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标题: Tunable source of terahertz radiation using molecular modulation
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来源出版物: OPTICS LETTERS 卷: 37 期: 20 页: 4191-4193 出版年: OCT 15 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: 15
摘要: We describe a source of terahertz (THz) radiation that is based on Raman down-shifting of an infrared laser beam using highly coherent molecular vibrations. The source can operate in either the pulsed or the continuous wave (CW) regime and is tunable over much of the THz region of the spectrum (1-10 THz). In the pulsed regime, we predict average output powers of order 10 mW and peak powers approaching 1 MW. In the CW regime, average powers exceeding 100 mu W with spectral linewidths at the hertz level are achievable. (C) 2012 Optical Society of America
入藏号: WOS:000310052800009
语种: English
文献类型: Article
KeyWords Plus: GENERATION; PULSES
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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 类别: Optics
研究方向: Optics
IDS 号: 023RP
ISSN: 0146-9592
29 字符的来源出版物名称缩写: OPT LETT
ISO 来源出版物缩写: Opt. Lett.
来源出版物页码计数: 3