

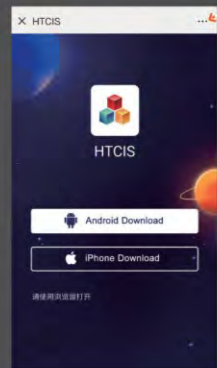
想要了解报告的更多信息, 请下载汇同会议系统APP。
 扫描下方二维码进行APP的下载:



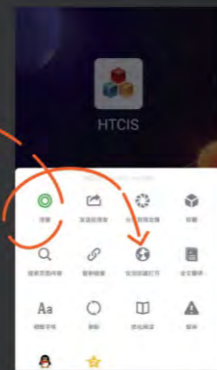
IOS系统:
 方法一: 扫描二维码下载
 方法二: 登录到APP Store,
 搜索“汇同会议系统”

安卓系统:
 方法一: 扫描二维码下载

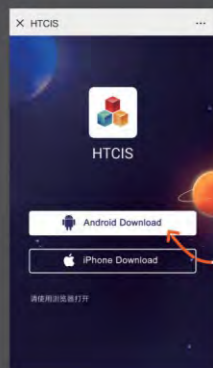
安卓系统安装步骤



1 “扫一扫”二维码,
 点击右上角“...”



2 点击“在浏览器
 打开”, 进入汇
 同会议系统
 APP下载页面



3 点击“Android
 Download”



4 点击确认, 允许
 来自此来源的
 应用



5 “立即下载”,
 记得提前打开
 wifi哦



6 点击“安装”, 待
 成功后即可成
 功体验APP

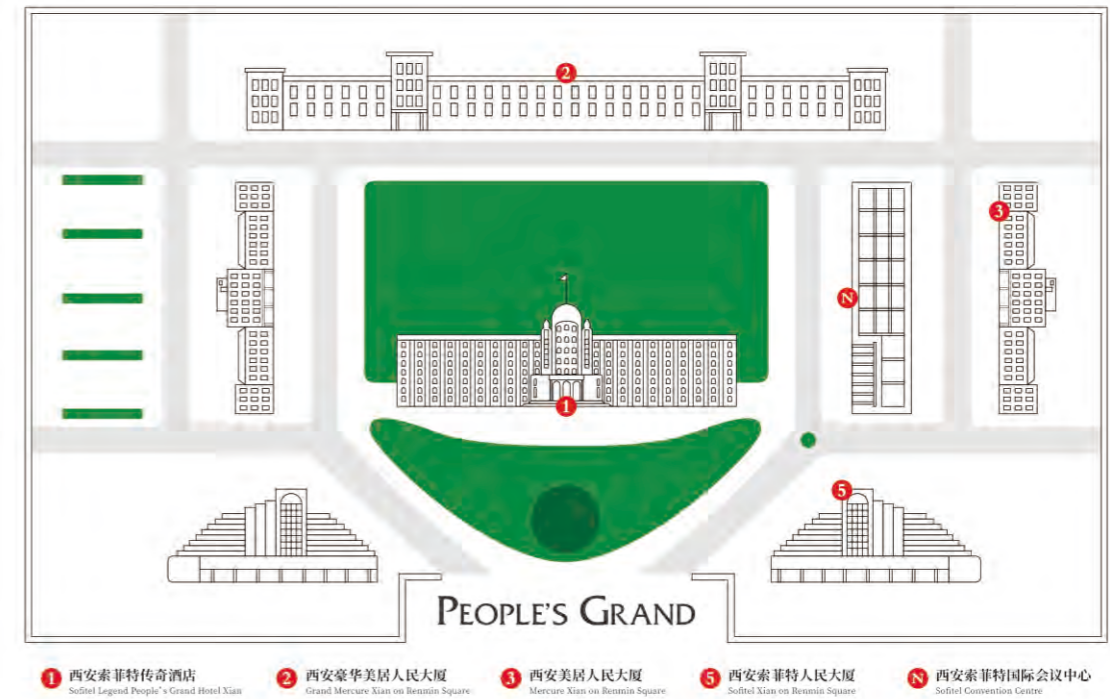

OPTICS FRONTIER **CIOP 2021**

Optics Frontier:
The 12th International Conference
on Information Optics and Photonics
 23-26 July, 2021 · Xi'an, China

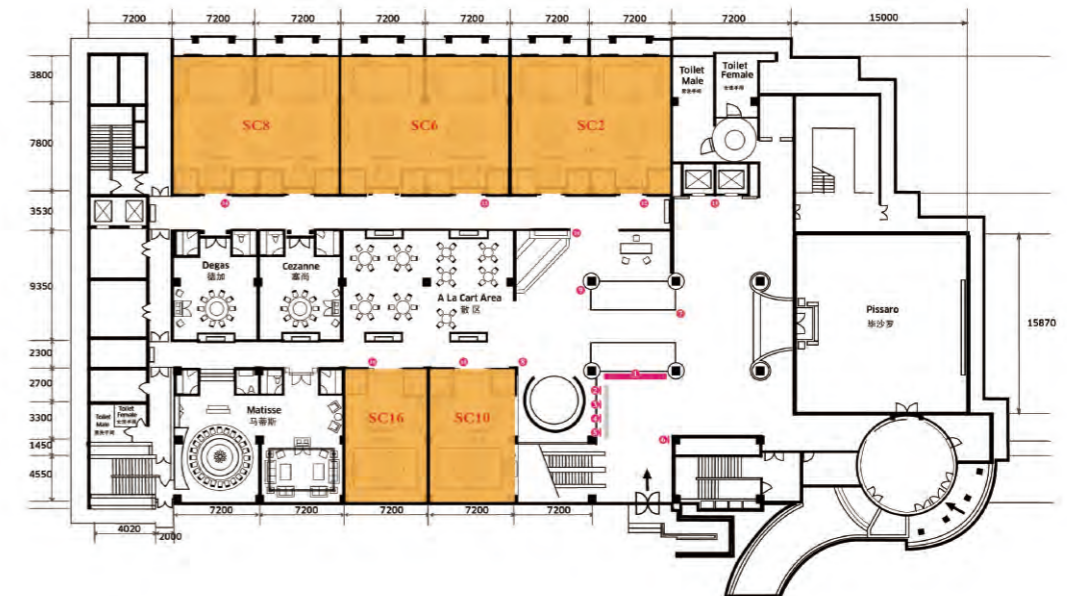
Conference Schedule

	July 23	July 24	July 25	July 26	Location
Registration	08:30-20:30	7:30-19:30	8:00-19:30	8:00-15:00	Lobby, 1F
Photonics Research Workshop: Deep Learning in Photonics	09:00-16:45				Room Nice, 2F
Chinese Optics Letters Workshop: Lithium Niobate Based Photonic Devices	09:00-16:45				Room Lyon, 2F
光电产业高峰论坛——光电“芯”未来	14:00-16:30				Room Paris, 2F
与主编面对面-科技论文的准备与写作要点	19:00-21:00				Room Nice, 2F
Opening & Plenary Session		08:30-12:25			Grand Ballroom, 3F
Technical Sessions		14:00-18:30	08:30-12:00 13:30-15:30	08:30-12:00 13:30-17:30	1F & 2F & 3F
Poster Session			15:30-17:30		1F
Welcome Banquet		19:00-21:00			Grand Ballroom, 3F
Meet CLP's Editors			15:30-16:30		Lobby, 1F
Best Poster Award			18:00-18:30		Room Nice, 2F

酒店平面图

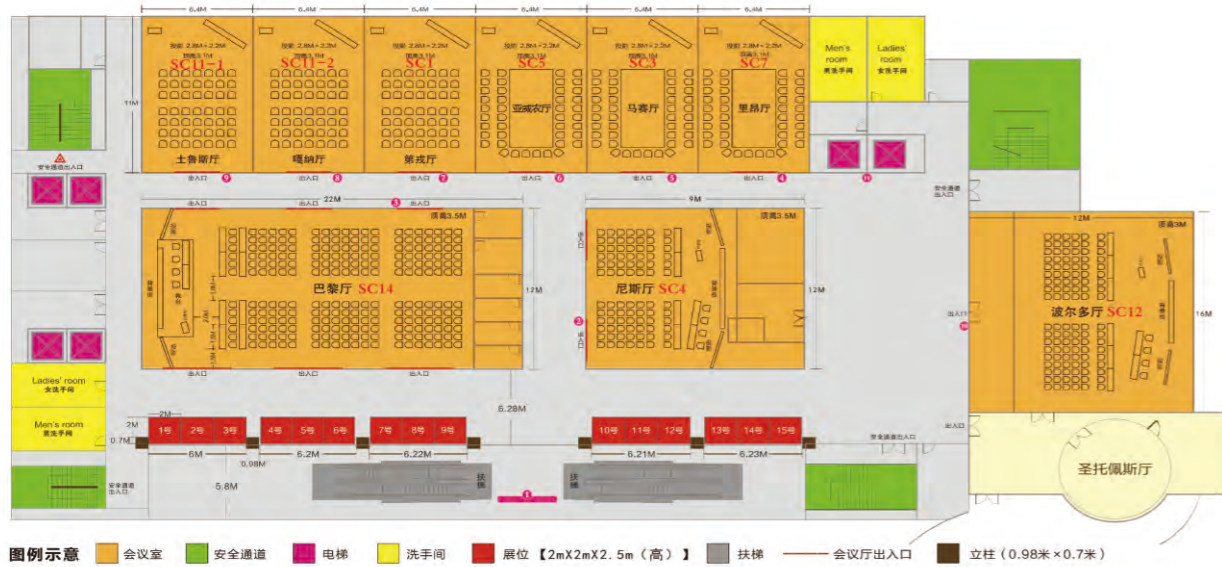


会议中心一层平面图



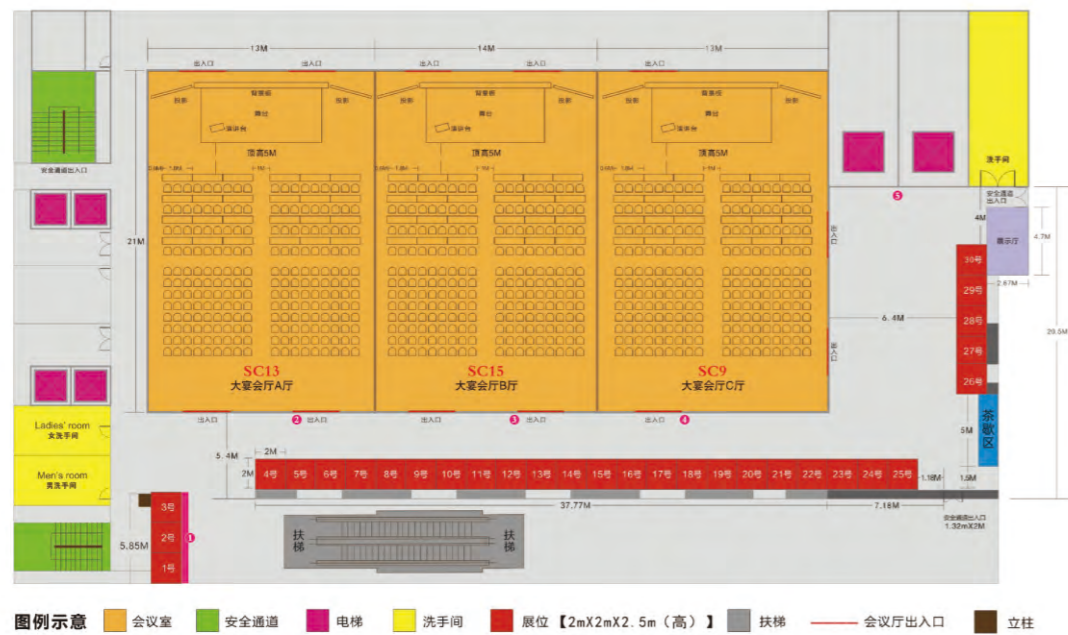
- 罗丹厅 SC2. Plasmonics and Metamaterials
- 蒙德里安厅 SC6. Microwave Photonics
- 毕加索厅 SC8. Optical Materials
- 莫奈厅 SC10. Infrared and Terahertz Technologies
- 雷诺厅 SC16. Atomic Physics, Quantum Photonics, and Quantum Information

会议中心二层平面图



- | | |
|---|---|
| 土鲁斯厅 SC11-1. Optical Imaging, Display, and Storage | 里昂厅 SC7. Micro and Nanophotonics |
| 夏纳厅 SC11-2. Optical Imaging, Display, and Storage | 巴黎厅 SC14. Biophotonics and Optofluidics |
| 第戎厅 SC1. Light-Matter Interactions | 尼斯厅 SC4. Solid State, Fiber, and Other Laser Sources |
| 亚威农厅 SC5. Silicon Photonics | 波尔多厅 SC12. Optical Communications and Networks |
| 马赛厅 SC3. Ultrafast and Nonlinear Phenomena | |

会议中心三层平面图



- | |
|--|
| 大宴会厅A厅 SC13. Optical Fiber and Waveguide Technologies |
| 大宴会厅B厅 SC15. Optical Sensors and Systems |
| 大宴会厅C厅 SC9. Optical Measurement and Metrology |

Contents

Committees	05
Host&Sponsors	10
General Information	
Special Events	
Photonics Research Workshop: Deep Learning in Photonics	11
Chinese Optics Letters Workshop: Lithium Niobate Based Photonic Devices	12
光电产业高峰论坛——光电“芯”未来	13
与主编面对面——科技论文的准备与写作要点	14
Meet CLP's Editors	15
Agendas of Technical Sessions	16
Plenary Session	
SC 1. Light-Matter Interactions	17
SC 2. Plasmonics and Metamaterials	20
SC 3. Ultrafast and Nonlinear Phenomena	24
SC 4. Solid State, Fiber, and Other Laser Sources	27
SC 5. Silicon Photonics	30
SC 6. Microwave Photonics	33
SC 7. Micro and Nanophotonics	37
SC 8. Optical Materials	40
SC 9. Optical Measurement and Metrology	43
SC 10. Infrared and Terahertz Technologies	46
SC 11-1. Optical Imaging, Display, and Storage	49
SC 11-2. Optical Imaging, Display, and Storage	52
SC 12. Optical Communications and Networks	53
SC 13. Optical Fiber and Waveguide Technologies	56
SC 14. Biophotonics and Optofluidics	60
SC 15. Optical Sensors and Systems	63
SC 16. Atomic Physics, Quantum Photonics, and Quantum Information	65
Poster Session	68

Committees

General Chairs



Guofan Jin
Tsinghua University, China



James Harris
Stanford University, USA

Technical Program Chairs



Xi-Cheng Zhang
University of Rochester, USA



Chao Lu
The Hong Kong Polytechnic University, China



Zhiyi Wei
Institute of Physics, CAS, China

Steering Committee

Zhiping (James) Zhou, Peking University, China (Chair)
Jianlin Zhao, Northwestern Polytechnical University, China
Jianrong Qiu, Zhejiang University, China
Limin Tong, Zhejiang University, China
Xianfeng Chen, Shanghai Jiao Tong University, China
Junle Qu, Shenzhen University, China
Sen Han, University of Shanghai for Science and Technology, China
Yanqing Lu, Nanjing University, China
Feng Chen, Shandong University, China
Ming Tang, Huazhong University of Science and Technology, China
Shilong Pan, Nanjing University of Aeronautics and Astronautics, China

Subcommittees

SC1. Light-Matter Interactions

Hongbo Sun, Tsinghua University, China (Chair)
 Saulius Juodkazis, Swinburne University of Technology, Australia (Co-chair)
 Qiang Wu, Nankai University, China (Co-chair)
 Dong Wu, University of Science and Technology of China, China (Co-chair)
 Yves Bellouard, École Polytechnique Fédérale de Lausanne, EPFL, Switzerland
 Minghui Hong, National University of Singapore, Singapore
 Matthieu Lancry, Paris-Sud University, France
 Yongfeng Lu, University of Nebraska-Lincoln, USA
 Andreas Ostendorf, Ruhr-University Bochum, Germany
 Koji Sugioka, Riken, Japan

