

中文核心期刊
中国科技核心期刊

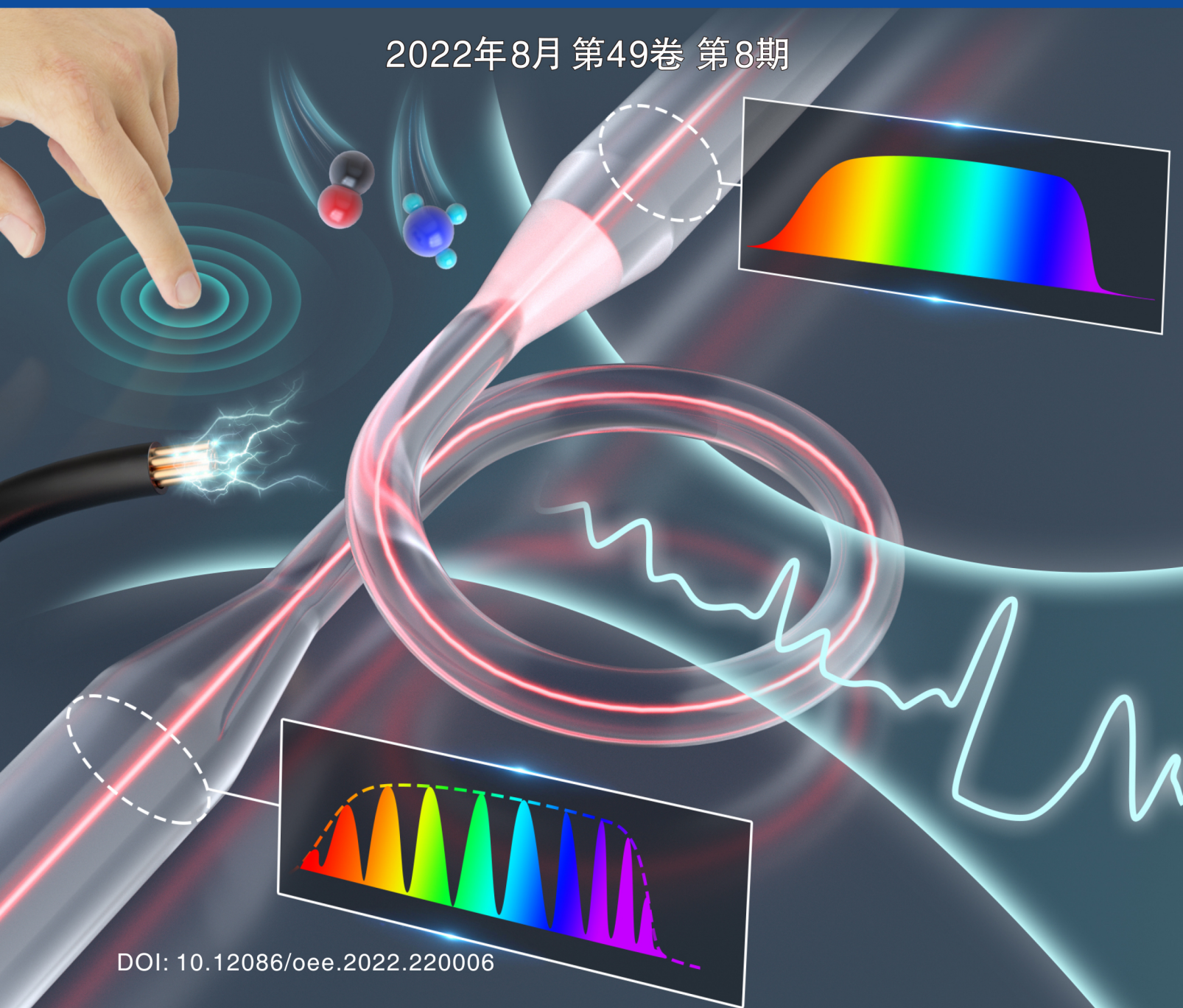
ISSN 1003-501X
CN 51-1346/O4
CODEN GUGOEC

光电工程



Opto-Electronic Engineering

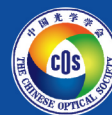
2022年8月 第49卷 第8期



DOI: 10.12086/oe.2022.220006



中国科学院光电技术研究所



中国光学学会

光电工程 (Guangdian Gongcheng)

