

Abstract Submitted
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Non-linear response of Indium Antimonide to femtosecond mid IR
EVAN LANG, FEDOR BERGMANN, ENAM CHOWDHURY, Ohio State Univ - Columbus — Indium Antimonide (InSb) is an important semiconductor in mid IR range whose non-linear response to femtosecond pulses is not well characterized. Our goal is to measure the non-linear response of non-thermally excited electrons of InSb using a pump-probe experiment with 150fs pulses at nJ/pulse energy from a home built femtosecond fiber oscillator at 1550nm. The delay time between pump and probe was varied from 0 to 100ps with femtosecond resolution. The probe light was reflected from excited surface by the pump and its response captured with IR camera/photo detector. Details of the reflectivity dynamics will be discussed.

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