SC2. Plasmonics and Metamaterials

Hui Liu, Nanjing University, China (Chair)
 Hong Chen, Tongji University, China (Co-chair)
 Xianfeng Chen, Shanghai Jiao Tong University, China
 Xiaoyong Hu, Peking University, China
 Zhiyuan Li, South China University of Technology, China
 Ruwen Peng, Nanjing University, China
 Min Qiu, Westlake University, China
 Din Ping Tsai, The Hong Kong Polytechnic University, Hong Kong, China
 Lei Zhou, Fudan University, China

SC3. Ultrafast and Nonlinear Phenomena

Zhiyi Wei, Institute of Physics, CAS, China (Chair)
 Guoqing Chang, Institute of Physics, CAS, China (Co-Chair)
 Peixiang Lu, Huazhong University of Science and Technology, China (Co-Chair)
 Yuxin Leng, Shanghai Institute of Optics and Fine Mechanics, CAS, China
 Shu-Wei Huang, University of Colorado, USA
 Kenneth Wong, The University of Hong Kong, Hongkong, China
 Chengying Wu, Peking University, China

SC4. Solid State, Fiber, and Other Laser Sources

Zhichuan Niu, Institute of Semiconductors, CAS, China (Chair)
 Jun Liu, Shanghai Institute of Optics and Fine Mechanics, CAS, China (Chair)
 Huiyun Liu, University College London, UK (Co-chair)
 Jiangfeng Zhu, Xidian University, China (Co-chair)
 Haibo Ge, Xi'an University of Posts & Telecommunications, China
 Zhaoyang Li, Osaka University, Japan
 Chongyang Liu, Nanyang Technological University, Singapore
 Cunzhu Tong, Changchun Institute of Optics, Fine Mechanics and Physics, CAS, China
 Pu Wang, Beijing University of Technology, China

SC5. Silicon Photonics

Zhiping (James) Zhou, Peking University, China (Chair)
 Daoxin Dai, Zhejiang University, China (Co-Chair)
 Di Liang, Hewlett Packard Labs, USA (Co-Chair)
 Vilson Rosa de Almeida, Instituto Tecnológico de Aeronáutica (ITA) & Universidade Brasil, Brazil
 Xuetao Gan, Northwestern Polytechnical University, China
 Frederic Gardes, University of Southampton, UK
 Yuqing Jiao, Eindhoven University of Technology, Netherlands
 Jing Liu, Tianjin University, China
 Cuicui Lu, Beijing Institute of Technology, China
 Tangyou Sun, Guilin University of Electronic Technology, China
 Wei Shi, Université Laval, Canada
 Koji Yamada, The National Institute of Advanced Industrial Science and Technology, AIST, Japan

SC6. Microwave Photonics

Xiaoping Zheng, Tsinghua University, China (Chair)
Jose Capmany, Polytechnic University of Valencia, Spain (Chair)
Ming Li, Institute of Semiconductors, CAS, China (Co-chair)
Christina Lim, The University of Melbourne, Australia (Co-chair)
Chao Wang, University of Kent, UK
David Marpaung, University of Twente, The Netherlands
Jose azana, Institut National de la Recherche Scientifique, Canada
Xiaoxiao Xue, Tsinghua University, China
Xianbin Yu, Zhejiang University, China
Yang Liu, École Polytechnique Fédérale de Lausanne (EPFL), Switzerland
Weifeng Zhang, Beijing Institute of Technology, China
Xihua Zhou, Southwest Jiaotong University, China
Guillermo Carpintero, Postgraduate School in Engineering and Basic Science, Universidad Carlos III de Madrid, Spain
David Moss, Swinburne University of Technology, Australia

SC7. Micro and Nanophotonics

Yidong Huang, Tsinghua University, China (Chair)
 Susumu Noda, Kyoto University, Japan (Co-chair)
 Lan Yang, Washington University in St. Louis, USA (Co-chair)
 Jimin Bao, University of Houston, USA
 Tawfique Hasan, University of Cambridge, UK
 Danguan Lei, City University of Hong Kong, Hong Kong, China
 Renmin Ma, Peking University, China
 Qihua Xiong, Tsinghua University, China
 Weidong Zhou, University of Texas at Arlington, USA

SC8. Optical Materials

Jianrong Qiu, Zhejiang University, China (Chair)
 Himanshu Jain, Lehigh University, USA (Co-chair)
 Katsuhisa Tanaka, Kyoto University, Japan (Co-chair)
 Yong Gyu Choi, Korea Aerospace University, South Korea
 Sergei Firstov, Russian Academy of Sciences, Russia
 Jiang Li, Shanghai Institute of Ceramics, CAS, China
 Hirokazu Masai, AIST, Japan
 Guangming Tao, Huazhong University of Science and Technology, China
 Jun Wang, Shanghai Institute of Optics and Fine Mechanics, CAS, China
 Haohai Yu, Shandong University, China
 Shifeng Zhou, South China University of Technology, China

SC9. Optical Measurement and Metrology

Xiangzhao Wang, Shanghai Institute of Optics and Fine Mechanics, CAS, China (Chair)
 Osami Sasaki, Niigata University, Japan (Co-chair)
 Suzuki Takamasa, Niigata University, Japan (Co-chair)
 Yang Bu, Shanghai Institute of Optics and Fine Mechanics, CAS, China
 Zhishan Gao, Nanjing University of sciences and technology, China
 Sen Han, University of Shanghai for Science and Technology, China
 Yanqiu Li, Beijing Institute of Technology, China
 Sikun Li, Shanghai Institute of Optics and Fine Mechanics, CAS, China
 Shiyuan Liu, Huazhong University of Science and Technology, China
 Qican Zhang, Sichuan University, China

SC10. Infrared and Terahertz Technologies

Yan Zhang, Capital Normal University, China (Chair)
 Chao Zhang, University of Wollongong, Australia (Co-Chair)
 Harald Schneider, Helmholtz-Zentrum Dresden Rossendorf, Germany
 Masahiko Tani, University of Fukui, Japan
 Qijie Wang, Nanyang Technological University, Singapore
 Qiye Wen, University of Electronic Science and Technology of China, China

SC11. Optical Imaging, Display, and Storage

Liangcai Cao, Tsinghua University, China (Chair)
 Ting-Chung Poon, Virginia Tech, USA (Chair)
 Xiaodi Tan, Fujian Normal University, China (Co-Chair)
 Qionghua Wang, Beihang University, China (Co-Chair)
 Baoli Yao, Xi'an Institute of Optics and Precision Mechanics, CAS, China (Co-Chair)
 Jianglei Di, Northwestern Polytechnical University, China
 Xiangping Li, Jinan University, China
 Yang Li, Tsinghua University, China
 Jung-Ping Liu, Feng Chia University, Taiwan, China
 Xinzhu Sang, Beijing University of Posts and Telecommunications, China
 Chao Zuo, Nanjing University of Science and Technology, China

SC12. Optical Communications and Networks

Ming Tang, Huazhong University of Science and Technology, China (Chair)
 Junjie Li, China Telecom, China (Co-Chair)
 Lei Deng, Huazhong University of Science and Technology, China
 Liang Dou, Alibaba, China
 Liangchuan Li, Huawei Technologies, China
 Rui Lin, Chalmers University of Technology, Sweden
 Zhixin Liu, University College London (UCL), UK
 Tianshu Wang, Changchun University of Science and Technology, China
 Liangming Xiong, YOFC, China
 Xingwen Yi, Sun Yat-sen University, China
 Fan Zhang, Peking University, China
 Yongli Zhao, Beijing University of Posts and Telecommunications, China
 Jian Zhao, South China University of Technology, China
 Qunbi Zhuge, Shanghai Jiaotong University, China

SC13. Optical Fiber and Waveguide Technologies

Li Pei, Beijing Jiaotong University, China (Chair)
 Jianping Li, Guangdong University of Technology, China
 Yange Liu, Nankai University, China
 Anbang Wang, Taiyuan University of Technology, China
 Zinan Wang, University of Electronic Science and Technology of China, China
 Lei Wei, Nanyang Technological University, Singapore
 Qiang Wu, Northumbria University, UK
 Hai Xiao, Clemson University, USA
 Aping Zhang, The Hong Kong Polytechnic University, Hong Kong, China
 Xihua Zou, Southwest Jiaotong University, China
 Xiaobei Zhang, Shanghai University, China

SC14. Biophotonics and Optofluidics

Junle Qu, Shenzhen University, China (Chair)
 Ammasi Periasamy, University of Virginia, USA (Chair)
 Aaron H.P. Ho, The Chinese University of Hong Kong, China (Co-Chair)
 Zhen Yuan, University of Macau, China (Co-Chair)
 Santhosh Chidangil, Manipal Academy of Higher Education, India
 Ling Fu, Huazhong University of Science and Technology, China
 Qin Li, Beijing Institute of Technology, China
 Liwei Liu, Shenzhen University, China
 Ke Si, Zhejiang University, China
 Timothy Tan, Nanyang Technological University, Singapore
 Sihua Yang, South China Normal University, China
 Tong Ye, Clemson University, USA

SC15. Optical Sensors and Systems

Yuwen Qin, Guangdong University of Technology, China (Chair)
 Yanhua Luo, University of New South Wales, Australia (Co-chair)
 Tao Zhu, Chongqing University, China (Co-chair)
 George Y. Chen, Shenzhen University, China
 Xinyu Fan, Shanghai Jiao Tong University, China
 Qingwen Liu, Shanghai Jiao Tong University, China
 Huilian Ma, Zhejiang University, China
 Wei Ren, The Chinese University of Hong Kong, Hong Kong, China
 Liyang Shao, Southern University of Science and Technology, China
 Kwang-Yong Song, Chung-Ang University, South Korea
 Chao Wang, Wuhan University, China

SC16. Atomic Physics, Quantum Photonics, and Quantum Information

Xianmin Jin, Shanghai Jiao Tong University, China (Chair)
 Leong Chuan Kwek, National University of Singapore & Nanyang Technological University, Singapore (Co-chair)
 Juejie Wu, National University of Defense Technology, China (Co-chair)
 Qiang Zhang, University of Science and Technology of China, China (Co-chair)
 David Hutchinson, University of Otago, New Zealand
 Sergei Kulik, Lomonosov Moscow State University, Russia
 Bill Munro, NTT Basic Research Labs, Japan
 Xiaogang Qiang, National Innovation Institute of Defense Technology, China
 Xiaolong Su, Shanxi University, China
 Hao Tang, Shanghai Jiao Tong University, China
 Jinshi Xu, University of Science and Technology of China, China
 Man-hong Yung, Southern University of Science and Technology, China

General Information

Conference Venue: Convention Centre, Sofitel Xi'an on Renmin Square Hotel
 Address: 319 Dong Xin Street, XI'AN, 710004, Shaanxi, CHINA

Speaker Preparation

Oral, invited and keynote speakers should arrive the session room 30 min prior to your talk to upload and check you slides.

- for plenary talk (40 min)
- for keynote talk (45 min)
- for invited talk (30 min)
- for oral talk (15 min)

Poster Preparation

Authors are required to stand by their poster during the poster session for discussion. Please make sure to print your mobile tel. and email in the poster, because the conference staff will contact the winner of Best Poster Awards, which will be selected on-site the poster session.

Poster session: 15:30-17:30, July 25 (Sunday)

Poster board size: 0.95 m (length) * 2.47 m (height), recommended poster size: 0.8m * 1.2 m

Set-up time: 8:00-15:30, July 25 (Sunday)

Poster presenters are responsible to remove their poster, the conference staff will not collect the posters left at the end of the poster session.

Please note that any no-show paper will NOT be published or indexed.

Tips

- Scan the QR code below to download the Huitong Conference System APP, and follow the real-time dynamics of the invited talks and the conference schedule.



- Volunteers and staffs are in blue T-shirts. You can go to registration desk or the CLP service center if you need any help.
- Wifi: Sofitel Convention Centre_Xian (No password, free)
- The meal tickets are printed with badge, please go to the restaurant according to the time and location written in tickets. There are three restaurants for distribution.

- Xi'an 57, 4F, Grand Mercure
- AZUR, 1F, Sofitel
- Arc de Triomphe, 4F, Mercure

Host



Co-organizers



Support Units



Technical Cosponsor:



Sponsors



Photonics Research Workshop

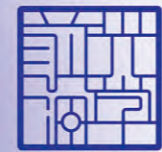
Deep Learning in Photonics

9:00 - 16:45

Jul 23, 2021

Room Nice, F2

Sofitel Convention Center on Renmin Square, Xi'an



OPTICS FRONTIER

CIOP 2021

CONCURRENT EVENTS

Organizers



Zongfu Yu
University of Wisconsin, Madison
USA



Li Gao
Nanjing University of Posts and Telecommunications
China



Yang Chai
The Hong Kong Polytechnic University
China



Darko Zibar
Technical University of Denmark
Denmark



Shuiying Xiang
Xidian University
China

Invited Speakers



Jing Han
Nanjing University of Science and Technology, China



Yueqiang Hu
Hunan University, China



Pu Li
Taiyuan University of Technology, China



Ruifeng Liu
Xi'an Jiaotong University, China



Yongmin Liu
Northeastern University, USA



Chao Qian
Zhejiang University, China



Junsuk Rho
Pohang University of Science and Technology, Korea



Guohai Situ
Shanghai Institute of Optics and Fine Mechanics, CAS, China



Xiaochen Sun
Xi'an Institute of Optics and Precision Mechanics, CAS, China



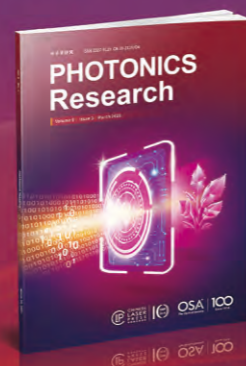
Peter Wiecha
Université de Toulouse, France



Shuiying Xiang
Xidian University, China



Weijian Yang
University of California, Davis, USA



2020 Impact Factor

7.080

Hosts



Chinese Optics Letters Workshop

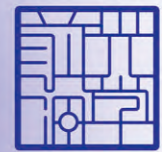
Lithium Niobate Based Photonic Devices

9:00 - 16:45

Jul 23, 2021

Room Lyon, F2

Sofitel Convention Center on Renmin Square, Xi'an



OPTICS FRONTIER

CIOP 2021

CONCURRENT EVENTS

Organizers



Feng Chen
Shandong University
China



Yuping Chen
Shanghai Jiao Tong University
China

Invited Speakers



Fang Bo
Nankai University, China



Xinlun Cai
Sun Yat-sen University, China



Rui Ge
Shanghai Jiao Tong University, China



Hui Hu
Shandong University, China



Xiaopeng Hu
Nanjing University, China



Yuechen Jia
Shandong University, China



Qiang Lin
University of Rochester, USA



Yan Sheng
Australian National University, Australia



Cheng Wang
City University of Hong Kong, China



Jinsong Xia
Huazhong University of Science and Technology, China



Yuanlin Zheng
Shanghai Jiao Tong University, China

Special Issue on
Lithium Niobate Based Photonic Devices



2020 Impact Factor

2.448

Hosts



光电产业高峰论坛 光电“芯”未来

14:00 - 16:30

Jul 23, 2021

巴黎厅 2楼

西安索菲特人民大厦, 会议中心

论坛主席



黄翊东 教授
清华大学



OPTICS
FRONTIER

CIOP
2021

CONCURRENT
EVENTS

在当前的国际形势下, 发展拥有自主知识产权的新型光电芯片具有特别重要的意义。光电产业高峰论坛——光电“芯”未来围绕创新成果的产业化突破, 邀请了国内新型光电芯片企业负责人, 同聚一堂、共话发展。

