ZTP Thermal & Power

Fiber optic sensor for measuring solution concentration

Fiber optic sensor for measuring solution concentration

A Fiber Optic Sensor for Measurements of Solute Concentration in Fluids

A new and simple calibration technique that greatly enhances the measurement sensitivity of conventional fiber-optic reflectometry based on Fresnel reflection from the tip of a fiber is used for

Read More

Intelligent Fiber Optic Sensor for Estimating the Concentration of a

The sensor consists of a light source, asymmetrical fiber coupler, an optic head, a mini lift and a computer-aided measuring system with a detection block, Figure 1.

Read More

Reflective Optical Fiber SPR Sensor for Simultaneous Measurement

To achieve a compact and robust structure, a reflective optical fiber surface plasmon resonance (SPR) sensor is proposed for the simultaneous measurement of glucose concentration

Read More

A Fiber Optic Sensor for Measurements of Solute Concentration in Fluids

A new and simple calibration technique that greatly enhances the measurement sensitivity of conventional fiber-optic reflectometry based on Fresnel reflection from the tip of a fiber is used for

Read More

Temperature-Compensated Solution Concentration Measurements

We demonstrate fiber optic sensors with temperature compensation for the accurate measurement of ethanol concentration in aqueous solutions.

Read More

ARSRV36_N1_P1_7

This review briefly presents the recent research and developments of optical fiber sensor technology with the focus on various methods in liquid concentration and refractive index measurement.

Read More

A Fiber-Optic Sensor Using an Aqueous Solution of Sodium Chloride

A fiber-optic sensor system using a multiplexed array of sensing probes based on an aqueous solution of sodium chloride (NaCl solution) and an optical time-domain reflectometer (OTDR) for

Read More

Fiber optic SPR sensor for liquid concentration measurement

A liquid concentration measurement system with end-reflection optic fiber SPR sensor was set up in this paper. Especially, a chemical method based on silver mirror reaction is proposed to

Read More

A novel compact fiber optic concentration sensing system based on

This paper proposed a novel compact fiber-optic Michelson interferometer for measuring solution concentration, which was realized by multiple arc discharge performed on the end of a

Read More

Intelligent Fiber Optic Sensor for Estimating the

In contrast to well-known fiber optical intelligent sensors which use information of various optical wavelengths, , the proposed construction uses

Read More

Sugar Detection in Aqueous Solution Using an SMS Fiber Device

In this paper, we present the fabrication and testing of an SMS sensor suitable for the measurement of the sugar content in aqueous solutions. The sensor presented has the potential to

Read More

Fiber-optical sensor for measuring concentration of solution

This sensor featuring plane-convex lens collimator for expanding beam and coupling, and a low frequency for light pulse modulation is introduced. The theoretical formulas of concentration of

Read More

Intelligent Fiber Optic Sensor for Estimating the Concentration of a

This paper presents the construction and working principles of an intelligent fiber-optic intensity sensor used for examining the concentration of a mixture in conjunction with water. It can

Read More

Temperature-compensated no-core fiber sensor based on surface

We introduce a compact dual-channel surface plasmon resonance (SPR) fiber optic sensor capable of concurrently measuring ambient temperature and glucose concentrations. The

Read More

Fresnel-reflection-based fiber sensor for on-line measurement of

A fiber-optic sensor based on a two-channel Fresnel reflection technique for the measurement of solute concentrations is proposed in this paper. The relationships between

Read More

A fiber-optic sensor using an aqueous solution of sodium

Recently, optical fiber tip sensor has been utilized for measuring sucrose and ethanol level , glycerol , benzene, methanol, acetone

Read More

Advanced hydrogel optical fiber sensors with triple-readout for real

Herein, we have developed hydrogel-based optical fiber (OF) sensors for continuous and real-time pH sensing using a hydrogel matrix with the pH-sensitive dye Neutral Red to

obtain a color

Read More

Glucose Concentration Measurement by Fiber Optic

This fiber optic sensor, based on a homogeneous fluorescence energy-transfer immunoassay, operates in a continuous, reversible manner to

Read More

Sugar concentration detection by using fiber optic displacement sensor

Five different concentrations of glucose solution were prepared for this study. The sensor's performance is evaluated by measuring the output voltage in a glucose solution. The

Read More

THE DESIGN OF FIBER OPTIC SENSOR FOR THE

In this paper, we present a fiber optic intensity modulated sensor designed for solution concentration measurement. Our work focuses on optimizing the experimental setup by adjusting the fiber

Read More

Temperature-Compensated Solution Concentration Measurements

We demonstrate fiber optic sensors with temperature compensation for the accurate measurement of ethanol concentration in aqueous solutions. The device consists of two photonic

Read More

CS-100F1 Series Fiber Optic Type Chemical Solution

An inline, real-time optical fiber-based chemical concentration monitor that enables measurements of chemicals used in semiconductor manufacturing processes

Read More

Fiber-optical sensor for measuring concentration of solution

It can be used to perform the measurement or control of concentration of solution on-line in succession.

Read More

Contact Us

For datasheets, pricing, or custom data center infrastructure solutions, please visit: https://zeldaterblanchephotography.co.za