

302.

标题: Influence of waveguide dispersion on short-pulse free electron laser detuning curves

作者: Zhaunerchyk, V (Zhaunerchyk, Vitali); Oepts, D (Oepts, Dick); Jongma, RT (Jongma, Rienk T.); van der Zande, WJ (van der Zande, Wim J.)

来源出版物: PHYSICAL REVIEW SPECIAL TOPICS-ACCELERATORS AND BEAMS 卷: 15 期: 5 文献号: 050701 DOI: 10.1103/PhysRevSTAB.15.050701 出版年: MAY 1 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: 25

摘要: In this paper we present results of numerical studies on the cavity desynchronization in the short-pulse waveguided free electron laser (FEL) oscillator FLARE, which is a new THz FEL at the Radboud University Nijmegen, with the emphasis to investigate the influence of the waveguide dispersion. In particular, the peaks of the detuning curves are predicted to be essentially broader. We also predict that the extent of the peak broadening increases as the waveguide dispersion becomes more significant.

入藏号: WOS:000303441000001

语种: English

文献类型: Article

KeyWords Plus: FEL; OSCILLATIONS; WAVELENGTH; SUPERMODES; SIMULATION; LETHARGY; MODE

地址: [Zhaunerchyk, Vitali; Jongma, Rienk T.; van der Zande, Wim J.] Radboud Univ Nijmegen, Inst Mol & Mat, NL-6525 AJ Nijmegen, Netherlands

[Oepts, Dick] FOM, Inst Plasma Phys Rijnhuizen, NL-3430 BE Nieuwegein, Netherlands

通讯作者地址: Zhaunerchyk, V (通讯作者), Stockholm Univ, Albanova Univ Ctr, Dept Phys, SE-10691 Stockholm, Sweden

电子邮件地址: zhaunerchyk@science.ru.nl

出版商: AMER PHYSICAL SOC

出版商地址: ONE PHYSICS ELLIPSE, COLLEGE PK, MD 20740-3844 USA

Web of Science 分类: Physics, Nuclear; Physics, Particles & Fields

学科类别: Physics

IDS 号: 934JS

ISSN: 1098-4402

29 字符的来源出版物名称缩写: PHYS REV SPEC TOP-AC

ISO 来源出版物缩写: Phys. Rev. Spec. Top.-Accel. Beams

来源出版物页码计数: 6