

258.

标题: Studies on Signal-to-Noise Ratio Standardization for THz Time-Domain Spectroscopy

作者: Li, M (Li Meng); He, MX (He Ming-xia); Tian, Z (Tian Zhen)

来源出版物: SPECTROSCOPY AND SPECTRAL ANALYSIS 卷: 32 期: 3 页: 606-609

DOI: 10.3964/j.issn.1000-0593(2012)03-0606-04 出版年: MAR 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: 10

摘要: In the present article the concept of standard signal-to-noise ratio (StSNR) for THz time-domain spectroscopy was introduced, with which different systems could be evaluated quantitatively. Based on the characteristics of SNR, a brief method was given for acquiring StSNR. With this method for calculating the StSNR, the result data of a single test was the only item needed, which eased the users lot to compare the capability of various THz time-domain spectrometers. According to this method, a number of THz-TDS systems applied in various THz research groups were evaluated.

入藏号: WOS:000301329300008

语种: Chinese

文献类型: Article

作者关键词: Terahertz time-dormin spectroscopy; Signal-to-noise ratio; Standardization

地址: [Li Meng; He Ming-xia; Tian Zhen] Tianjin Univ, Ctr Terahertz Waves, Tianjin 300072, Peoples R China

[Li Meng; He Ming-xia; Tian Zhen] Tianjin Univ, Coll Prceis Instrument & Optoelect Engn, Tianjin 300072, Peoples R China

[Li Meng; He Ming-xia] Tianjin Univ, State Key Lab Precis Measuring Technol & Instrume, Tianjin 300072, Peoples R China

通讯作者地址: He, MX (通讯作者), Tianjin Univ, Ctr Terahertz Waves, Tianjin 300072, Peoples R China

电子邮件地址: sprout_0201@qq.com; hhmmxx@rju.edu.cn

出版商: OFFICE SPECTROSCOPY & SPECTRAL ANALYSIS

出版商地址: NO 76 COLLAGE SOUTH RD BEIJING, BEIJING 100081, PEOPLES R CHINA

Web of Science 分类: Spectroscopy

学科类别: Spectroscopy

IDS 号: 906FC

ISSN: 1000-0593

29 字符的来源出版物名称缩写: SPECTROSC SPECT ANAL

ISO 来源出版物缩写: Spectrosc. Spectr. Anal.

来源出版物页码计数: 4