月刊 1974 年创刊
第 49 卷 第 8 期 (总第 393 期)
2022 年 8 月

主管单位: 中国科学院
主办单位: 中国科学院光电技术研究所
中国光学学会
主 编: 罗先刚
编辑出版: 《光电工程》编辑部
(四川省成都市双流区 350 信箱, 邮编 610209)
电 话: 028-85100579
电子邮箱: oee@ioe.ac.cn
网 址: <http://www.ojournal.org>
印 刷: 四川玖艺呈现印刷有限公司
国内发行: 四川省报刊发行局
(邮发代号: 62-296)
国外发行: 中国国际图书贸易集团有限公司
(发行代号: M7114)
中国标准连续出版物号: ISSN 1003-501X
CN 51-1346/O4
出版时间: 每月 25 日
国内定价: 90 元/期

Opto-Electronic Engineering

(Monthly, since 1974)

Volume 49, Issue 8 August 2022

Managed by
Chinese Academy of Sciences
Sponsored by
Institute of Optics and Electronics,
Chinese Academy of Sciences
The Chinese Optical Society
Editor-in-Chief Luo Xiangang
Edited and Published by
Editorial Office of *Opto-Electronic
Engineering*, P. O. Box 350, Shuangliu,
Chengdu 610209, P.R.China
Tel +86-28-85100579
E-mail oee@ioe.ac.cn
Website <http://www.ojournal.org>
Printed by Sichuan Joy Art Printing Co., Ltd.
Domestic Distributed by
Sichuan Provincial Newspaper &
Periodical Subscription and Distribution
Bureau (Code: 62-296)
Overseas Distributed by
China International Book Trading
Corporation (Code: M7114)

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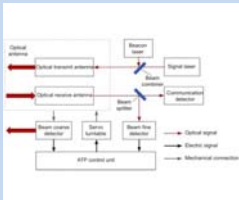


Optical microfiber resonator: principle and applications

220006

Ding Zixuan , Chen Ye , Xu Fei

In this article, the recent progress in the microfiber resonators research fields, covering fundamental characteristics, fabrication methods, and applications of microfiber resonators were summarized.



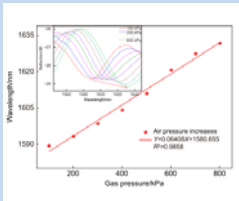
Research progress of acquisition, pointing and tracking in optical wireless communication system

210439

Liang Jingyuan , Chen Ruidong , Yao Haifeng , Bai Bo , Cao Minghua , Zhao Li , Wang Yi , Deng Jiaxin

The domestic and foreign research achievements in capturing, aiming, and tracking were analyzed, and the work done by Xi'an University of Technology in the field of automatic aiming was introduced.

Article

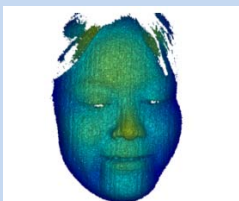


Highly sensitive gas-pressure sensor based on paralleled optical fiber Fabry-Perot interferometers

210420

Guo Yun , Wu Yuchun , Wang Jiahao , Zhang Yingfang , Wang Dongning , Xu Ben

A highly sensitive optical fiber sensor based on the Vernier effect was demonstrated for gas pressure sensing. Experimental results showed that the sensor was insensitive to the surrounding temperature, which reduced the influence of ambient temperature on the measurement of gas pressure.

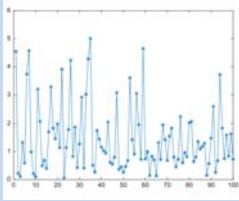


Priori knowledge assisted dynamic 3D shape measurement with fringe projection

210449

Chu Dongya , Zhang Guanghui , Song Renjie , Zhang Xiaosong , Ying Xiaolin , Li Yong

A static and dynamic dual-mode 3D measurement system was built by using a DLP projector and high-speed camera. The 3D shape measurement of 1280×1024 points at 70 f/s was realized.



Research on CS-BP algorithm of tracking error prediction in fault diagnosis of photoelectric measurement system

210455

Ma Jie , Wu Zhiyong

A BP neural network algorithm optimized by the Cuckoo algorithm (CS-BP) was proposed. The tracking error can be predicted by using the azimuth guidance, pitch guidance, azimuth encoder, pitch encoder and time data of the optoelectronic measurement system.

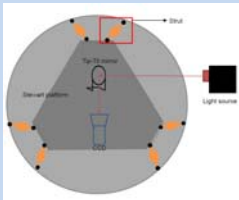


Image measurement-based two-stage control of Stewart platform

220019

Zhang Liangzong , Yang Tao , Wu Yun , Tang Tao

In this paper, a control method based on a single sensor was proposed to improve the traditional dual-order structure to avoid decoupling and achieve a high-precision closed-loop for the Stewart-TTM.