主持人 | 黄翊东 清华大学

邀请报告

14:00-14:20

The open access platform for photo-electrical chips

郭进 | 联合微电子中心有限责任公司

邀请报告

14:20-14:40

用科技之光, 创造美好生活

张贤鹏 | 深圳光峰科技股份有限公司

邀请报告

14:40-15:00

MEMS LiDAR will lead the commercialization of LIDAR for automotive in the next ten years

石拓 | 北京一径科技有限公司

15:00-15:30

Coffee Break

邀请报告

15:30-15:50

光电子芯片科研成果转化的中试平台

曲迪 | 华慧芯科技(天津)有限公司

邀请报告

15:50-16:10

3D感知对AIoT架构的重定义

朱力 | 深圳市光鉴科技有限公司

邀请报告

16:10-16:30

超光谱成像芯片—让光谱感知无处不在

王宇 | 北京与光科技有限公司

与主编面对面

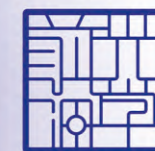
科技论文的准备与写作要点

19:00 - 21:00

Jul 23, 2021

尼斯厅 2楼

西安索菲特人民大厦



OPTICS
FRONTIER

CIOP
2021

CONCURRENT
EVENTS

内容简介

学位与学术论文的特点及基本要求

论文撰写准备

论文写作要点

论文自审与修改

《光学学报》期刊简介

主讲人简介

西北工业大学理学院教授, 光学工程和物理学学科带头人、博士生导师, 超常条件材料物理与化学教育部重点实验室、陕西省光信息技术重点实验室主任。《光学学报》执行主编, 兼任中国光学学会理事, 全息与光信息处理专业委员会主任, 光学教育专业委员会、高速摄影与光子学专业委员会副主任, 中国仪器仪表学会光机电系统与集成分会副理事长, 陕西省光学学会、物理学会副理事长。



主讲人 | 赵建林 教授
《光学学报》执行主编



EI收录

1.659

2020年影响因子 (CJCR)

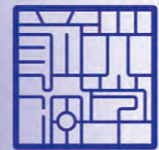
Meet CLP's Editors & Enjoy Xi'an Snacks

at CIOP 2021 Poster Section Area

15:30-16:30

July 25, 2021

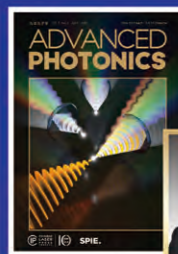
Poster section area at Conference Center, 1F
Sofitel Convention Center on Renmin Square, Xi'an



OPTICS FRONTIER

CIOP 2021

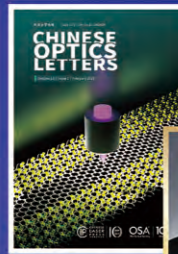
CONCURRENT EVENTS



Xiacong(Larry) Yuan
Advanced Photonics
Shenzhen University



Jianlin Zhao
Acta Optica Sinica
Northwestern Polytechnical University



Feng Chen
Chinese Optics Letters
Shandong University



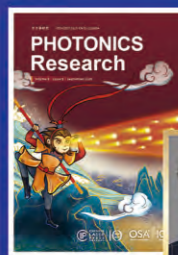
Jianrong Qiu
Laser & Optoelectronics Progress
Zhejiang University



Lei Zhou
Photonics Insights
Fudan University



Pu Zhou
Chinese Journal of Lasers
National University of Defense Technology



Yu-Ao Chen
Photonics Research
University of Science and Technology of China



Local snacks and beverages will be served.

Opening Ceremony & Plenary Talks

President: **Zhiyi Wei**, Institute of Physics, CAS, China

08:30-08:40	Opening Ceremony
08:40-08:50	Editor-in-Chief Choice Award

President: **Jianlin Zhao**, Northwestern Polytechnical University, China

08:50-09:30	Metasurfaces for controlling light Lei Zhou Fudan University, China
09:30-10:10	Nonlinear effects in multimode fibers Govind P. Agrawal University of Rochester, United States

10:10-10:25 Group Photo & Coffee Break

President: **Jianrong Qiu**, Zhejiang University, China

10:25-11:05	Quantum Leap: Global quantum communication network and future aspects Yuao Chen University of Science and Technology of China, China
11:05-11:45	Integrated ultra-low linewidth stabilized lasers and applications Daniel Blumenthal University of California, Santa Barbara, United States
11:45-12:25	Imaging melanin quantitatively using label-free third-harmonic-generation enhancement-ratio microscopy Chi-Kuang Sun Taiwan University, China

SC1. Light–Matter Interactions		Dijon Room, 2F July 24, 2021
Presider: Huailiang Xu, Jilin University, China		
14:00–14:45	Femtosecond laser micro/nano engineering manufacturing (Keynote) Feng Chen, Xi'an Jiaotong University, China	
14:45–15:15	High efficiency 3D Femtosecond laser microfabrication based on spatial light modulation (Invited) Dong Wu, University of Science and Technology of China, China	
15:15–15:45	Study on femtosecond laser filament phenomenon for in-Orbit applications (Invited) Xun Liu, Beijing Institute of Space Mechanics and Electricity, China	
15:45–16:15	Laser Induced Nanojoining of Nanowires (Invited) Jianlei Cui, Xi'an Jiaotong University, China	
16:15–16:30	Coffee Break	
Presider: Dong Wu, University of Science and Technology of China, China		
16:30–17:00	Super resolution maskless projection lithography for cross-scale micronano structures (Invited) Meiling Zheng, Technical Institute of Physics and Chemistry, CAS, China	
17:00–17:30	Laser technologies enable flexible mechatronics (Invited) Dongdong Han, Jilin University, China	
17:30–17:45	Experimental study on laser cleaning of pollutants on the surface of ceramic relics (Oral) Cong Wang, Aerospace Information Research Institute, CAS, China; University of Chinese Academy of Sciences, China	CIOP2021-2021-000222
17:45–18:00	Fundamental studies of high Sn content GeSn induced by femtosecond laser (Oral) Suyuan Wang, Civil Aviation University of China, China	CIOP2021-2021-000403
19:00–21:00	Welcome Banquet	

SC1. Light–Matter Interactions		Dijon Room, 2F July 25, 2021
Presider: Feng Chen, Xi'an Jiaotong University, China		
08:30–09:00	Surface micro-nano structures processing with temporal/spatial shaping femtosecond laser (Invited) Xiaowei Li, Beijing Institute of Technology, China	
09:00–09:30	Ultrafast Imaging of Spontaneous Symmetry Breaking in Molecules (Invited) Zheng Li, Peking University, China	
09:30–10:00	Physics of the semiconductor ultrafast laser annealing in the post-Moore era (Invited) Junwei Luo, Institute of Semiconductors CAS, China	
10:00–10:15	Detection of buried nanostructures through optically opaque layers by light-driven hypersound (Oral) Hao Zhang, Advanced Research Center for Nanolithography, Netherlands; Northwestern Polytechnical University, China	CIOP2021-2021-000344
10:15–10:30	Coffee Break	

SC1. Light–Matter Interactions		Dijon Room, 2F July 26, 2021
Presider: Xiaowei Li, Beijing Institute of Technology, China		
10:30–11:00	Opto-thermo-mechanic coupling in micro-manipulation and manufacturing (Invited) Linhan Lin, Tsinghua University, China	
11:00–11:30	Material structuring using ultrafast laser non-diffractive beams (Invited) Guanghua Cheng, Northwestern Polytechnical University, China	
11:30–11:45	Thermal analysis of water-cooling channel structure under high power laser (Oral) Shuzhen Nie, Aerospace Information research institute, CAS, China	CIOP2021-2021-000238
11:45–12:00	Imbert–Fedorov shift of elliptically polarized light reflected at air-graphene interface (Oral) Ze Chen, Beijing University of Posts and Telecommunications, China	CIOP2020-2020-000001
12:00–13:30	Lunch Break	
Presider: Yangjian Cai, Soochow University & Shandong Normal University, China		
13:30–14:00	Strong field-induced air lasing (Invited) Huailiang Xu, Jilin University, China	
14:00–14:30	Nonlinear optical studies on low dimensional structures (Invited) Weitao Liu, Fudan University, China	
14:30–15:00	Ultrafast rotating femtosecond beating laser field and its application prospect (Invited) Shixiang Xu, Shenzhen University, China	
15:00–15:15	Plasmon driven micro-nano crystal transformation (Oral) Chengyun Zhang, Xi'an University of Posts & Telecommunications, China	CIOP2021-2021-000375
15:15–15:30	Self-organized phase transition lithography for all-inorganic photonic textures (Oral) Bo Zhang, Zhejiang University, China	CIOP2021-2021-000156
15:30–17:30	Poster Session & Coffee Break	

SC1. Light–Matter Interactions		Dijon Room, 2F July 26, 2021
Presider: Qiang Wu, Nankai University, China		
08:30–09:00	Synthesis of light source with novel coherence structure (Invited) Yangjian Cai, Soochow University & Shandong Normal University, China	
09:00–09:30	Regular periodic surface structures efficiently induced on by femtosecond laser (Invited) Tianqing Jia, East China Normal University, China	
09:30–10:00	Optical limiting properties of nonlinear laser protection materials (Invited) Chunrui Wang, Changchun Institute of Optics, Fine Mechanics and Physics, CAS, China	
10:00–10:15	Analytical model and solution illustrating classical optical contribution to giant spectral splitting in strongly-coupled micro/naoncavity-atom system (Oral) Jian Zeng, South China University of Technology, China	CIOP2021-2021-000450
10:15–10:30	Coffee Break	

Presider: Honghua Fang , Tsinghua University, China	
10:30–11:00	Graphene metamaterials and photonic devices (Invited) Baohua Jia, Swinburne University of Technology, Australia
11:00–11:30	High quality diamond deposition based on laser-enabled resonant vibrational excitation of critical growth radicals (Invited) Lisha Fan, Zhejiang University of Technology, China
11:30–11:45	Interactions between stratified chiral particles optically trapped in high-order Bessel beams (Oral) Bai Jing, Xi'an University of Posts & Telecommunications, China CIOP2021-2021-000514
12:00–13:30	Lunch Break
Presider: Tianqing Jia , East China Normal University, China	
13:30–14:00	Engineering the exciton emission of layered materials with hexagonal boron nitride (Invited) Honghua Fang, Tsinghua University, China
14:00–14:30	Quartz-tuning-fork detection based trace gas sensing (Invited) Yufei Ma, Harbin Institute of Technology, China
14:30–14:45	Superwetting oil/water separation surfaces fabricated by femtosecond laser (Oral) Jie Liang, Xi'an Jiaotong University, China CIOP2021-2021-000463
14:45–15:00	High-speed processing of silicon carbide ceramic by high repetition frequency femtosecond laser (Oral) Jian Zhang, Laser Fusion Research Center, China CIOP2021-2021-000426
15:00–15:15	A Flexible circuit fabricated by tuning the wettability of liquid metal (Oral) Chengjun Zhang, Xi'an Jiaotong University, China CIOP2021-2021-000462

SC2. Plasmonics and Metamaterials		Rodin Room, 1F July 24, 2021
Presider: Hui Liu , Nanjing University, China		
14:00–14:45	High dimensional quantum optical meta-device (Keynote) Din-Ping TSAI, The Hong Kong Polytechnic University, China	
14:45–15:15	Constructing active metasurfaces and dynamically tunable metadevices based on phase change materials (Invited) Ruwen Peng, Nanjing University, China	
15:15–15:45	Radiation-type metasurfaces for advanced electromagnetic controlling (Invited) Weixiang Jiang, Southeast University, China	
15:45–16:00	Manipulating circularly polarized electromagnetic wave with helicity-selective metasurface (Oral) Chen Ke, Nanjing University, China CIOP2021-2021-000711	
16:00–16:15	Single-shot optical multi-parameter detector based on dielectric metalens array (Oral) Tie Hu, Huazhong University of Science and Technology, China CIOP2021-2021-000498	
16:15–16:30	Coffee Break	
Presider: Weixiang Jiang , Southeast University, China		
16:30–17:00	Metamaterial based photonic devices (Invited) Xiaoyong Hu, Peking University, China	
17:00–17:30	Circuit-based hyperbolic metamaterials and their applications (Invited) Hong Chen/ Zhiwei Guo, Tongji University, China	
17:30–18:00	Free electron radiation based on plasmonic structures and metamaterials (Invited) Fang Liu, Tsinghua University, China	
18:00–18:15	All-optical logic gate and routing based on Stern-Gerlach-like effect of surface polaritons soliton in a planar metamaterial waveguide (Oral) Qi Liu, Peking University, China; Beijing Academy of Quantum Information Sciences, China CIOP2021-2021-000343	
18:15–18:30	Efficient generation of complex vectorial optical fields with metasurfaces (Oral) Dongyi Wang, Fudan University, China CIOP2021-2021-000764	
19:00–21:00	Welcome Banquet	

SC2. Plasmonics and Metamaterials		Rodin Room, 1F July 25, 2021
Presider: Xiaoyong Hu, Peking University, China		
08:30–09:15	Higher-order photonic topological states and their applications (Keynote) Xiangdong Zhang, Beijing Institute of Technology, China	
09:15–09:45	Probing rotated Weyl physics on nonlinear lithium niobate-on-insulator chips (Invited) Hui Liu, Nanjing University, China	
09:45–10:15	Manipulating light with guided resonances of photonic crystal slab (Invited) Meng Xiao, Wuhan University, China	
10:15–10:30	Coffee Break	
Presider: Xiangdong Zhang, Beijing Institute of Technology, China		
10:30–11:00	Observation of exceptional nexus and its topological property (Invited) Kun Ding, Fudan University, China	
11:00–11:30	Optical trapping and binding from a non-hermitian perspective (Invited) Zhihui Wu, Southern University of Science and Technology, China	
11:30–12:00	Studies of synthetic frequency dimension in modulated ring resonators (Invited) Luqi Yuan, Shanghai Jiao Tong University, China	
12:00–12:15	Coupling phase transition based on topological hybrid nanocavity (Oral) Hongyu Zhang, Beijing Institute of Technology, China	CIOP2021-2021-000003
12:15–13:30	Lunch Break	
Presider: Kun Ding, Fudan University, China		
13:30–14:00	Polarization vortices in momentum space and bound states in the continuum (Invited) Lei Shi, Fudan University, China	
14:00–14:30	Low-loss zero-index metamaterials based on bound states in the continuum (BIC) (Invited) Yang Li, Tsinghua University, China	
14:30–15:00	Symmetry, constraints and invariance of light scattering for finite-size scattering objects (Invited) Yuntian Chen, Huazhong University of Science and Technology, China	
15:00–15:15	Topological photonic states in magneto-optical microstructures (Oral) Jianfeng Chen, South China University of Technology, China	CIOP2021-2021-000376
15:15–15:30	Nesting and degeneracy of mie resonances of dielectric cavities within zero-index materials (Oral) Yun Ma, Peking University, China	CIOP2021-2021-000328
15:30–15:45	Metasurfaces with planar chiral meta-atoms for spin light manipulation (Oral) Chen Chen, Nanjing University, China	CIOP2021-2021-000766
15:30–17:30	Poster Session & Coffee Break	

