

742. 标题: Quantitative measurement of a 3-component mixture based on THz spectra
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来源出版物: PHOTONICS AND OPTOELECTRONICS MEETINGS (POEM) 2011: LASER AND TERAHERTZ SCIENCE AND TECHNOLOGY??丛书: Proceedings of SPIE??卷: 8330??
文献号: 833004??DOI: 10.1117/12.919981??出版年: 2012??
在 Web of Science 中的被引频次: 0
被引频次合计: 0
引用的参考文献数: 6
摘要: Quantitative measurement based on THz absorption spectrum is of great importance in THz applications. Several researchers have worked on it and gained some achievements, but most of them explored pure component or no more than 2-component s samples. In this paper, a mixture sample consisting of Glutamine, Histidine and Threonine is investigated in the frequency range from 0.3 to 2.6 THz. The quantitative measurement principle is the Lambert-Beer's Law which have been accepted in infrared and visible spectra. Our experiments show the validation of the law in THz region. A Least-Mean-Square algorithm is adopted and measurement errors of Glutamine, Histidine and Threonine are 17.60%, 4.44% and 2.59%.
入藏号: WOS:000304667100003
语种: English
文献类型: Proceedings Paper
会议名称: 4th International Photonics and Optoelectronics Meetings (POEM) - Laser and Terahertz Science and Technology/10th International Conference on Photonics and Imaging in Biology and Medicine (PIBM)
会议日期: NOV 02-05, 2011
会议地点: Wuhan, PEOPLES R CHINA
会议赞助商 : Wuhan Natl Lab Optoelect, Huazhong Univ Sci & Technol, China Hubei Prov Sci & Technol Dept, Wuhan E Lake Natl Innovat Model Zone (Opt Valley China, OVC), Opt Soc, Hubei Prov Foreign Experts Affairs Bur, Natl Nat Sci Fdn Comm (NNSFC)
作者关键词: Terahertz time-domain spectroscopy (THz-TDS); Amino acid; Quantitative measurement
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出版商: SPIE-INT SOC OPTICAL ENGINEERING
出版商地址: 1000 20TH ST, PO BOX 10, BELLINGHAM, WA 98227-0010 USA
Web of Science 分类: Optics
学科类别: Optics
IDS 号: BAM23
ISSN: 0277-786X
ISBN: 978-0-8194-8987-6
29 字符的来源出版物名称缩写: PROC SPIE
来源出版物页码计数: 6