199
Accession number:20115114605860
Title:High resolution waveguide terahertz time-domain spectroscopy
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Source title:Journal of Infrared, Millimeter, and Terahertz Waves
Abbreviated source title:J. Infrared. Millim. Terahertz Waves
Volume:32
Issue:11
Issue date:November 2011
Publication year:2011
Pages:1267-1284
Language:English
ISSN:18666892
E-ISSN:18666906
Document type:Journal article (JA)
Publisher:Springer New York, 233 Springer Street, New York, NY 10013-1578, United States
Abstract:Terahertz time-domain spectroscopy accesses the frequency range between 100 GHz and 5 THz by using the coherent generation and detection based on femtosecond laser sources. On the way to obtain fingerprint absorption spectra of molecular solids, terahertz waveguides have proven to be a valuable tool to extend the results to narrow and high resolution linewidths of crystalline solids. We will discuss the development, properties and applications of terahertz waveguide geometries for spectroscopic applications, in particular high-resolution measurements using parallel-plate waveguides.
Number of references:74