SC2. Plasmonics and Metamaterials		Rodin Room, 1F July 26, 2021
Presider: Min Qiu, Westlake University, China		
08:30–09:00	Evaluation of quantum and optical interaction contribution to the giant spectral splitting in a strongly-coupled micro/nanocavity system (Invited) Zhiyuan Li, South China University of Technology, China	
09:00–09:30	Gain and loss in plasmonic nanolasers (Invited) Renmin Ma, Peking University, China	
09:30–09:45	Theoretical model for plasmonic nanolasers with arbitrary-shaped nanocavity (Oral) Yixiao Gao, Ningbo University, China	CIOP2021-2021-000177
09:45–10:00	Angle-selective perfect absorber based on THz metasurface (Oral) Tong Liu, Fudan University, China	CIOP2021-2021-000765
10:00–10:15	High SERS active substrate fabrication through self-assembly method (Oral) Kangzhe Zhao, Xi'an University of Posts and Telecommunications, China	CIOP2021-2021-000475
10:15–10:30	Coffee Break	
Presider: Zhiyuan Li, South China University of Technology, China		
10:30–11:00	Micro-scale opto-thermo-mechanical actuation in the dry adhesive regime (Invited) Min Qiu, Westlake University, China	
11:00–11:30	Super-Planckian near-field thermal radiation between hyperbolic metamaterials (Invited) Yungui Ma, Zhejiang University, China	
11:30–11:45	Probing non-hermitian bound states with angle-resolved thermal emission (Oral) Fan Zhong, Nanjing University, China	CIOP2021-2021-000318
11:45–12:00	Ultra-broadband and wide field-of-view enhanced polarimetric infrared detection using a plasmonic gold structure (Oral) Ehab Awad, King Saud University, Saudi Arabia	CIOP2021-2021-000079
12:00–13:30	Lunch Break	
Presider: Yungui Ma, Zhejiang University, China		
13:30–14:00	Direct observation and control of resonances in silicon microdisks (Invited) Qinghai Song, Harbin Institute of Technology, China	
14:00–14:30	Recent advances in tailoring light with subwavelength structures (Invited) Jian Wang, Huazhong University of Science and Technology, China	
14:30–15:00	Deep subwavelength control of circularly polarized light by cathodoluminescence nanoscopy (Invited) Zheyu Fang, Peking University, China	
15:00–15:15	Femtosecond field-driven on-chip unidirectional electronic currents in nonadiabatic tunneling regime (Oral) Liping Shi, Westlake University, China	CIOP2021-2021-000565
15:15–15:30	Coffee Break	

Presider: Qinghai Song , Harbin Institute of Technology, China	
15:30–16:00	Topology-induced phase transitions in spin-orbit optics (Invited) Xiaohui Ling, Hengyang Normal University, China
16:00–16:15	Research on intelligent photonic computing chips (Oral) Kun Liao, Peking University, China CIOP2021-2021-000056
16:15–16:30	Controllable generation of large-scale highly-regular gratings on Si films (Oral) Jiao Geng, Westlake University, China CIOP2021-2021-000445
16:30–16:45	Structured continuous thick metal film with largely enhanced transmission (Oral) Yadong Zhou, China Jiliang University, China CIOP2021-2021-000080

SC3. Ultrafast and Nonlinear Phenomena		Marselilles Room, 2F July 24, 2021
Presider: Wenjun Liu , Beijing University of Posts and Telecommunications, China		
14:00–14:45	Ultrafast laser: toward high average power and short pulse duration (Keynote) Zhiyi Wei, Institute of Physics, CAS, China	
14:45–15:15	Bright high-order harmonic generation with high power laser system (Invited) Zhinan Zeng, Shanghai Institute of Optics and Fine Mechanics, CAS, China	
15:15–15:45	Integrated spontaneous quasi-phase-matching in a lithium niobate micro-racetrack resonator (Invited) Yuping Chen, Shanghai Jiao Tong University, China	
15:45–16:00	Enhancement of UV harmonic generation based on bonding-crystal interface (Oral) Yan Guan, Shanghai Jiao Tong University, China CIOP2021-2021-000536	
16:00–16:15	High-resolution ballistic imaging using a subtractive optical Kerr gate (Oral) Yipeng Zheng, Xi'an University of Posts & Telecommunications, China CIOP2021-2021-000473	
16:15–16:30	Coffee Break	
Presider: Zhiyi Wei , Institute of Physics, CAS, China		
16:30–17:00	Angular resolved molecular Charge Migration in the attosecond regime (Invited) Pengfei Lan, Huazhong University of Science and Technology, China	
17:00–17:30	Following phonon dynamics in solids using high-harmonic spectroscopy (Invited) Tran Trung Luu, The University of Hong Kong, China	
17:30–18:00	Femtosecond generation and nonlinear control in fiber laser (Invited) Wenjun Liu, Beijing University of Posts and Telecommunications, China	
18:00–18:15	GW peak-power, pre-chirp managed divided-pulse amplification using composite birefringent plates for pulse division and recombination (Oral) Runzhi Chen, Institute of Physics CAS, China CIOP2021-2021-000246	
18:15–18:30	The effect of ultra-short laser pulse on photoacoustic signal based on finite element analysis (Oral) Jiahao Zeng, Nanchang University, China CIOP2021-2021-000769	
19:00–21:00	Welcome Banquet	

SC3. Ultrafast and Nonlinear Phenomena		Marselilles Room, 2F July 25, 2021
Presider: Yuxi Fu, Xi'an Institute of Optics and Precision Mechanics, CAS, China; Attosecond Science Research Team, RIKEN, Japan		
08:30–09:15	Terahertz driven electron and X-ray sources (Keynote) Franz Kaertner, DESY, Germany	
09:15–09:45	Active spintronic-metasurface terahertz emitters with tunable chirality (Invited) Zhensheng Tao, Fudan University, China	
09:45–10:15	Dissociative single and double ionization of molecules clocked by an ultrafast stopwatch (Invited) Shengzhe Pan, East China Normal University, China	
10:15–10:30	Coffee Break	
Presider: Zhensheng Tao, Fudan University, China		
10:30–11:00	High-energy soft X-ray attosecond pulses (Invited) Yuxi Fu, Xi'an Institute of Optics and Precision Mechanics (XIOPM), CAS, China; Attosecond Science Research Team, RIKEN, Japan	
11:00–11:30	Phase of high-order harmonics, from gas to solids (Invited) Xinkui He, Institute of Physics, CAS, China	
11:30–12:00	High-precision timing synchronization technique and its applications (Invited) Ming Xin, Tianjin University, China	
12:00–12:15	Energetic femtosecond pulses based on SPM-enabled spectral selection for SLAM biomedical imaging (Oral) Yuting Xing, Institute of Physics CAS, China CIOP2021-2021-000221	
12:15–13:30	Lunch Break	
Presider: Xinkui He, Institute of Physics, CAS, China		
13:30–14:00	Laser spectroscopy of lead halide perovskites: fundamentals (Invited) Tian Jiang, National University of Defense Technology, China	
14:00–14:30	Attosecond water-window XANES (Invited) Jens Biegert, ICFO – The Institute of Photonic Sciences, Spain	
14:30–15:00	Topological corner state laser in kagome waveguide arrays (Invited) Yiqi Zhang, Xi'an Jiaotong University, China	
15:00–15:15	Analysis of a higher-energy structure in nanotip enhanced fields (Oral) Xuzhen Gao, Xi'an Institute of Optics and Precision Mechanics of CAS, China CIOP2021-2021-000407	
15:15–15:30	Nonlinear optical enhancement and origin of BP/Ag nanohybrids (Oral) Baohua Zhu, Henan University, China CIOP2021-2021-000180	
15:30–15:45	Soliton metamorphosis dynamics in ultrafast fiber lasers (Oral) Zhiwen He, Northwestern Polytechnical University, China CIOP2021-2021-000700	
15:45–16:00	Cascaded harmonic generation in a periodically poled lithium niobate ridge waveguide (Oral) Chuanyi Lu, Shanghai Jiao Tong University, China CIOP2021-2021-000522	
16:00–17:30	Poster Session & Coffee Break	

SC3. Ultrafast and Nonlinear Phenomena		Marselilles Room, 2F July 26, 2021
Presider: Wei Liu, Sun Yat-Sen University, China		
08:30–09:00	A complete model for epsilon-near-zero optical nonlinearity (Invited) Ting Mei, Northwestern Polytechnical University, China	
09:00–09:30	Extreme nonlinear optics, EUV lasers and its applications (Invited) Xiaoshi Zhang, The Aerospace Information Research Institute, CAS, China	
09:30–10:00	High-harmonic generation from topological insulators and monolayer molybdenum disulfide (Invited) Ya Bai, Shanghai Institute of Optics and Fine Mechanics, CAS, China	
10:00–10:15	Dispersed pulses created by aperiodic binary spectral phase jump and applications for pulse shaping (Oral) Xin Liu, Xi'an Institute of Optics and Precision Mechanics, CAS, China CIOP2021-2021-000423	
10:15–10:30	Coffee Break	
Presider: Ting Mei, Northwestern Polytechnical University, China		
10:30–11:00	High power femtosecond Yb solid state lasers and nonlinear frequency conversion (Invited) Jiangfeng Zhu, Xidian University, China	
11:00–11:30	Ultrafast lasers for FEL facilities (Invited) Wei Liu, Sun Yat-Sen University, China	
11:30–12:00	Detection and control of optical spin-orbit interaction of strong laser fields (Invited) Yunquan Liu, Peking University, China; Peking University Yangtze Delta Institute of Optoelectronics, China	
12:00–12:15	Spatio-temporal characterization of ultrashort vortex laser pulses using modified TERMITES technique (Oral) Jinyu Pan, Shanghai Institute of Optics and Fine Mechanics, CAS, China CIOP2021-2021-000733	
12:15–12:30	The generation and rotation of filaments array by interfering vortex beams (Oral) Dongwei Li, Shandong Normal University, China CIOP2021-2021-000573	
12:30–13:30	Lunch Break	

SC4. Solid State, Fiber, and Other Laser Sources		Nice Room, 2F July 24, 2021
Presider: Zhichuan Niu, Institute of Semiconductors, CAS, China		
14:00–14:45	2 μm GaSb-based semiconductor laser sources (Keynote) Chongyang Liu/ Xiang Li, Nanyang Technological University, Singapore	
14:45–15:15	Coherent control of the multiple wavelength lasing of N_2^+ : coherence transfer and beyond (Invited) Yi Liu, University of Shanghai for Science and Technology, China	
15:15–15:45	From CPA to MPC: Novel pulse compressor for 10–100 s PW lasers (Invited) Jun Liu, Shanghai Institute of Optics and Fine Mechanics, CAS, China	
15:45–16:15	Recent advances on waveguide lasers based on low-dimensional saturable-absorber materials (Invited) Feng Chen, Shandong University, China	
16:15–16:30	Coffee Break	
Presider: Jun Liu, Shanghai Institute of Optics and Fine Mechanics, CAS, China		
16:30–17:00	High-power ultrafast pre-chirp managed Yb-fiber amplifiers towards GW peak power (Invited) Guoqing Chang, Institute of Physics, CAS, China	
17:00–17:30	Hybrid-structure ultrafast fiber lasers (Invited) Dong Mao, Northwestern Polytechnical University, China	
17:30–17:45	Single-shot resolving soliton interaction in harmonic mode-locked laser (Oral) Tianhao Xian, Shanghai Jiao Tong University, China	CIOP2021-2021-000206
17:45–18:00	Subring-wavelength multidimensional multiplexing for quad-comb generation from an integrated dual-ring mode-locked laser (Oral) Hao Sun, Harbin Institute of Technology, China	CIOP2021-2021-000183
19:00–21:00	Welcome Banquet	

SC4. Solid State, Fiber, and Other Laser Sources		Nice Room, 2F July 25, 2021
Presider: Feng Chen, Shandong University, China		
08:30–09:15	Brake-throughs in surface emitting lasers for green data com and internet (Keynote) Sicong Tian, Changchun Institute of Optics, Fine Mechanics and Physics, CAS, China; Technische Universität Berlin, Germany	
09:15–09:45	High Power fiber femtosecond laser and its applications (Invited) Minglie Hu, Tianjin University, China	
09:45–10:00	Hundred microjoule femtosecond fiber chirped pulse amplification laser system (Oral) Qikai Zhao, Shandong University, China	CIOP2021-2021-000262
10:00–10:15	Adaptive mode control in LMA fiber laser with a photonic lantern (Oral) Wenguang Liu, National University of Defense Technology, China	CIOP2021-2021-000218
10:15–10:30	Coffee Break	
Presider: Minglie Hu, Tianjin University, China		
10:30–11:00	High-power hybrid GaN-based green laser diode with ITO cladding layer (Invited) Jianping Liu, Suzhou Institute of Nano-tech and Nano-bionics, CAS, China	
11:00–11:15	Mid-infrared femtosecond optical vortices generated by optical parametric oscillators (Oral) Hui Tong, Shanghai Jiao Tong University, China	CIOP2021-2021-000116
11:15–11:30	High-efficiency 150 W-level Yb:YAG single-crystal fiber CPA system by adopting dual-wavelength pumping method (Oral) Shang Wang, Shandong University, China	CIOP2021-2021-000073
11:30–11:45	Intensity noise suppression by feed back loop system towards the space-borne laser interferometer (Oral) Fan Li, Shanxi University, China	CIOP2021-2021-000205
11:45–12:00	Design and research of dot array structured light projector based on bottom-emitting vertical cavity surface emitting laser (Oral) Renjie Ruan, Beijing University of Technology, China	CIOP2021-2021-000454
12:00–13:30	Lunch Break	
Presider: Jinwei Zhang, Huazhong University of Science and Technology, China		
13:30–14:00	Mid-infrared high-power ultrafast fluoride fiber laser: progress and prospect (Invited) Guoqiang Xie, Shanghai Jiao Tong University, China	
14:00–14:30	Research on antimonide semiconductor lasers emitting from 2 to 4 μm (Invited) Chengao Yang, Institute of Semiconductors, CAS, China	
14:30–15:00	Advances in multi-wavelength ultrafast photonics: status and prospect (Invited) Bo Guo, Harbin Engineering University, China	
15:00–15:15	Asymmetric four-grating compressor for 10 s to 100 s PW lasers (Oral) Xiong Shen, Shanghai Institute of Optics and Fine Mechanics, CAS, China	CIOP2021-2021-000288
15:30–17:30	Poster Session & Coffee Break	

SC4. Solid State, Fiber, and Other Laser Sources		Nice Room, 2F July 26, 2021
Prisider: Chengao Yang, Institute of Semiconductors, CAS, China		
08:30–09:00	Sub-optical-cycle parametric synthesizer controlling directly isolated attosecond pulses (Invited) Giovanni Cirimi, DESY, Germany	
09:00–09:30	Recent research progress on compound glass materials related photonic devices at ALL of HEU (Invited) Pengfei Wang, Harbin Engineering University, China	
09:30–10:00	Advance in high power narrow-linewidth fiber lasers (Invited) Pu Zhou, National University of Defense Technology, China	
10:00–10:15	2-GHz watt-level Kerr-lens mode-locked Yb:KGW laser (Oral) Zheng Li, Xidian University, China	CIOP2021-2021-000208
10:15–10:30	Coffee Break	
Prisider: Pu Zhou, National University of Defense Technology, China		
10:30–11:00	Quantum cascade topological lasers (Invited) Qijie Wang, Nanyang Technological University, Singapore	
11:00–11:30	High power Kerr-lens mode-locked Yb solid-state laser (Invited) Wenlong Tian, Xidian University, China	
11:30–12:00	Advanced mid-infrared semiconductor lasers enabled by photonics integration (Invited) Ruijun Wang, Sun Yat-sen University, China	
12:00–13:30	Lunch Break	
Prisider: Wenlong Tian, Xidian University, China		
13:30–14:00	Kerr-lens mode locked thin-disk oscillators (Invited) Jinwei Zhang, Huazhong University of Science and Technology, China	
14:00–14:30	High energy THz pulse generated by Ti:sapphire femtosecond laser filamentation (Invited) Weiwei Liu, Nankai University, China	
14:30–15:00	3.44 kW narrow-linewidth one-stage MOPA fiber lasers (Invited) Zefeng Wang, National University of Defense Technology, China	
15:00–15:15	100 hertz high energy KTiOAsO ₄ dual-wavelength optical parametric oscillator (Oral) Jun Meng, Shandong University, China	CIOP2021-2021-000264
15:15–15:30	Coffee Break	
Prisider: Dong Mao, Northwestern Polytechnical University, China		
15:30–16:00	Monolithic III-V quantum dot laser in silicon photonics (Invited) Siming Chen, University College London, United Kingdom	
16:00–16:15	Watt-level passive Q-switching red-diode-pumped Alexandrite laser with SESAM (Oral) Jingchong Wang, Shandong University, Qingdao, China	CIOP2021-2021-000322
16:15–16:30	Review of the laterally coupled distributed feedback semiconductor lasers (Oral) Naiyu Zhang, Changchun University of Science and Technology, China	CIOP2021-2021-000256

