

153. Title: Compact and cost-effective scheme for THz generation via optical rectification in GaP and GaAs using novel fs laser oscillators

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Source: APPLIED PHYSICS B-LASERS AND OPTICS

Volume:103

Issue:1

Pages: 45-50

Publication year: 2011

Document type:Journal article (JA)

Abstract: We demonstrate a compact and cost-effective setup to generate broadband THz radiation. As pump source we use a diode-pumped solid-state femtosecond oscillator or a femtosecond fiber laser system, partially in combination with an optical parametric oscillator. For the THz generation we utilize optical rectification in gallium phosphide (GaP) and gallium arsenide (GaAs). The THz power is on the order of 1 mW and we demonstrate imaging and spectral measurements with this setup.