



Bragg gratings in standard nonhydrogenated fibers for high-temperature sensing

[Valmir de Oliveira](#), [Marcia Muller](#), and [Hypolito José Kalinowski](#)

Applied Optics, Vol. 50, Issue 25, pp. E55-E58 (2011) doi:10.1364/AO.50.000E55

- **OCIS Codes:**

- [\(050.2770\)](#) Diffraction and gratings : Gratings
- [\(060.2340\)](#) Fiber optics and optical communications : Fiber optics components
- [\(060.2370\)](#) Fiber optics and optical communications : Fiber optics sensors

Citation

Valmir de Oliveira, Marcia Muller, and Hypolito José Kalinowski, "Bragg gratings in standard nonhydrogenated fibers for high-temperature sensing," Appl. Opt. **50**, E55-E58 (2011)

<http://www.opticsinfobase.org/ao/abstract.cfm?URI=ao-50-25-E55>

Abstract

Fiber Bragg gratings engraved in standard telecommunications-grade single-mode fibers without previous hydrogen loading show enhanced thermal stability for high-temperature measurements up to 800 °C. The reflectivity decay at that temperature is adequate for industrial applications with a weekly change of sensing heads.

© 2011 Optical Society of America

History

Original Manuscript: March 17, 2011

Revised Manuscript: June 7, 2011

Manuscript Accepted: June 15, 2011

Published: July 6, 2011