SC5. Silicon Photonics		Avignon Room, 2F July 24, 2021
Prisider: Linjie Zhou, Shanghai Jiao Tong University, China		
14:00–14:45	Recent progresses on silicon photonic research (Keynote) Tao Chu, Zhejiang University, China	
14:45–15:15	Topological rainbow for silicon-based nanophotonic chip (Invited) Cuicui Lu, Beijing Institute of Technology, China	
15:15–15:45	Observation of double fano Interference in metal-Insulator block arrays (Invited) Gongli Xiao, Guilin University of Electronic Technology, China	
15:45–16:00	A SiN-Si dual-layer optical phased array with high radiation efficiency and large steering range (Oral) Guangzhen Luo, Institute of Semiconductors, CAS, China; University of Chinese Academy of Sciences, China	CIOP2021-2021-000208
16:00–16:15	Phase-sensitive amplification with high gain based on double slot c-rich SiC waveguides (Oral) Minhui Cai, Xi'an University of Posts & Telecommunications, China	CIOP2021-2021-000572
16:15–16:30	Coffee Break	
Prisider: Tao Chu, Zhejiang University, China		
16:30–17:00	Silicon-based Integrated FMCW phased array LiDAR (Invited) Linjie Zhou, Shanghai Jiao Tong University, China; SJTU-Pinghu Institute of Intelligent Optoelectronics, China	
17:00–17:30	Near-zero-loss optical phase change material enabled reconfigurable silicon photonics (Invited) Juejun Hu, Massachusetts Institute of Technology, United States	
17:30–17:45	Fast Wavelength Locking of Four Micro-ring resonators with hardware multiplexing (Oral) Zhicheng Wang, Huazhong University of Science and Technology, China	CIOP2021-2021-000338
17:45–18:00	Nonvolatile switching in In ₂ Se ₃ -silicon microring resonators (Oral) Tiantian Li, Xi'an University of Posts & Telecommunications, China; University of Delaware, United States	CIOP2021-2021-000391
19:00–21:00	Welcome Banquet	

SC5. Silicon Photonics		Avignon Room, 2F July 25, 2021
Prisider: Xingjun Wang, Peking University, China		
08:30–09:00	Multi-path optical circulators based on silicon integrated metalens (Invited) Lei Bi, Univeristy of Electronic Science and Technology of China, China	
09:00–09:30	Mid-infrared silicon photonics and beyond (Invited) Zhenzhou Cheng, Tianjin University, China	
09:30–10:00	Ultra-narrow linewidth lasers and microcombs based on self-injection locking in integrated photonics (Invited) Lin Chang, University of California, Santa Barbara, United States	
10:00–10:15	Coffee Break	
Prisider: Zhenzhou Cheng, Tianjin University, China		
10:15–10:45	Silicon based athermal arrayed waveguide grating with hybrid strip-slot structure (Invited) Xingjun Wang, Peking University, China	
10:45–11:15	Tunable Silicon integrated photonics based on functional materials (Invited) Faneqa Joaquin, CNM-IMB, Spain	
11:15–11:45	Thick device layer and heterointegration for silicon photonics (Invited) Yu Zheng, Central South University, China	
12:00–13:30	Lunch Break	
Prisider: Lei Bi, Univeristy of Electronic Science and Technology of China, China		
13:30–14:00	From inverse design to implementation of silicon photonics (Invited) Minming Zhang, Huazhong University of Science and Technology, China	
14:00–14:30	Ultra-low threshold InAs/GaAs quantum dot microdisk lasers and 2D photonic crystal lasers on silicon (001) (Invited) Zhaoyu Zhang, The Chinese University of Hong Kong, Shenzhen, China	
14:30–15:00	Overcoming the limitations of silicon photonics: the role of metal oxides (Invited) Xiaowei Guan, Technical University of Denmark, Denmark	
15:00–15:30	Single molecule detection based on lens-free imaging (Invited) Xiangwei Zhao, Southeast University, China	
15:30–17:30	Poster Session & Coffee Break	

SC5. Silicon Photonics		Avignon Room, 2F July 26, 2021
Prisider: Nan Qi, Institute of Semiconductors, CAS, China		
08:30–09:00	Optical phased array based on silicon waveguide for wide-angle beam steering (Invited) Yaocheng Shi, Zhejiang University, China	
09:00–09:30	Energy efficient Si/Ge avalanche photodiodes and links (Invited) Yuan Yuan, Hewlett Packard Labs, United States	
09:30–09:45	Spatiotemporal optical field manipulation using silicon-based metasurfaces (Invited) Cheng Zhang, Huazhong University of Science and Technology, China	
09:45–10:00	Angle-selective perfect absorber based on THz metasurface (Oral) Tong Liu, Fudan University, China	CIOP2021-2021-000765
10:00–10:15	Coffee Break	
Prisider: Cheng Zhang, Huazhong University of Science and Technology, China		
10:15–10:45	Co-design of silicon photonic modulators and CMOS drivers for the high-speed co-packaged optics (CPO) (Invited) Nan Qi, Institute of Semiconductors, CAS, China	
10:45–11:15	Nonlinear photonics in ultra-silicon-rich nitride devices (Invited) Dawn Tan, Singapore University of Technology and Design, Singapore; A*STAR Institute of Microelectronics, Singapore	
11:15–11:45	Novel quantum logic gates on silicon photonic chips (Invited) Xifeng Ren, University of science and technology of China, China	
12:00–13:30	Lunch Break	

SC6. Microwave Photonics		Mondrian Room, 1F July 24, 2021
Presider: Yitang Dai, Beijing University of Posts and Telecommunications, China		
14:00–14:45	High-frequency wideband photonic ADC (Keynote) Zhangyuan Chen, Peking University, China	
14:45–15:15	High-resolution spectral characterization based on dual optical combs: Optical, terahertz and microwave (Invited) Xin Zhao/ Zheng Zheng, Beihang University, China	
15:15–15:45	Integrated microwave photonic sensor and signal processor (Invited) Xiaoke Yi, The University of Sydney, Australia	
15:45–16:00	A field trial of microwave photonic radar system based on photonic arbitrary waveform generator (Oral) Jinghan Yu, Tsinghua University, China CIOP2021-2021-000505	
16:00–16:15	Fully integrated hybrid microwave photonic receiver (Oral) Jiachen Li, Tsinghua University, China CIOP2021-2021-000271	
16:15–16:30	Coffee Break	
Presider: Zhangyuan Chen, Peking University, China		
16:30–17:00	Microwave photonic radar technologies and progress (Invited) Wangzhe Li, Aerospace Information Research Institute, CAS, China	
17:00–17:30	Recent progress on distributed coherent microwave photonic radar - From waveform to network. (Invited) Shangyuan Li, Tsinghua University, China	
17:30–17:45	Microwave photonic based high-resolution ISAR imaging system for high-speed target (Oral) Zhengyuan Zhu, Tsinghua University, China CIOP2021-2021-000418	
17:45–18:00	High-stable photonics-based frequency-quadrupled LFM signal generation for radar applications (Oral) Dingding Liang, East China Normal University, China CIOP2021-2021-000373	
19:00–21:00	Welcome Banquet	

SC6. Microwave Photonics		Mondrian Room, 1F July 25, 2021
Presider: Xiuyou Han, Dalian University of Technology, China		
08:30–09:15	Subwavelength grating waveguide devices for integrated microwave photonics (Keynote) Lawrence R. Chen, McGill University, Canada	
09:15–09:45	Terahertz photonics enabled fiber wireless communications (Invited) Xianbin Yu, Zhejiang University, China	
09:45–10:00	Photonic-enabled high frequency broadband RF canceller based on optical spectrum processing (Oral) Yunlu Xing, Tsinghua University, China CIOP2021-2021-000548	
10:00–10:15	Reconfigurable photonic fractional Fourier transformer (Oral) Shaowen Peng, Tsinghua University, China CIOP2021-2021-000577	
10:15–10:30	Coffee Break	
Presider: Xin Zhao, Beihang University, China		
10:30–11:00	Photonic enabled RF self-interference cancellation technology for In-band full-duplex communications (Invited) Xiuyou Han, Dalian University of Technology, China	
11:00–11:30	The serial optical neural network processor based on coherent light (Invited) Nuannuan Shi, Institute of Semiconductors, CAS, China	
11:30–12:00	Photonics-enabled microwave measurement and detection (Invited) Yang Chen, East China Normal University, China	
12:00–12:15	Wireless channel security monitoring based on integrated all optical channelized receiver (Oral) Kangqi Zhu, Tsinghua University, China CIOP2021-2021-000604	
12:15–13:30	Lunch Break	
Presider: Yang Chen, East China Normal University, China		
13:30–14:00	Fast self-adaptive generic digital linearization for analog microwave photonic systems (Invited) Peixuan Li, Southwest Jiaotong University, China	
14:00–14:30	Recent progress of optoelectronic oscillators (Invited) Tengfei Hao, Institute of Semiconductors, CAS, China	
14:30–15:00	High frequency test probes based on microwave photonics (Invited) Guillermo Carpintero, Universidad Carlos III de Madrid, Spain	
15:00–15:15	Dither-free bias control technique at the null point of the MZM based on power monitoring (Oral) Jing Qu, Beijing University of Posts and Telecommunications, China CIOP2021-2021-000610	
15:15–15:30	Generation of a coherent distributed radio frequency array: ultra-high accuracy parallel synchronization of 8 endpoints (Oral) Yiwen Lu, Beijing University of Posts and Telecommunications, China CIOP2021-2021-000510	
15:30–17:30	Poster Session & Coffee Break	

SC6. Microwave Photonics		Mondrian Room, 1F July 26, 2021
Presider: Xianbin Yu, Zhejiang University, China		
08:30–09:00	Hybrid integrated high-performance microwave photonic filter with switchable response (Invited) Xingjun Wang, Peking University	
09:00–09:30	High-performance optical vector analyzer based on linearly-frequency-modulated waveform (Invited) Bin Wang, Beijing Institute of Technology, China	
09:30–09:45	Microwave vector signal generation based on an optoelectronic oscillator incorporating a dual-polarization quadrature phase-shift keying modulator (Oral) Mei Xu, Beijing Institute of Technology, China	CIOP2021-2021-000345
09:45–10:00	Tunable optical delay line using silicon-based micro-disk resonators (Oral) Yuwen Xu, Beijing Institute of Technology, China	CIOP2021-2021-000606
10:00–10:15	High-performance self-powered fiber-integrated photodetector based on graphene/PdSe ₂ heterostructures (Oral) Wenguo Zhu, Jinan University, China	CIOP2021-2021-000579
10:15–10:30	Coffee Break	
Presider: Xingjun Wang, Peking University		
10:30–11:00	Silicon-based integrated microwave photonic chips (Invited) Weifeng Zhang, Beijing Institute of Technology, China	
11:00–11:30	Programmable spectral phase editing with resolution towards MHz level (Invited) Yitang Dai, Beijing University of Posts and Telecommunications, China	
11:30–11:45	Measurement of the absolute time delay of radio-over-free-space-optical links via phase-derived method (Oral) Zhongyang Xu, Nanjing University of Aeronautics and Astronautics, China	CIOP2021-2021-000176
11:45–12:00	Optically-carried electrical signal synthesis with up to THz frequency tunability and uniform phase noise (Oral) Hao Guo, Beihang University, China	CIOP2021-2021-000566
12:00–12:15	Photonic generation of mm-wave joint radar-communication signal using directly spread phase-coding (Oral) Wenlin Bai, Southwest Jiaotong University, China	CIOP2021-2021-000616
12:15–13:30	Lunch Break	
Presider: Weifeng Zhang, Beijing Institute of Technology, China		
13:30–14:00	Silicon optical tunable delay lines for phased array applications (Invited) Liangjun Lu, Shanghai Jiao Tong University, China	
14:00–14:30	Actively mode-locked optoelectronic oscillator (Invited) Zhiyao Zhang, University of Electronic Science and Technology of China, China	
14:30–15:00	Microcomb-based RF photonic filters (Invited) Jianqi Hu, EPFL, Switzerland	
15:00–15:15	Photonic-assisted programmable high-precision microwave shaper (Oral) Guchang Chen, Beijing University of Posts and Telecommunications, China	CIOP2021-2021-000544
15:15–15:30	Spatial light modulator based on thin film lithium niobate (Oral) Yunfan Wu, Huazhong University of Science and Technology, China	CIOP2021-2021-000574
15:30–15:45	Coffee Break	

Presider: Wangzhe Li, Aerospace Information Research Institute, CAS, China	
15:45–16:15	Fiber-integrated multi-functional optoelectronic device (Invited) Jianhui Yu/ Zhe Chen, Jinan University, China
16:15–16:45	The application direction and future development trend of microwave photonic technology in radar field (Invited) Shen Dong, The 14th Research Institute of China Electronics Technology Group Corporation, China
16:45–17:15	Free-space transmissions in the lower- and upper-terahertz bands assisted with photonics (Invited) Xiaodan Pang, KTH Royal Institute of Technology, Sweden
17:15–17:30	Stable continuous-wave THz vector imaging based on an optical frequency comb (Oral) Zuomin Yang, Zhejiang University, China

CIOP2021-2021-000491

SC7. Micro and Nanophotonics		Lyon Room, 2F July 24, 2021
Presider: Xue Feng, Tsinghua University, China		
14:00–14:45	Exciton Polariton Condensate and Lasing in WS ₂ Microcavities (Keynote) Qihua Xiong, Tsinghua University, China	
14:45–15:15	Exciton Polariton and Continuous-Wave Pumped Lasing of Low Dimensional Perovskite Crystals (Invited) Qing Zhang, Peking University, China	
15:15–15:45	High-quality infrared chalcogenide microsphere resonators (Invited) Pan Wang, Zhejiang University, China	
15:45–16:00	Experimental Measurement of Dynamic Band Structure along a Synthetic Dimension (Oral) Guangzhen Li, Shanghai Jiao Tong University, China CIOP2021-2021-000148	
16:00–16:15	Multi-wavelength magnetic coding of helical luminescence in microsphere cavity (Oral) Bo Peng, University of Electronic Science and Technology of China, China CIOP2021-2021-000364	
16:15–16:30	Coffee Break	
Presider: Qihua Xiong, Tsinghua University, China		
16:30–17:00	Optical Computing with Programmable Linear Transformation on Discrete Phase-coherent Spatial Modes (Invited) Xue Feng, Tsinghua University, China	
17:00–17:30	Holographic secret sharing based on cascaded metasurface (Invited) Lingling Huang, Beijing Institute of Technology, China	
17:30–18:00	Dielectric Metasurfaces Driven by Extreme Micro-Nano Fabrication (Invited) Yueqiang Hu, Hunan University, China	
18:00–18:15	Single-photon quantum optics in atom-waveguide systems (Oral) Luo Jia Wang, Shanghai Jiao Tong University, China CIOP2021-2021-000121	
18:15–18:30	Spin-Momentum-Locked Edge Mode for Topological Vortex Lasing (Oral) Zhenqian Yang, Peking University, China CIOP2021-2021-000502	
19:00–21:00	Welcome Banquet	

