

Photorefractive Fiber and Crystal Devices:
Materials, Optical Properties, and Applications VI
Proc. SPIE., Volume 4110, Pages 160-166
SPIE--The International Society for Optical Engineering

Fiber Sensing with Interconnection in Volume Holograms Through
Random Phase Encoding

Su, Wei-Chia; Sun, Ching-Cherng; Chen, Yi-Ming

Abstract

An all-optical fiber sensing system with interconnection in volume holograms through random phase encoding has been demonstrated. The random phase is generated from the speckles of a multi-mode fiber. The experimental and stimulation results are also presented.