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标题: Remote THz generation from two-color filamentation: long distance dependence

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来源出版物: OPTICS EXPRESS 卷: 20 期: 6 页: 6825-6834 出版年: MAR 12 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: 30

摘要: Remote terahertz (THz) generation from two-color filamentation is investigated as a function of the onset position of filaments. THz signals emitted by filaments produced at distances up to 55 m from the laser source were measured. However, from 9 m to 55 m, the THz signal decayed monotonically for increasing onset positions. With a simple calculation, the dominant factors associated to this decay were identified as group velocity mismatch of the two-color pulses and linear diffraction induced by focusing and propagating the second harmonic pulse. (C) 2012 Optical Society of America

入藏号: WOS:000301877700130

语种: English

文献类型: Article

KeyWords Plus: FEMTOSECOND LASER-PULSES; AIR; RADIATION; PURPOSE; MEDIA

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出版商: OPTICAL SOC AMER

出版商地址: 2010 MASSACHUSETTS AVE NW, WASHINGTON, DC 20036 USA

Web of Science 分类: Optics

学科类别: Optics

IDS 号: 913KW

ISSN: 1094-4087

29 字符的来源出版物名称缩写: OPT EXPRESS

ISO 来源出版物缩写: Opt. Express

来源出版物页码计数: 10