SC7. Micro and Nanophotonics		Lyon Room, 2F July 25, 2021
Presider: Yongzhuo Li, Tsinghua University, China		
08:30–09:15	Lasing and field manipulation by non-Hermitian and topological effects (Keynote) Renmin Ma, Peking University, China	
09:15–09:45	Light-matter interaction in semiconductor materials at micro/nanoscale (Invited) Xinfeng Liu, National Center for Nanoscience and Technology (NCNST), China	
09:45–10:00	Stable near-IR multi-wavelength lasing in metallo-dielectric cavity (Oral) Jialu Xu, Tsinghua University, China CIOP2021-2021-000336	
10:00–10:15	Unidirectional transmission of light waves in two-dimensional hexagonal boron nitride photonic crystals (Oral) Min Wu, Taiyuan University of Technology, China CIOP2021-2021-000546	
10:15–10:30	Coffee Break	
Presider: Renmin Ma, Peking University, China		
10:30–11:00	Optical Properties and Light-Emission Devices based on 2D Layered Semiconductors (Invited) Yongzhuo Li, Tsinghua University, China	
11:00–11:30	Optical writing and reading at the nanoscale (Invited) Xiangping Li, Jinan University, China	
11:30–11:45	Detecting optical magnetism using photo-induced magnetic force microscopy (Oral) Jinwei Zeng, Huazhong University of Science and Technology, China CIOP2021-2021-000370	
11:45–12:00	Employing ionic liquid solvent to fabricate perovskite solar cells in ambient air (Oral) Zhi Yang, Xi'an Jiaotong University, China CIOP2021-2021-000578	
12:00–12:15	Coupled cavity-waveguide based on topological corner state and edge state (Oral) Jianjun Liu, Hunan University, China CIOP2021-2021-000776	
12:00–13:30	Lunch Break	
Presider: Xinfeng Liu, National Center for Nanoscience and Technology, China		
13:30–14:00	III-nitride Nanostructures: Towards High Efficiency Deep Ultraviolet Photonics (Invited) Zetian Mi, University of Michigan, United States	
14:00–14:30	Optical studies of single perovskite nanocrystals: permanent dipole, exciton-phonon Coupling, and localized emission (Invited) Xiaoyong Wang, Nanjing University, China	
14:30–15:00	Dynamic behaviors and applications of semiconductor lasers (Invited) Yiyuan Xie, Southwest University, China	
15:00–15:15	High performance topological bulk lasers (Oral) Zengkai Shao, Peking University, China CIOP2021-2021-000542	
15:15–15:30	Integrated heralded single photon source with switchable OAM mode (Oral) Shan Zhang, Tsinghua University, China CIOP2021-2021-000266	
15:30–17:30	Poster Session & Coffee Break	

SC7. Micro and Nanophotonics		Lyon Room, 2F July 26, 2021
Presider: Guoxi Wang, Xi'an Institute of Optics and Precision Mechanics, CAS, China		
08:30–09:00	Nonlinear optical effects in periodically poled lithium niobate microdisk resonators (Invited) Fang Bo, Nankai University, China	
09:00–09:30	Nonlinear frequency conversion in optically resonant dielectric metasurfaces (Invited) Lei Xu, Nottingham Trent University, United Kingdom	
09:30–10:00	Enhanced optical manipulation in structured ambient c, Harbin Institute of Technology, China (Invited)	
10:00–10:15	Many-body interaction and exciton dynamics in perovskite semiconductors (Oral) Weijie Zhao, Southeast University, China	CIOP2021-2021-000552
10:15–10:30	Coffee Break	
Presider: Weiqiang Ding, Southeast University, China		
10:30–11:00	Mode-controlled semiconductor nanowire laser (Invited) Xuetao Gan, Northwestern Polytechnical University, China	
11:00–11:30	Phonon-induced anomalous gauge potential in an optical microcavity (Invited) Wenjie Wan, Shanghai Jiao Tong University, China	
11:30–12:00	Optical polarization manipulation using metasurfaces and its applications (Invited) Guoxi Wang, Xi'an Institute of Optics and Precision Mechanics, CAS, China	
12:00–12:15	Visualized concentration microsensors based on single dye-doped polymer microfibers (Oral) jinjin Han, Huaqiao University, China	CIOP2021-2021-000312
12:15–13:30	Lunch Break	
Presider: Xuetao Gan, Northwestern Polytechnical University, China		
13:30–14:00	Polaritonic metasurfaces (Invited) Andrea Alu, CUNY Advanced Science Research Center, United States	
14:00–14:30	Topological nanophotonics (Invited) Jianwen Dong, Sun Yat-sen University, China	
14:30–15:00	Ring shaped Talbot effect (Invited) Junhe Zhou, Tongji University, China	
15:00–15:15	Polarization controlled manipulation of surface plasmon polaritons (Oral) Sen Wang, Shandong Normal University, China	CIOP2021-2021-000692
15:15–15:30	Temperature prediction of helical microfiber sensors based on deep belief network(DBN) (Oral) Minghui Chen, Huaqiao University, China	CIOP2021-2021-000241
15:30–15:45	Gauge-Induced Topological Modes and Asymmetric Light Transportations (Oral) Wange Song, Nanjing University, China	CIOP2021-2021-000767
15:45–16:00	Coffee Break	

SC8. Optical Materials		Picasso Room, 1F July 24, 2021
Presider: Jun Wang, Shanghai Institute of Optics and Fine Mechanics, CAS, China		
14:00–14:45	Glass ceramics for photonic devices (Keynote) Jianrong Qiu, Zhejiang University, China	
14:45–15:15	Three-dimensional single crystal architectures within glass for integrated optical devices (Invited) Volkmar Dierolf, Lehigh University, United States	
15:15–15:45	Controllable preparation and properties of advanced laser ceramics (Invited) Jiang Li, Shanghai Institute of Ceramics, CAS, China	
15:45–16:00	Effect of variable temperature growth on the crystal quality and surface morphology characteristics of InGaAs/GaAs MQWs obtained via MOCVD (Oral) Quhui Wang, Changchun University of Science and Technology, China	CIOP2021-2021-000311
16:00–16:15	Fabrication and characterizations of cubic yttria-stabilized ZrO ₂ transparent ceramics using co-precipitated nanopowders (Oral) Penghui Chen, Shanghai Institute of Ceramics, CAS, China	CIOP2021-2021-000381
16:15–16:30	Coffee Break	
Presider: Jianrong Qiu, Zhejiang University, China		
16:30–17:00	Broadband nonlinear optical applications of tellurium nanocrystals (Invited) Jun Wang, Shanghai Institute of Optics and Fine Mechanics, CAS, China	
17:00–17:30	X-ray absorption near edge structure analysis of activators in luminescent glasses (Invited) Hirokazu Masai, National Institute of Advanced Industrial Science and Technology, Japan	
17:30–17:45	Laser ablation resistance experiment progress of tail end beam dump materials for high-power laser facility (Oral) Tianran Zheng, Laser Fusion Research Center, China Academy of Engineering Physics, China	CIOP2021-2021-000185
17:45–18:00	Microstructure evolution in two-step-sintering process toward transparent Ce:(Y,Gd) ₃ (Ga,Al) ₅ O ₁₂ scintillation ceramics (Oral) Danyang Zhu, Shanghai Institute of Ceramics, CAS, China	CIOP2021-2021-000380
18:00–18:15	Optimization of anti-reflection film for space solar cells with glass cover (Oral) Mengqi Shi, Shanghai Institute of Space Power-Sources, China	CIOP2021-2021-000642
19:00–21:00	Welcome Banquet	

SC8. Optical Materials		Picasso Room, 1F July 25, 2021
Presider: Jiang Li, Shanghai Institute of Ceramics, CAS, China		
08:30–09:15	Magneto-optical materials in the visible (Keynote) Katsuhisa Tanaka, Kyoto University, Japan	
09:15–09:45	Hierarchical-morphology meta-fabric for scalable passive daytime radiative cooling (Invited) Guangming Tao, Huazhong University of Science and Technology, China	
09:45–10:15	Langasite family of nonlinear optical crystals (Invited) Haohai Yu, Shandong University, China	
10:15–10:30	Coffee Break	
Presider: Guangming Tao, Huazhong University of Science and Technology, China		
10:30–11:00	Plasmonic saturable absorbers (Invited) Xiaofeng Liu, Zhejiang University, China	
11:00–11:30	Mixtures and nanolaminate materials for high-power laser coatings (Invited) Meiping Zhu, Shanghai Institute of Optics and Fine Mechanics, CAS, China; Hangzhou Institute for Advanced Study, University of CAS, China	
11:30–11:45	Fabrication of GaAs/SiO ₂ and GaAs/Si heterointerfaces by surface activated chemical bonding at room temperature (Oral) Rui Huang, Beijing University of Technology, China	CIOP2021-2021-000021
12:00–13:30	Lunch Break	
Presider: Haohai Yu, Shandong University, China		
13:30–14:00	Self-organized phase transition lithography for all-inorganic photonic textures (Invited) Dezhi Tan, Zhejiang University, China	
14:00–14:30	Compositional evolution of chalcogenide glass as thermal-imaging lens material (Invited) Yong Gyu Choi, Korea Aerospace University, Korea	
14:30–15:00	Stability of inorganic perovskite nanocrystals and their light emitting devices (Invited) Zhigang Zang, Chongqing University, China	
15:00–15:30	Development of organic-inorganic composite scintillators (Invited) Masanori Koshimizu, Tohoku University, Japan	
15:30–15:45	Terahertz modulation based on aligned Ni-nanowire arrays (Oral) Xiaowei Huang, China University of Petroleum, Beijing, China	CIOP2021-2021-000085
15:30–17:30	Poster Session & Coffee Break	

SC8. Optical Materials		Picasso Room, 1F July 26, 2021
Presider: Lihe Yan, Xi'an Jiaotong University, China		
08:30–09:00	Transparent luminescent nano-glass composites (Invited) Jing Ren, Harbin Engineering University, China	
09:00–09:30	The high-performance micro-nano lasers based on low dimensional perovskites (Invited) Juan Du, Shanghai Institute of Optics and Fine Mechanics, CAS, China	
09:30–10:00	Defect engineering and afterglow control (Invited) Yang Li, Guangzhou Medical University, China	
10:00–10:15	Room-temperature strong coupling hybrid system of silver nanoparticles and J-aggregates (Oral) Fang Li, Wuhan Institute of Technology, China	CIOP2021-2021-000419
10:15–10:30	Coffee Break	
Presider: Jing Ren, Harbin Engineering University, China		
10:30–11:00	Developing mixed-anion mechanoluminescent materials for advanced sensing applications (Invited) Yixi Zhuang, Xiamen University, China	
11:00–11:30	Nonlinear optical property and transient absorption measurements in isotropic and anisotropic transition metal dichalcogenides nanosheets (Invited) Lihe Yan, Xi'an Jiaotong University, China	
11:30–12:00	Construction, luminescent mechanism and multifunctionality of mechanoluminescent materials (Invited) Juncheng Zhang, Ocean University of China, China	
12:00–13:30	Lunch Break	

SC9. Optical Measurement and Metrology		Grand Ballroom C, 3F July 24, 2021
Preside: Weihu Zhou, Institute of Microelectronics of the Chinese Academy of Sciences, China		
14:00–14:45	Applications of Laser Interferometer in Flatness Metrology and Industrial Inspection (Keynote) Sen Han, University of Shanghai for Science and Technology, China	
14:45–15:15	Advances and challenges in optical micrometrology of complex surfaces (Invited) Rong Su, Shanghai Institute of Optics and Fine Mechanics, CAS, China	
15:15–15:45	Challenges and future trends of optical nanometrology for IC manufacturing at advanced technology nodes (Invited) Xiuguo Chen, Huazhong University of Science and Technology, China	
15:45–16:00	A novel pattern-free phase unwrapping algorithm (Oral) Qingkang Bao, Xi'an Jiaotong University, China	CIOP2021-2021-000347
16:00–16:15	A Novel Rigorous Point Cloud Registration Method Based Directional Feature Weighting Constrained (Oral) Jing Tao, Tongji University, China	CIOP2021-2021-000290
16:15–16:30	Coffee Break	
Presider: Sen Han, University of Shanghai for Science and Technology, China		
16:30–17:00	Directed Self-Assembly of Block Copolymers for Microelectronic Manufacturing (Invited) Shisheng Xiong, Fudan University, China	
17:00–17:30	Dynamic 3D shape measurement based on fringe projection (Invited) Qican Zhang, Sichuan University, China	
17:30–17:45	Exact shape measurement of thin glass plate by considering dispersion effects in a white-light scanning interferometer (Oral) Songjie Luo, Huaqiao University, China	CIOP2021-2021-000249
17:45–18:00	Continual Learning for Scene Classification of High Resolution Remote Sensing Images (Oral) Jiangbo Xi, Chang'an University, China	CIOP2021-2021-000928
19:00–21:00	Welcome Banquet	

SC9. Optical Measurement and Metrology		Grand Ballroom C, 3F July 25, 2021
Presider: Xiangzhao Wang, Shanghai Institute of Optics and Fine Mechanics, CAS, China		
08:30–09:15	Optical coherence tomography using nonstationary signal processing based on continuous wavelet transform (Keynote) Takamasa Suzuki, Niigata University, Japan	
09:15–09:45	Imaging and measuring the objects behind a scattering medium (Invited) Jixiong Pu, Huaqiao University, China	
09:45–10:15	Line-scan confocal microscopy with virtual-slit technology (Invited) Weibo Wang, Harbin Institute of Technology, China	
10:15–10:30	Coffee Break	
Presider: Qican Zhang, Sichuan University, China		
10:30–11:00	Optical element surface defects detection and quantitative evaluation standard based on dark-field imaging (Invited) Yongying Yang, Zhejiang University, China	
11:00–11:30	Optical Fluidic Biomedical Testing Equipment (Invited) Dawei Zhang, University of Shanghai for Science and Technology, China	
11:30–12:00	Optical measurements based on multimodal photoacoustic microscopic imaging (Invited) Xiangyang Zhang, Jiangnan University, China	
12:00–12:15	Optical axis elicitation method of Off-Axis Aspheric Mirror (Oral) Xiaoyu Feng, Beijing Institute of Space Mechanics & Electricity, China	CIOP2021-2021-000093
12:15–13:30	Lunch Break	
Presider: Shisheng Xiong, Fudan University, China		
13:30–14:00	Profile measurement of micro-structures (Invited) Zhishan Gao, Nanjing University of Science and Technology, China	
14:00–14:30	Real-time Calibrating Polarization-sensitive Diffuse Reflectance Probe: Development and Applications (Invited) Jianfeng Wang, Beijing Institute of Technology, China	
14:30–15:00	Representative Spectral Payloads for Composition Detection in Chinese Latest Deep Space Missions (Invited) Zhiping He, Shanghai Institute of Optics and Fine Mechanics, CAS, China	
15:00–15:15	Optical Metrology Technique based on Momentum-space Dispersion (Oral) Tongyu Li, Fudan University	CIOP2021-2021-000763
15:15–15:30	Polarization measurement errors analysis on fully-automatic polarimetry (Oral) Miao Ren, Shaanxi Normal University, China	CIOP2021-2021-000269
15:30–17:30	Poster Session & Coffee Break	

SC9. Optical Measurement and Metrology		Grand Ballroom C, 3F July 26, 2021
Presider: Xiangyang Zhang, Jiangnan University, China		
08:30–09:00	Research of Micro–Nano Optical Metrology Technology (Invited) Wei-hu Zhou, Institute of Microelectronics of the Chinese Academy of Sciences, China	
09:00–09:30	Research on displacement measurement technology based on phase grating interferometry (Invited) Yuejing Qi, Institute of Microelectronics of the Chinese Academy of Sciences, China	
09:30–10:00	Wavefront aberration measurement of lithographic projection lens (Invited) Feng Tang, Shanghai Institute of Optics and Fine Mechanics, CAS, China	
10:00–10:15	Vectorial Doppler metrology based on vectorial polarization light (Oral) Fang Liang, Huazhong University of Science and Technology, China	CIOP2021-2021-000132
10:15–10:30	Coffee Break	
Presider: Sikun Li, Shanghai Institute of Optics and Fine Mechanics, CAS, China		
10:30–11:00	Multi-surface measurement on wavelength tuning interferometry (Invited) Yingjie Yu, Shanghai University, China	
11:00–11:15	Inter-satellite laser ranging for time-delay interferometry in space-based gravitational-wave detection (Oral) Xin Yao, China Academy of Space Technology (Xi'an), China	CIOP2021-2021-000912
11:15–11:30	Measuring fluence distribution of intense short laser based on the radiochromic effect (Oral) Yunxiao He, Tsinghua University, China	CIOP2021-2021-000618
12:00–13:30	Lunch Break	

