ZEEMAN LASER SCANNING CONFOCAL MICROSCOPY (ZLSCM) FOR IMAGING THROUGH SCATTERING MEDIA

Hsiu-Fong Chang, Chien Chou, Han-Fai Yau

1Institute of Optical Sciences, National Central University, Jhongli, Taoyuan, Taiwan 320 R.O.C.

2Institute of Radiological Sciences, National Yang Ming University, Peitou, Taipei, Taiwan 112 R.O.C.

Yi-Hsin Chan,
Faculty of Medicine, School of Medicine, National Yang Ming University, Peitou, Taipei, Taiwan 112 R.O.C.

Jheng-Syong Wu
Institute of Biophotonics Engineering, National Yang Ming University, Peitou, Taipei, Taiwan 112 R.O.C.
E-mail: cchou@ym.edu.tw

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Abstract
A comparison between conventional confocal microscopy and Zeeman laser scanning confocal microscope (ZLSCM) on the performance of imaging in the scattering medium is presented. The suppression of the diffused photons of both imaging systems based on the optical unit of the confocal microscope with and without optical heterodyne technique is discussed. In addition, the capability of image object in the scattering medium by detecting the ballistic photon or photon pair in terms of the reduced optical thickness is experimentally demonstrated.

References