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

Huan-Jang Huang1, Tsung-Yu Hsieh2, and Chien Chou1,2,*

1 Institute of Radiological Sciences, National Yang-Ming University, 155, Sec.2, Li-Nong St., Beitou, Taipei, 112, Taiwan
2 Institute of Biophotonics Engineering, National Yang-Ming University, 155, Sec.2, Li-Nong St., Beitou, Taipei, 112, Taiwan
* E-mail: 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