SC10. Infrared and Terahertz Technologies		Monet Room, 1F July 24, 2021
Presider: Yan Zhang, Capital Normal University, China		
14:00–14:30	Terahertz semiconductor laser frequency comb and dual-comb sources (Invited) Hua Li, Shanghai Institute of Microsystem and Information Technology, CAS, China	
14:30–15:00	Graphene plasmonics for terahertz nonlinear optics (Invited) Martin Mittendorff, University of Duisburg–Essen, Germany	
15:00–15:30	High performance terahertz quantum cascade lasers and accurate, fast predictions of resonant mode characteristics for THz QCLs (Invited) Chongzhao Wu, Shanghai Jiao Tong University, China	
15:30–16:15	High-brightness terahertz-wave parametric sources for nondestructive application (Keynote) Hiroaki Minamide, RIKEN, Japan	
16:15–16:30	Coffee Break	
Presider: Hua Li, Shanghai Institute of Microsystem and Information Technology, CAS, China		
16:30–17:00	THz emission spectroscopy and its application in condensed matter physics (Invited) Xinlong Xu, Northwest University, China	
17:00–17:30	Spintronic based ultrabroadband terahertz emitters: mechanism, performance, and manipulation (Invited) Zuanming Jin, University of Shanghai for Science and Technology, China	
17:30–18:00	Broadband and flexible terahertz absorber based on two-dimensional material (Invited) Qiyue Wen, University of Electronic Science and Technology of China, China	
19:00–21:00	Welcome Banquet	

SC10. Infrared and Terahertz Technologies		Monet Room, 1F July 25, 2021
Presider: Chongzhao Wu, Shanghai Jiao Tong University, China		
08:30–09:00	Nonlinear response of GaAs-based nanowires subject to strong mid-infrared and THz fields (Invited) Harald Schneider, Helmholtz-Zentrum Dresden Rossendorf, Germany	
09:00–09:30	2D materials and metamaterials for IR and THz wave control and detection (Invited) Jinghua Teng, IMRE, Singapore	
09:30–09:45	Research on training set in image segmentation of terahertz digital holographic reconstructed image based on convolutional neural network (Oral) Fangrong Gan, Harbin Institute of Technology, China	CIOP2021-2021-000708
09:45–10:15	A general rule of THz mode assignment for molecular crystals (Invited) Feng Zhang, Molecular Photoscience Research Center, Japan	
10:15–10:30	Coffee Break	
Presider: Xinlong Xu, Northwest University, China		
10:30–11:00	Terahertz polarization detection characteristics of a photoconductive antenna array (Invited) Wei Shi, Xi'an University of Technology, China	
11:00–11:30	IR/THz scanning near-field microscopy without external illumination (Invited) Qianchun Weng, RIKEN, Japan	
11:30–11:45	Ultra-broadband terahertz filtering effect induced by double layer graphene strips (Oral) Maixia Fu, Henan University of Technology, China	CIOP2021-2021-000598
11:45–12:00	Vectorial Doppler metrology based on vectorial polarization light (Oral) Fang Liang, Huazhong University of Science and Technology, China	
12:00–13:30	Lunch Break	
Presider: Wei Shi, Xi'an University of Technology, China		
13:30–14:00	Terahertz time-domain spectroscopy of wide-bandgap semiconductors (Invited) Verdad C. Agulto, Osaka University, Japan	
14:00–14:30	Polarimetric terahertz spectroscopy (Invited) Yandong Gong, Beijing Information Science and Technology University, China	
14:30–15:00	New photo-thermometric detectors: from infrared to terahertz (Invited) Yating Zhang, Tianjin university, China	
15:00–15:30	Terahertz emission properties of spintronic Fe/Pt bilayer and antenna-structures (Invited) Masahiko Tani, University of Fukui, Japan	
15:30–17:30	Poster Session & Coffee Break	

SC10. Infrared and Terahertz Technologies		Monet Room, 1F July 26, 2021
Presider: Yating Zhang, Tianjin university, China		
08:30–09:00	Terahertz optoacoustics in water (Invited) Zhen Tian, Tianjin University, China	
09:00–09:30	Ultrafast electron solvation dynamics in water studied by transient terahertz spectroscopy (Invited) Tianwu Wang, GBA branch of Aerospace Information Research Institute, CAS, China	
09:30–10:00	Investigation of terahertz spectra of hydrated substances (Invited) Lei Hou, Xi'an University of Technology, China	
10:00–10:15	Topological dirac semimetals for ultra-sensitive terahertz detection (Oral) Lin Wang, Shanghai Institute of Technical Physics, China	CIOP2021-2021-000378
10:15–10:30	Coffee Break	
Presider: Tianwu Wang, GBA branch of Aerospace Information Research Institute, CAS, China		
10:30–11:00	Emerging nonlinear dynamics and applications of mid-infrared semiconductor lasers (Invited) Cheng Wang, ShanghaiTech University, China	
11:00–11:30	Reconfigurable terahertz metamaterial devices enabled by MEMS (Invited) Xiaoguang Zhao, Tsinghua University, China	
11:30–11:45	Linear polarization characteristics of broadband half-wave plates based on monolayer all-dielectric metamaterials (Oral) Xiaoyuan Hao, Guilin University of Electronic and Technology, China	CIOP2021-2021-000515
12:00–13:30	Lunch Break	

SC11-1. Optical Imaging, Display, and Storage		Toulouse Room, 2F July 24, 2021
Presider: Liangcai Cao, Tsinghua University, China		
14:00–14:30	Physics-enhanced deep neural networks for computational optical imaging: Case study (Invited) Guohai Situ, Shanghai Institute of Optics and Fine Mechanics, CAS, China	
14:30–15:00	Polarimetric optical imaging: device, technique and applications (Invited) Liyong Ren, Shaanxi Normal University, China	
15:00–15:30	Digital holographic microplastics detection and characterization in heterogeneous samples via deep learning (Invited) Edmund Y. Lam, University of Hong Kong, China	
15:30–16:00	High-fidelity multidimensional compressed ultrafast photography (Invited) Shian Zhang, East China Normal University, China	
16:00–16:15	High-throughput fast full-color digital pathology via Fourier ptychographic microscopy (Oral) An Pan, Xi'an Institute of Optics and Precision Mechanics, CAS, China CIOP2021-2021-000082	
16:15–16:30	Coffee Break	
Presider: Guohai Situ, Shanghai Institute of Optics and Fine Mechanics, CAS, China		
16:30–17:00	Evaluating and Improving the performance of ghost imaging in real scenarios (Invited) Weitao Liu, National University of Defense Technology, China	
17:00–17:30	High-speed quantitative phase microscopy targeting intracellular organelles' dynamics in live cells (Invited) Peng Gao, Xidian University, China	
17:30–18:00	Effect of various attacks on optical scanning cryptography (Invited) Aimin Yan, Shanghai Normal University, China	
19:00–21:00	Welcome Banquet	

SC11-1. Optical Imaging, Display, and Storage		Toulouse Room, 2F July 25, 2021
Presider: Xiaodi Tan, Fujian Normal University, China		
08:30–09:15	Integral imaging tabletop 3D display with large viewing angle (Keynote) Qionghua Wang, Beihang University, China	
09:15–09:45	Development of three-dimensional near-eye displays solving the accommodation/convergence conflict. (Invited) Weitao Song, Beijing Institute of Technology, China	
09:45–10:00	Incremental inverse dynamical photon scattering (IIDPS): an accelerated artificial neural network method for phase retrieval (Oral) Xiaoming Jiang, Chongqing University of Posts and Telecommunications, China	
10:00–10:15	Experimental demonstration of multimode fiber active illuminated imaging via deep learning (Oral) Zhenyu Ju, Beijing University of Posts and Telecommunications, China CIOP2021-2021-000245	
10:15–10:30	Coffee Break	
Presider: Qionghua Wang, Beihang University, China		
10:30–11:00	Reconstruction characteristics of polarization holography (Invited) Xiaodi Tan, Fujian Normal University, China	
11:00–11:30	Optical long data storage enabled by nanophotonics (Invited) Qiming Zhang, University of Shanghai for Science and Technology, China	
11:30–12:00	Phase-shifting interferometry for multidimensional incoherent digital holography and toward ultimately low light sensing (Invited) Tatsuki Tahara, National Institute of Information and Communications Technology, Japan	
12:00–13:30	Lunch Break	
Presider: Liyong Ren, Shaanxi Normal University, China		
13:30–14:00	Novel approaches to coherent diffraction imaging (Invited) Fucai Zhang, Southern University of Science and Technology, China	
14:00–14:30	Computational coherent imaging by phase encoding (Invited) Zhengjun Liu, Harbin Institute of Technology, China	
14:30–15:00	GEOMScope: large field-of-view 3D lensless microscopy with low computational complexity (Invited) Weijian Yang, University of California, Davis, USA	
15:00–15:15	Hyperspectral imaging with single fiber bundle by inverting the incoherent light transmission matrix (Oral) Yitong Li, Huazhong University of Science and Technology, China CIOP2021-2021-000386	
15:15–15:30	Spectral reconstruction with model-based neural network for liquid crystal modulator devices (Oral) Jizhou Zhang, Beijing Institute of Technology, China; Beijing Institute of Technology Chongqing Innovation Center, China CIOP2021-2021-000001	
15:30–17:30	Poster Session & Coffee Break	

SC11-1. Optical Imaging, Display, and Storage		Toulouse Room, 2F July 26, 2021
Presider: Leiting Pan, Nankai University, China		
08:30–09:00	Transport-of-intensity quantitative phase imaging (TIQPI) and transport-of-intensity diffraction tomography (TIDT) (Invited) Chao Zuo, Nanjing University of Science and Technology, China	
09:00–09:30	Simple is the best: structured light illumination as examples (Invited) Kai Liu, Sichuan University, China	
09:30–10:00	Structured-light 3D shape measurements using deep learning (Invited) Shijie Feng, Nanjing University of Science and Technology, China	
10:00–10:15	Phase-space measurement of arbitrary coherent beams (Oral) Runnan Zhang, Nanjing University of Science and Technology, China	CIOP2021-2021-000885
10:15–10:30	Coffee Break	
Presider: Chao Zuo, Nanjing University of Science and Technology, China		
10:30–11:00	Single-molecule localization super-resolution microscopy and its applications on cytoskeleton (Invited) Leiting Pan, Nankai University, China	
11:00–11:30	Non-interferometric phase demodulation and performance improvement in holographic data storage (Invited) Jianying Hao, Fujian Normal University, China	
11:30–11:45	Optimizing design of partially coherent illumination for refractive index tomographic microscopy (Oral) Jiaji Li, Nanjing University of Science and Technology, China	CIOP2021-2021-000896
11:45–12:00	spot center location method for chinese spaceborne GF-7 footprint camera (Oral) Chaofeng Ren, Chang'an University, China	CIOP2021-2021-000915
12:00–13:30	Lunch Break	
Presider: Kai Liu, Sichuan University, China		
13:30–14:00	NIR-II excited three-photon microscopy for in vivo atherosclerotic plaques imaging (Invited) Shaowei Wang, Xi'an Jiaotong University, China	
14:00–14:30	Ultra-short laser pulses for industrial applications (Invited) Saulius Juodkazis, Swinburne University of Technology, Australia	
14:30–15:00	Image edge extraction using dual acousto-optic modulators in a Mach-Zehnder interferometer (Invited) Yaping Zhang, Kunming University of Science and Technology, China	
15:00–15:15	High-resolution image reconstruction through scattering media based on transmission matrix (Oral) Guangdong Ma, Xi'an Jiaotong University, China	CIOP2021-2021-000232
15:15–15:30	Light efficiency enhanced quantum dot color conversion layer based on a distributed bragg reflector (Oral) Enguo Chen, Fuzhou University, China	CIOP2021-2021-000493

SC11-2. Optical Imaging, Display, and Storage		Cannes Room, 2F July 24, 2021
Presider: Yang Li, Tsinghua University, China		
14:00–14:45	Metasurfaces for multifunctional flat optics: from components to cameras (Keynote) Federico Capasso, Harvard University, USA	
14:45–15:15	Metalens microscope: from design to prototype (Invited) Tao Li, Nanjing University, China	
15:15–15:45	All dielectric metasurface and applications (Invited) Shumin Xiao, HIT Shenzhen, China	
15:45–16:00	AFC-900 large-format aerial frame camera: design principles and photogrammetric processing (Oral) Qi Zhou, Wuhan University, China	CIOP2021-2021-000460
16:00–16:15	Multifocus optical-resolution photoacoustic microscopy for Large volumetric high-resolution imaging (Oral) Xianlin Song, Nanchang University, China	CIOP2021-2021-000774
16:15–16:30	Coffee Break	
Presider: Siying Peng, Westlake University, China		
16:30–17:00	Metasurface-based vectorial holography (Invited) Dandan Wen, Northwestern Polytechnical University, China	
17:00–17:30	Label-free and interpretable hyperspectral imaging for intraoperative clinical applications (Invited) Jie Bao / Yating Zhang, Tsinghua University, China	
17:30–17:45	Quantitative phase imaging with ghost microscopy (Oral) Vinu R.V, Huaqiao University, China	CIOP2021-2021-000118
19:00–20:30	Welcome Banquet	

SC11-2. Optical Imaging, Display, and Storage		Cannes Room, 2F July 25, 2021
Presider: Jiamiao Yang, Shanghai Jiao Tong University, China		
08:30–09:00	Convolutional neural network and its application in optical information processing (Invited) Jianglei Di, Northwestern Polytechnical University, China	
09:00–09:30	Liquid crystal holograms for geometric phase planar optics (Invited) Wei Duan, Beihang University, China	
09:30–10:00	Holographic waveguide display technology (Invited) Yuning Zhang, Southeast University, China	
10:00–10:15	From the tale of phase-shifted zone plates to optical manipulations (Oral) Jila Rafeighdoost, Xi'an Institute of Optics and Precision Mechanics, CAS, China	CIOP2021-2021-000927
10:15–10:30	Coffee Break	
Presider: Wei Duan, Beihang University, China		
10:30–11:00	Light-induced phase separation in halide perovskite: kinetics and mechanism (Invited) Siying Peng, Westlake University, China	
11:00–11:30	Imaging and stimulating deep inside biological tissue by manipulating light outside (Invited) Jiamiao Yang, Shanghai Jiao Tong University, China	
11:30–11:45	Label-free morphological measurement of irradiated-urothelial bladder carcinoma cells by using digital holographic microscopy (Oral) Feng Pan, Beihang University, China	CIOP2021-2021-000466
12:00–13:30	Lunch Break	

SC12. Optical Communications and Networks		Bordeaux Room, 2F July 24, 2021
Presider: Ming Tang, Huazhong University of Science and Technology, China		
14:00–14:45	Mode division multiplexing communication towards high performance computing applications (Keynote) Xiacong Yuan, Shenzhen University, China	
14:45–15:15	Feature optimization scheme for ML-based equalizer in IMDD system (Invited) Meihua Bi, Hangzhou Dianzi University, China	
15:15–15:45	Hollow core fiber based Fabry-Perot interferometer (Invited) Meng Ding, University of Southampton, United Kingdom	
15:45–16:00	Deep learning enabled crosstalk monitoring in space division multiplexing system (Oral) Chen Cheng, Huazhong University of Science and Technology, China CIOP2021-2021-000441	
16:00–16:15	Long-distance UOWC system based on wavelength conversion in room temperature (Oral) Lirong Fan, Xi'an University of Posts & Telecommunications, China CIOP2021-2021-000492	
16:15–16:30	Coffee Break	
Presider: Xiacong Yuan, Shenzhen University, China		
16:30–17:00	Background noise resistant underwater wireless optical communication using Faraday atomic line laser and filter (Invited) Guanjun Gao, Beijing University of Posts and Telecommunications, China	
17:00–17:30	Amplified O-band direct-detection transmission using bismuth-doped fiber amplifiers (Invited) Yang Hong, University of Southampton, United Kingdom	
17:30–17:45	Monte-Carlo-based accelerating parallel simulation and modelling of composite optical wireless underwater channel (Oral) Linlin Kou, Xi'an University of Posts & Telecommunications, China CIOP2021-2021-000501	
17:45–18:00	Modulation format identification based on logistics regression for high-speed coherent optical communication system (Oral) Manli Huang, Southwest Jiaotong University, China CIOP2021-2021-000314	
19:00–21:00	Welcome Banquet	

