

560

标题: Quantum path control on the harmonic emission in the presence of a terahertz field

作者: Feng, LQ (Feng, Liqiang); Chu, TS (Chu, Tianshu)

来源出版物: CHEMICAL PHYSICS 卷: 405 页: 26-31 DOI: 10.1016/j.chemphys.2012.06.001 出版年: SEP 11 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: 45

摘要: Quantum path control on the harmonic emission from a model Ne atom has been investigated within the scheme where a terahertz (THz) controlling pulse is added to a 5 fs/1200 nm fundamental chirp pulse. It has been found that, with the optimal THz field, the short quantum path has been selected and the super-continuum region of the harmonic spectra has been extended from 357 eV to 656 eV with less modulated structures. The proper superposition of harmonics without any phase compensation produces a single isolated 38 as attosecond pulse. (C) 2012 Elsevier B.V. All rights reserved.

入藏号: WOS:000308720500005

语种: English

文献类型: Article

作者关键词: High-order harmonic generation; Isolated attosecond pulse; Quantum path control; Terahertz field

地址: [Feng, Liqiang; Chu, Tianshu] Chinese Acad Sci, State Key Lab Mol React Dynam, Dalian Inst Chem Phys, Dalian 116023, Peoples R China

[Chu, Tianshu] Qingdao Univ, Inst Computat Sci & Engrn, Lab New Fiber Mat & Modern Text, Growing Base State Key Lab, Qingdao 266071, Peoples R China

通讯作者地址: Chu, TS (通讯作者), Chinese Acad Sci, State Key Lab Mol React Dynam, Dalian Inst Chem Phys, Dalian 116023, Peoples R China.

电子邮件地址: tschu@dicp.ac.cn

出版商: ELSEVIER SCIENCE BV

出版商地址: PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS

Web of Science 类别: Chemistry, Physical; Physics, Atomic, Molecular & Chemical

研究方向: Chemistry; Physics

IDS 号: 004ZQ

ISSN: 0301-0104

29 字符的来源出版物名称缩写: CHEM PHYS

ISO 来源出版物缩写: Chem. Phys.

来源出版物页码计数: 6