

MPT CARS

Martin Weinigel¹, Hans Georg Breunig², Karsten König^{1,2}

¹JenLab GmbH, Schillerstr 1, 07745 Jena, Germany

²Saarland University, Department of Biophotonics and Laser Technology, Campus A5.1, 66123 Saarbrücken

Emails: weinigel@jenlab.de

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Femtosecond-laser based nonlinear optical imaging is a label-free approach to get access and to resolve the distribution of endogenous tissue molecules non-invasively.

Here, the latest imaging system is presented with a multitude of nonlinear optical contrast mechanisms such as time-resolved two-photon excited (auto)fluorescence (2P-AF/FLIM), second-harmonic generation (SHG) and coherent anti-Stokes Raman scattering (CARS). The multimodal imaging capability is illustrated by deep-tissue imaging of murine tissue samples and human skin in vivo [1-4].

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