



Iranian Journal of Physics Research, Vol. 15, No. 4, 2016

Research note

Ultra-sensitive surface plasmon resonance fiber optic sensors based on gold nanoparticles

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(Received 10 August 2014 ; in final form 10 August 2015)

Abstract

Plasmonic properties of metals such as gold is the main factor in the development of optical fiber sensors. Plasmonic property is created by exciting the surface plasmon polaritons by laser radiation. These properties are usually used in boosting and detection. The article examines and compares the collected information such as the length of the fiber optical sensor and the sensitivity of sensors including wave guides, fiber brag gratings and Wagon Wheel optical fiber in recent years.

Keywords: optical fiber, plasmon, sensor

For full article, refer to the Persian section