291.

Accession number:20113714319013

Title:THz nonlinear spectroscopy of solids

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Source title: IEEE Transactions on Terahertz Science and Technology

Abbreviated source title:IEEE Trans. Terahertz Sci. Technolog.

Volume:1

Issue:1

Issue date:September 2011

Publication year:2011

Pages:301-312

Article number:6005347

Language:English

ISSN:2156342X

Document type:Journal article (JA)

Publisher:IEEE Microwave Theory and Techniques Society, 2458 East Kael Circle, Mesa, AZ 85213, United States

Abstract:We present a review of the recent progress in the generation methods of intense terahertz (THz) single-cycle pulses and their application to THz nonlinear spectroscopy in condensed matters. Special attentions are paid to various aspects of nonlinearity in semiconductors including dynamical Franz-Keldysh effect, ballistic acceleration of free carriers, and coherent control of the exciton system.

Number of references:67