricating a Kretschmann configuration on a micro-structure fiber which is p.

In this paper, an optical fiber probe with high coupling efficiency is prepared based on photopolymerization, and on the basis of this structure, a new type of nanoscale displacement sensor

Figures Schematic diagram for lateral and axial displacement sensing using beam-through technique. The output voltage of the lock-in

This work introduces an in-situ nano-displacement measurement system via a multimode fiber probe with superoscillatory speckles and deep learning.

Optical fiber-based sensor technology offers the possibility of developing a variety of physical sensors for a wide range of physical parameters (Nalwa, 2004). Compared to conventional transducers, optical

This paper presents a linear fiber optic displacement sensor for the use over a large range based on the macro-bending loss. The sensor incorporates an extremely simple design, light source

We proposed a compact and tunable multimode interferometer (MMI) based on an asymmetric wavy fiber (AMWF), which has axial offset, off-center taper waist, and micro-length. The

SPIE is a non-profit dedicated to advancing the scientific research and engineering applications of optics and photonics through international conferences, education programs and publications.

Compared to conventional transducers, optical fiber sensors show very high performances in their response to many physical parameters such as displacement, pressure, temperature and electric field.

This paper describes the optimal design of a miniature fiber-optic linear displacement sensor. It is characterized by its ability to measure displacements along a millimetric range with sub-micrometric

Abstract: A microbubble probe-based fiber optical sensor for micro-displacement sensing is proposed. The sensor is composed of an air bubble and a probe that provides high spatial resolution.

The paper presents some fiber optic sensors that have been devised to provide a low-cost solution to monitor

mechanical quantities, such as displacement, vibration amplitude and

Selecting a Displacement Sensor The "Selecting a Displacement Sensor" site introduces various application examples and products suitable for these

Hier sollte eine Beschreibung angezeigt werden, diese Seite lässt dies jedoch nicht zu.

Considering that the structure of the fiber micro-displacement sensor is not compact and the detection range is narrow , the present study proposes a fiber-optic microsphere micro

Displacement measurements are of significant importance in a variety of critical scientific and engineering fields, such as gravitational wave detection, geophysical research, and manufacturing

An experimental device for micro displacement measurement was built based on optical fiber coupling theory. In this study, the influence of different taper waist diameters on micro

Web: <https://www.kremgroup.co.za>

