Indzawo Optic Connect

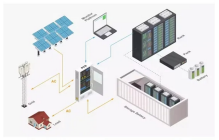
Customization Process for High-Temperature Resistant Fiber Bragg Gratings Used in Supercomputing Centers

Customization Process for High-Temperature Resistant Fiber Bragg

The gratings are type II gratings that withstand temperatures of up to 1,000°C and as the process is applied through the coating of the fiber, no stripping and recoating is required, resulting in superior ...

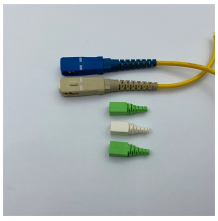
In this paper, a highly sensitive refractive index (RI) and temperature sensor based on two fiber Bragg gratings (FBGs) cascaded with a droplet-like ...

In this paper, improved fabrication and calibration techniques of Fiber Bragg Gratings (FBG) for very high temperature sensing applications up to more than 1500 °C will be presented.

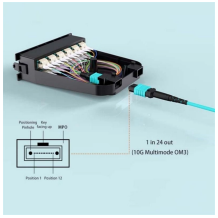


In this paper, a highly sensitive refractive index (RI) and temperature sensor based on two fiber Bragg gratings (FBGs) cascaded with a droplet-like fiber interferometer (DLFI) is proposed...

Fiber Bragg Grating (FBG) sensors facilitate compact, multiplexed, and electromagnetic interference-immune monitoring in embedded and harsh environments. The removal of the polymer ...



In this paper, we present a design framework for micro-engineering the temperature coefficients of FBGs over specified temperature ranges, while maintaining low loss and good spectral ...



To enhance the high-temperature performance of the fiber Bragg grating array (FBGA), an on-line writing high-temperature resistant FBGA is proposed. FBGA is coated with polyimide and is written ...

This work proposes an effective high-temperature and stress–strain sensing technology, which is expected to be used for structural health monitoring in high-temperature environment.

Abstract—Various types of high temperature fibre Bragg gratings (FBGs) for sensing applications, are briefly reviewed, discussing their various figures of merit and performance.

This study provides critical technical support for the reliable application of FBG under high-temperature conditions and establishes a theoretical foundation for advancing composite coating ...

In this paper, we report the design of a high-temperature resistance wFBGA based on PI-wFBGA fabricated online by drawing tower, which uses post hydrogen-loading and low-temperature ...

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For more information, pricing, or custom solutions, please contact us:

Website: https://www.indzawo.co.za
Email: sales@indzawo.co.za
Phone: +27 71 296 8473
Address: 22 Quantum Street, Midrand, 1685, Gauteng, South Africa

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