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标题: Dual-wavelength mode-locked Yb:LuYSiO5 laser with a double-walled carbon nanotube saturable absorber
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来源出版物: LASER PHYSICS LETTERS 卷: 9 期: 2 页: 135-140 DOI: 10.1002/lapl.201110111 出版年: FEB 2012
在 Web of Science 中的被引频次: 1
被引频次合计: 1
引用的参考文献数: 35
摘要: We report a passively dual-wavelength mode-locked Yb:LuYSiO5 (Yb:LYSO) laser with a double-walled carbon nanotube saturable absorber (DWCNT-SA) for the first time. Simultaneous mode-locking at the 1045.5 and 1059.0 nm was achieved and the pulse duration of the dual-wavelength mode-locked pulses are 8.0 ps. Ultrahigh repetition rate ultrafast pulses with 750 fs pulse width and 3.66 THz repetition rate were further obtained. The average output power of 1.27 W with a repetition rate of 103.5 MHz was obtained using absorbed pump power of 12.83 W and the slope efficiency is 13.0%. (C) 2012 by Astro Ltd. Published exclusively by WILEY-VCH Verlag GmbH & Co. KGaA
入藏号: WOS:000303246300009
语种: English
文献类型: Article
作者关键词: dual-wavelength; mode-locked; double-wall carbon nanotube saturable absorber; Yb:LYSO crystal
KeyWords Plus: TI-SAPPHIRE LASER; FEMTOSECOND PULSES; GENERATION; OPERATION; CRYSTAL; NM
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出版商: WILEY-V C H VERLAG GMBH
出版商地址: PO BOX 10 11 61, D-69451 WEINHEIM, GERMANY
Web of Science 分类: Instruments & Instrumentation
学科类别: Instruments & Instrumentation
IDS 号: 931VB
ISSN: 1612-2011
29 字符的来源出版物名称缩写: LASER PHYS LETT
ISO 来源出版物缩写: Laser Phys. Lett.
来源出版物页码计数: 6