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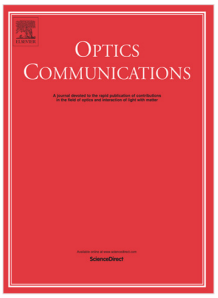

Dielectric film based optical fiber sensor using Fabry–Perot resonant structure

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- A Fabry-Perot resonant structure was fabricated with depositing TiO_2 and SiO_2 thin films by e-beam evaporation.
- Since the film is porous material, the proposed fiber sensor structure have the capability to detect liquid refractive index.
- The proposed sensor based on thin films shows a refractive index sensitivity of 105 nm/RIU and a resolution of 2×10^{-3} RIU.