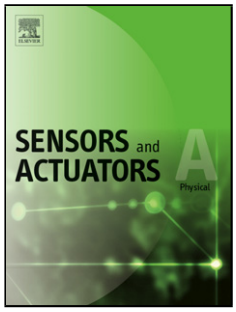

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Liquid Refractometric Sensors Based on Optical Fiber Resonators

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Abstract

A robust, easy-to-fabricate, and sensitive liquid refractometric sensor utilizing optical fiber resonators (OFRs) obtained by simple stripping and cleaning of conventional optical fibers is presented. The sensing scheme is based on recording the spectral changes of the whispering gallery modes (WGMs) observed in the transmission spectrum of an OFR excited with a tunable laser coupled to the OFR through an independent tapered optical fiber. The demonstrated sensor

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