

## Accepted Manuscript

Title: Magnetic field sensing using evanescent waves in the Kretschmann configuration

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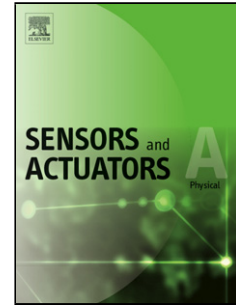
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The polar magneto-optical Kerr rotations of thin Co films in the Kretschmann configuration have been measured.

A multi-step method has been used to overcome the influence of the glass Faraday magneto-optical effect on the measurements.

The magnetic field sensing based on the interaction between evanescent waves and magnetic thin film in the Kretschmann configuration has been proven effective.

The optical magnetic field sensing using evanescent waves and magnetic thin film has been discussed.

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