

Ultra-weak fiber Bragg grating (UWFBG) arrays can significantly enhance backscattering intensity and thereby improve DAS performance. This ...

Fiber Bragg gratings have emerged as major components for dispersion compensation because of their low loss, small footprint, and low optical nonlinearity.

The influence of reflectivity of fiber grating, interval between adjacent gratings and transmission loss of delay fiber on the multiplexing capacity of sensing system are discussed.

Weakly reflective Fiber Bragg Gratings (reflectivity less than 30%, even down to parts per million). High-reflectivity Fiber Bragg Gratings (reflectivity greater than 90%).

Ultra-weak fiber Bragg grating (UWFBG) arrays can significantly enhance backscattering intensity and thereby improve DAS performance. This review provides a comprehensive overview of ...

Fiber Bragg gratings are reflective structures in the core of an optical fiber with a periodic or aperiodic perturbation of the effective refractive index.

Fiber Bragg gratings (FBGs) are periodic or quasi-periodic structures written along an optical fiber that reflect light at wavelengths determined by their periodicity.

In this paper, the Bragg gratings inscription in nitrogen weakly-doped silica fibers is demonstrated for the first time. The two-step recording mechanism is demonstrated.

Several LMA double-cladding FBGs with weak reflectivity were measured. The results show that this novel measurement method is convenient and efficient, does not depend on the ...

One method based on the end-face reflection as a reference was used to measure weak grating reflectivity of 0.01%-1%. For measuring ultra-weak grating reflectivity, the grating group with ...

The major advantage of these all fiber systems, where the free space mirrors are replaced with a pair of fiber Bragg gratings (FBGs), is the elimination of realignment during the life of the system, since the ...

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