Contribution ID: **124** Type: **Poster**

【821】Enhancement of single-shot THz detection using a small bias detection scheme

Tuesday 10 September 2024 19:45 (1 minute)

This work presents a single-shot THz detection technique utilizing optically chirped probe pulses combined with a small bias detection scheme to enhance the detected THz signals. By measuring the THz signals at opposite optical biases ±θ, where θ is a small angle of the quarter waveplate (QWP) near zero, an 18-fold enhancement factor is achieved compared to the standard electro-optic sampling (EOS) scheme.

Authors: Dr MOUSAVI, Seyyed Jabbar (Institute of Applied Physics, University of Bern, Sidlerstrasse 5, 3012 Bern, Switzerland); Mr SAUTER, Jan (Institute of Applied Physics, University of Bern, Sidlerstrasse 5, 3012 Bern, Switzerland)

Co-authors: Ms ZYAEE, Elnaz (Institute of Applied Physics, University of Bern, Sidlerstrasse 5, 3012 Bern, Switzerland); Dr UNIKANDANUNNI, Vivek (Institute of Applied Physics, University of Bern, Sidlerstrasse 5, 3012 Bern, Switzerland); Prof. FEURER, Thomas (Institute of Applied Physics, University of Bern, Sidlerstrasse 5, 3012 Bern, Switzerland)

Presenter: Dr MOUSAVI, Seyyed Jabbar (Institute of Applied Physics, University of Bern, Sidlerstrasse 5, 3012 Bern, Switzerland)

Session Classification: Poster Session

Track Classification: Photon Science