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Plasmonic sensor based on tapered optical fibers and magnetic fluids for measuring magnetic fields

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RESEARCH HIGHLIGHTS

- Use of plasmonic devices to measure magnetic field
- Use of doubly-deposited uniform-waist tapered fibers as refractometers
- Use of magnetic fluids as transducers
- Novel concept, very good results in terms of sensitivity
- Possibilities of further extension of plasmonic technology for measurements of physical magnitudes

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