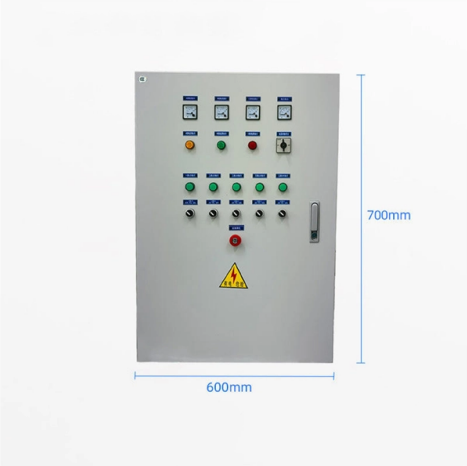
Polarization-maintaining fiber for micro-ring fabrication



Overview

In this paper, we propose a highly birefringent polarization-maintaining hollow-core anti-resonant fiber (HC-ARF) with a hybrid nested semi-tube geometry.

Article Content

Design and Optimization of Polarization-Maintaining

This work presents a novel polarization-maintaining hollow-core anti-resonant fiber design featuring a nested semicircular dual-ring structure and

Polarization-maintaining fibers and their applications

Polarization-maintaining fibers and their applications are reviewed. The classification of high-birefringent fibers and low-birefringent fibers and their fabrication methods and characteristics are discussed in

Design of ultra-low-loss hollow-core polarization maintaining fibers ...

In this paper, we propose a highly birefringent polarization-maintaining hollow-core anti-resonant fiber (HC-ARF) with a hybrid nested semi-tube geometry. By employing bi-thickness hybrid

A novel fiber fabrication method of circular polarization maintaining ...

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In the paper, we demonstrated the entire fiber fabrication method of dielectric chiral fiber. This is the first fabrication of long dielectric chiral fiber. We also measured key optical properties of

Design of polarization-maintaining fiber with uniform doping ...

In this work, we propose a polarization-maintaining, weakly coupled few-mode fiber with a uniform doping concentration, designed via a particle swarm optimization algorithm and a discrete

Polarization-Maintaining Fiber With Uniform Doping Concentration ...

In this study, we propose a polarization-maintaining few-mode fiber (PM-FMF) with a uniform doping concentration, capable of supporting up to 10 weakly coupled modes. The fiber

Polarization-maintaining Fibers – PM fiber, HIBI fiber, polarization ...

Polarization-maintaining fibers are specialty fibers with strong built-in birefringence, preserving the linear polarization of an input beam.

Polarization-Maintaining Fibers Explained

In this article, the latest in FOC''s series covering specialty fibers and their fabrication, we discuss polarization-maintaining (PM) fibers and the various approaches used to make them.

Ultrafast Polarization-Maintaining Fiber Lasers: Design, Fabrication ...

Ultrafast polarization-maintaining fiber lasers (UPMFLs), with superior optical performance and high immunity to environmental disturbances, are highly preferable in a variety of industrial and scientific

Polarization-maintaining optical fiber

Polarization-maintaining fibers work by intentionally introducing a systematic linear birefringence in the fiber, so that there are two well defined polarization modes which propagate along the fiber with very

Design and Optimization of Polarization-Maintaining

In this work, a novel polarization-maintaining hollow-core fiber structure featuring a semi-circular nested dual-ring geometry is proposed. To

Spin-photon qubits for scalable quantum network

Spin-photon qubits from solid-state quantum emitters, especially telecom-band silicon color centers, combine matured fabrication with low-loss fiber links, enabling scalable quantum computing ...

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A novel fiber fabrication method of circular polarization maintaining ...

Some important optical performances of dielectric chiral fiber (DCF) were tested. The results of optical activity of dielectric materials, optical power loss, circular polarization maintaining

Polarization-maintaining few mode fiber composed of a central circular ...

We propose a novel waveguide design of polarization-maintaining few mode fiber (PM-FMF) supporting ≥10 non-degenerate modes, utilizing a central circular air hole and a circumjacent elliptical-ring core.

Design of ultrahigh birefringent stress-induced polarization ...

Abstract We present a stress-induced ultrahigh-birefringence fine-diameter polarization-maintaining fiber (PMF). The proposed PMF is composed of an elliptical-core, with four elliptical side

(INVITED)Fiber-based polarization dependent devices and their ...

Abstract Fiber-based polarization dependent devices (FPDDs), such as optical polarizer, polarization beam splitter are of significant importance in a variety of applications, especially in

Design and Fabrication of Polarization-Independent Micro-Ring

It shows almost complete elimination of polarization sensitivity over the 60-nm bandwidth measured, while maintaining outstanding filter performance.

Ring Resonator Using a Polarization-Maintaining Hollow-Core

Without introducing additional polarization control components, we achieved the control of the polarization state inside the resonant ring, suppressing the secondary eigenstate of polarization

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