

# LINEAR BIREFRINGENCE IMAGING BY DEVELOPED DIFFERENTIAL-PHASE POLARIZATION SENSITIVE OPTICAL COHERENCE TOMOGRAPHY

Huan-Jang Huang<sup>1</sup>, Tsung-Yu Hsieh<sup>2</sup>, and Chien Chou<sup>1,2,\*</sup>

<sup>1</sup> Institute of Radiological Sciences, National Yang-Ming University,  
155, Sec.2, Li-Nong St., Beitou, Taipei, 112, Taiwan

<sup>2</sup> Institute of Biophotonics Engineering, National Yang-Ming University,  
155, Sec.2, Li-Nong St., Beitou, Taipei, 112, Taiwan

\* E-mail: [cchou@ym.edu.tw](mailto:cchou@ym.edu.tw)

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## ABSTRACT

A linear birefringence tomographic imaging of a variable phase retardation plate was measured by developed differential-phase polarization sensitive optical coherence tomography (DP-PSOCT) analogically. It belongs to a common-path polarized interferometer that the differential-phase is able to be decoded in real time versus demodulated amplitude of heterodyne signal from a differential amplifier dynamically. A modified balanced detector scheme is constructed in DP-PSOCT not only reduces excess noise of laser intensity fluctuation but also provides higher sensitivity on differential-phase detection tomographically.

## REFERENCE

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