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标题: Direct intensity sampling of a modelocked terahertz quantum cascade laser
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来源出版物: APPLIED PHYSICS LETTERS 卷: 101 期: 18 文献号: 181115 DOI: 10.1063/1.4765660 出版年: OCT 29 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: 22
摘要: Pulses from an actively modelocked terahertz quantum cascade laser are fully characterized using an optical sampling technique to detect the total instantaneous terahertz intensity. By triggering the quantum cascade laser electronics with a femtosecond laser, we are able to measure both the formation of modelocked pulses and the quasi-steady state. The dependence of the pulse width on the modulation power and drive current are investigated. At low drive currents, we measure transform-limited gaussian-shaped pulses with a FWHM of 19 ps. (C) 2012 American Institute of Physics. [http://dx.doi.org/10.1063/1.4765660]
入藏号: WOS:000311064500015
语种: English
文献类型: Article
KeyWords Plus: SEMICONDUCTOR-LASER; MODE-LOCKING; THZ; DYNAMICS
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出版商: AMER INST PHYSICS
出版商地址: CIRCULATION & FULFILLMENT DIV, 2 HUNTINGTON QUADRANGLE, STE 1 N O 1, MELVILLE, NY 11747-4501 USA
Web of Science 类别: Physics, Applied
研究方向: Physics
IDS 号: 036XB
ISSN: 0003-6951
29 字符的来源出版物名称缩写: APPL PHYS LETT
ISO 来源出版物缩写: Appl. Phys. Lett.
来源出版物页码计数: 4