SC12. Optical Communications and Networks		Bordeaux Room, 2F July 25, 2021
Presider: Meihua Bi, Hangzhou Dianzi University, China		
08:30–09:00	Joint optimization of transmission, computation and storage resources allocation in cloud networking (Invited) Nan Hua, Tsinghua University, China	
09:00–09:30	Secure optical communication based on dynamic private chaotic scrambling (Invited) Ning Jiang, University of Electronic Science and Technology of China, China	
09:30–10:00	Quantization noise suppression with noise-shaping technique in optical interconnects utilizing low-resolution DAC (Invited) Fan Li, Sun Yat-Sen University, China	
10:00–10:15	Performance enhancement of LCOS-WSS based on wavefront distortion compensation (Oral) Ying Liu, Huazhong University of Science and Technology, China CIOP2021-2021-000555	
10:15–10:30	Coffee Break	
Presider: Zhenming Yu, Beijing University of Posts and Telecommunications, China		
10:30–11:00	Inter-band interference cancellation based on machine learning method for non-orthogonal multi-band optical access (Invited) Junwen Zhang, Fudan University, China	
11:00–11:30	Towards all-fiber silicon nonlinear devices for telecom applications (Invited) Li Shen, Huazhong University of Science and Technology, China	
11:30–12:00	Experimental study on 100 km free space coherent optical communication (Invited) Xizheng Ke, Xi'an University of Technology, China	
12:00–12:15	Polarization multiplexing of single-sideband quadrature-amplitude-modulation signal generation by a polarization multiplexing optical modulator (Oral) Yi Wei, Xi'an University of Posts & Telecommunications, China CIOP2021-2021-000594	
12:15–12:30	Misaligned hyperfine orbital angular momentum modes recognition assisted by deep learning (Oral) Xiao Wang, Xi'an Jiaotong University, China CIOP2021-2021-000233	
12:30–13:30	Lunch Break	
Presider: Nan Hua, Tsinghua University, China		
13:30–14:00	Machine learning and data-driven solutions for network automation (Invited) Sabidur Rahman, Sonoma State University, United States	
14:00–14:30	Impact of fiber attenuation and effective area on spectrum efficiency of elastic optical networks (Invited) Gangxiang Shen, Soochow University, China	
14:30–15:00	Reduced state MLSE for multi-level PAM IM/DD systems (Invited) Yukui Yu, Korea Advanced Institute of Science and Technology, South Korea	
15:00–15:15	Weak light signal detection for underwater laser communication based on adaptive stochastic resonance (Oral) Xiang Lan, Xi'an University of Posts & Telecommunications, China CIOP2021-2021-000520	
15:15–15:30	Propagation properties of a partially coherent double-half inverse Gaussian hollow beam through turbulent atmosphere (Oral) Jie Zhu, Guizhou Institute of Technology, China CIOP2021-2021-000617	
15:30–17:30	Poster Session & Coffee Break	

SC12. Optical Communications and Networks		Bordeaux Room, 2F July 26, 2021
Presider: Li Shen, Huazhong University of Science and Technology, China		
08:30–09:00	Low cost and high reliability optical transmission using opto–electronic computing (Invited) Zhenming Yu, Beijing University of Posts and Telecommunications, China	
09:00–09:30	Analysis of optical OFDM signal reconstruction using temporal transport–of–intensity equation (Invited) Masayuki Matsumoto, Wakayama University, Japan	
09:30–10:00	Low latency DWBA scheme for mini–slot based 5G new radio in a fixed and mobile converged TWDM–PON (Invited) Jiawei Zhang, Beijing University of Posts and Telecommunications, China	
10:00–10:15	Experimental validation of modified EGN model in real–time 400G/800G transmission with PCS and digital sub–carrier multiplexing (Oral) Zhenhua Feng, China Academy of Information and Communication Technology, China CIOP2021-2021-000437	
10:15–10:30	Coffee Break	
Presider: Jiawei Zhang, Beijing University of Posts and Telecommunications, China		
10:30–11:00	Enabling technologies for power fading compensation in direct–detection systems (Invited) Yixiao Zhu, Shanghai Jiao Tong University, China	
11:00–11:30	On–chip chalcogenide nonlinear light sources (Invited) Bin Zhang, Sun Yat–sen University, China	
11:30–12:00	AI–assisted free–space optical communications (Invited) Yejun Liu, Chongqing University of Posts and Telecommunications, China	
12:00–13:30	Lunch Break	

SC13. Optical Fiber and Waveguide Technologies		Grand Ballroom A, 3F July 24, 2021
Presider: Li Pei, Beijing Jiaotong University, China		
14:00–14:45	Plasmonic fiber–optic sensors for biomedical and renewable energy applications (Keynote) Tuan Guo, Jinan University, China	
14:45–15:15	Few mode fiber microcavity sensor based on Vernier effect (Invited) Xinghu Fu, Yanshan University, China	
15:15–15:45	Space–division multiplexed distributed fiber sensors (Invited) Zhiyong Zhao, Huazhong University of Science and Technology, China	
15:45–16:00	Total variation method for reconstruction of three–dimensional refractive index distribution of optical fiber under sparse angle (Oral) He Qian, Beijing Jiaotong University, China CIOP2021-2021-000677	
16:00–16:15	Design and fabrication of a kind of mode–group–selective photonic lantern (Oral) Yao Lu, National University of Defense Technology, China CIOP2021-2021-000239	
16:15–16:30	Coffee Break	
Presider: Tuan Guo, Jinan University, China		
16:30–17:00	Quasi–distributed acoustic sensing at ultrahigh update rates (Invited) Avishay Eyal, Tel–Aviv University, Israel	
17:00–17:30	A MDM networking with a DMG lower than 4 dB over 1000 km by employing all–fiber few–mode EDFAs (Invited) Jianshuai Wang, Beijing Jiaotong University, China	
17:30–17:45	Optical microresonator based on an in–fiber rectangular air bubble (Oral) Qiang Zhang, Shenzhen University, China CIOP2021-2021-000211	
19:00–21:00	Welcome Banquet	

SC13. Optical Fiber and Waveguide Technologies		Grand Ballroom A, 3F July 25, 2021
Presider: Feng Wang, Nanjing University, China		
08:30–09:15	Applications of photonic crystal fibres: from micro-reactor in chemistry to generation of non-classical light (Keynote) Nicolas Joly, Friedrich-Alexander University; Max-Planck Institute for the Science of Light, Germany	
09:15–09:45	Highly sensitive and compact fiber optic ultrasound sensors for structure imaging and nondestructive testing (Invited) Qizhen Sun, Huazhong University of Science and Technology, China	
09:45–10:00	Machine learning-enabled camera free speckle wavemeter (Oral) Yi Li, China Jiliang University, China CIOP2021-2021-000169	
10:00–10:15	All-fiber few-mode Er/Yb co-doped fiber amplifier for mode division multiplexing under cladding pumping (Oral) Zhiqi Li, Beijing Jiaotong University, China CIOP2021-2021-000667	
10:15–10:30	Coffee Break	
Presider: Qizhen Sun, Huazhong University of Science and Technology, China		
10:30–11:00	Advanced fiber optic sensors enable new frontiers in basic & applied research (Invited) Jie Huang, Missouri University of Science and Technology, United States	
11:00–11:30	High performance measurement with UWFBG array based on double-pulse method (Invited) Feng Wang, Nanjing University, China	
11:30–12:00	Research on the design of multi core and few mode fiber (Invited) Feng Tian, Beijing University of Posts and Telecommunications, China	
12:00–12:15	Elliptical hollow-core anti-resonance fiber with robust polarization-maintaining property (Oral) Zhuzhao Luo, Wuhan University of Technology, China; Shanghai Institute of Optics and Fine Mechanics (SIOM), CAS, China CIOP2021-2021-000751	
12:15–13:30	Lunch Break	
Presider: Pengfei Wang, Harbin Engineering University, China		
13:30–14:00	Fibre optic micro-needles: a multimodal sensory platform (Invited) Duncan Hand, Heriot-Watt University, United Kingdom	
14:00–14:30	Recent research progress on Mid-IR fluoride fibre lasers at HEU (Invited) Pengfei Wang, Harbin Engineering University, China	
14:30–15:00	Chaotic Brillouin distributed optical fiber sensing (Invited) Mingjiang Zhang, Taiyuan University of Technology, China	
15:00–15:15	Experimental investigations on the influence of molten-state duration time upon transmission characteristics of helical long-period fiber gratings (Oral) Lunlun Xian, Nanjing University of Science and Technology, China CIOP2021-2021-000570	
15:15–15:30	Gas pressure sensor based on a hollow cavity modulated phase shifted fiber Bragg grating (Oral) Shengzhen Lu, Shenzhen University, China CIOP2021-2021-000202	
15:30–15:45	Passive mode-locked fiber laser based on carbon nanotubes-styrene methyl-methacrylate saturable absorber (Oral) Yunliang Bao, Shanghai University, China CIOP2021-2021-000691	
15:30–17:30	Poster Session & Coffee Break	

SC13. Optical Fiber and Waveguide Technologies		Grand Ballroom A, 3F July 26, 2021
Presider: Zongyin Yang, Zhejiang University, China		
08:30–09:00	Recent developments in optical fiber based hetrostructures for sensing (Invited) Gerald Farrell, Technological University Dublin, Ireland	
09:00–09:30	All-fiber filters and their applications in multi-wavelength switchable ultra-narrow linewidth fiber lasers (Invited) Ting Feng, Hebei University, China	
09:30–10:00	Novel optical fiber structures for gain equalization in space division multiplexing (Invited) Jingjing Zheng, Beijing Jiaotong University, China	
10:00–10:15	On-line measurement of flow velocity based on fiber optical tweezers (Oral) Xiaoyun Tang, Harbin Engineering University, China CIOP2021-2021-000535	
10:15–10:30	Coffee Break	
Presider: Ting Feng, Hebei University, China		
10:30–11:00	Functionalised optical fibre sensors for healthcare applications (Invited) Sergiy Korposh, The University of Nottingham, United Kingdom	
11:00–11:30	Full-spectrum optoelectronics based on bandgap-graded nanowires (Invited) Zongyin Yang, Zhejiang University, China	
11:30–11:45	Fiber optical tweezers based on mode division multiplexing (Oral) Yu Zhou, Harbin Engineering University, China CIOP2021-2021-000713	
11:45–12:00	A multi-core photonic crystal fiber with low crosstalk and nearly zero ultra-flattened dispersion (Oral) Shizhuo Fan, Lanzhou University of Technology, China CIOP2021-2021-000452	
12:00–12:15	Polarization-maintaining solid-core anti-resonant fibers designed for mid-infrared waves (Oral) Shuai Sun, Tianjin University, China CIOP2021-2021-000587	
12:15–13:30	Lunch Break	
Presider: Xiong Deng, Southwest Jiaotong University, China		
13:30–14:00	Neuro-inspired photonic computing based on multimode waveguides (Invited) Satoshi Sunada, Kanazawa University, Japan	
14:00–14:30	Low-loss fusion splicing between negative-curvature HCF and conventional SMF and characterizations (Invited) Limin Xiao, Fudan University, China	
14:30–15:00	Space division multiplexing fiber technology (Invited) Jiajing Tu, Jinan University, China	
15:00–15:15	3D waveguide preparation by femtosecond laser direct writing (Oral) Zhen-Nan Tian, Jilin University, China CIOP2021-2021-000435	
15:15–15:30	Microsphere-embedded core-offset fiber for temperature-insensitive strain sensor (Oral) Huibo Fan, Yangzhou University, China CIOP2021-2021-000040	
15:30–15:45	Coffee Break	

Presider: Limin Xiao , Fudan University, China	
15:45–16:15	Wireless communication over LED channel (Invited) Xiong Deng, Southwest Jiaotong University, China; TU Eindhoven, Netherlands
16:15–16:30	Mid-infrared As_2S_3 square photonic crystal fiber for stimulated Brillouin scattering and slow light generation (Oral) Huijie Sun, Lanzhou University of Technology, China CIOP2021-2021-000401
16:30–16:45	Design optimization of the single-mode hybrid photonic crystal terahertz waveguide chips (Oral) Haisu Li, Beijing Jiaotong University, China CIOP2021-2021-000299
16:45–17:00	Temperature and strain fiber sensor design based on microstructural Fabry-Perot cavity (Oral) Jin Li, Northeastern University, China CIOP2021-2021-000078

SC14. Biophotonics and Optofluidics		Paris Room, 2F July 24, 2021
Presider: Junle Qu , Shenzhen University, China		
14:00–14:45	Multiphoton microscopy for imaging deeper, wider, and faster (Keynote) Chris Xu, Cornell University, United States	
14:45–15:15	Optical imaging and trapping by spatial modulation of optical fields (Invited) Baoli Yao, Xi'an Institute of Optics and Precision Mechanics, CAS, China	
15:15–15:45	Future perspectives for photodynamic therapy (Invited) Buhong Li, Fujian Normal University, China	
15:45–16:15	Multi-color structured illumination microscopy for live cell imaging based on the enhanced image recombination transform algorithm (Invited) Ming Lei, Xi'an Jiaotong university, China	
16:15–16:30	Coffee Break	
Presider: Baoli Yao , Xi'an Institute of Optics and Precision Mechanics, CAS, China		
16:30–17:00	Structural and functional fourier domain optical coherence tomography (Invited) Zhihua Ding, Zhejiang University, China	
17:00–17:30	Multiphoton microscopy of intrinsic fluorophore (Invited) Wei Zheng, Shenzhen Institutes of Advanced Technology, CAS, China	
17:30–17:45	Dark-field and Raman imaging study on the interaction process between cells and nanoparticles (Oral) Zhenhao Mo, Shenzhen University, China CIOP2021-2021-000293	
17:45–18:00	Expansion microscopy with multifunctional polymer dots (Oral) Jie Liu, Southern University of Science and Technology, China CIOP2021-2021-000589	
19:00–21:00	Welcome Banquet	

SC14. Biophotonics and Optofluidics		Paris Room, 2F July 25, 2021
Presider: Buhong Li, Fujian Normal University, China		
08:30–09:00	Stoichiometry and regulation network of Bcl-2 family complexes quantified by live-cell FRET assay (Invited) Tongsheng Chen, South China Normal University, China	
09:00–09:30	Temperature-feedback nanoplatform for NIR-II penta-modal Imaging-guided synergistic photothermal therapy and CAR-NK Immunotherapy of lung cancer (Invited) Zhen Yuan, University of Macau, China	
09:30–10:00	Deep-learning based femtosecond stimulated Raman scattering histology (Invited) Minbiao Ji, Fudan University, China	
10:00–10:15	Fast and high manipulation accuracy weighted Gerchberg-Saxton algorithm in optical tweezers (Oral) Minru He, Xi'an Jiaotong University, China	CIOP2021-2021-000451
10:15–10:30	Coffee Break	
Presider: Xunbin Wei, Peking University, China		
10:30–11:00	Multimodality photoacoustic imaging technology: Progress in medical applications from microscopy to endoscopy (Invited) Sihua Yang, South China Normal University, China	
11:00–11:30	Photoacoustic microfluidic microscopy (Invited) Lei Xi, Southern University of Science and Technology, China	
11:30–11:45	Label-free identification of cardio-cerebrovascular diseases based on multi-dimensional two-photon microscopy (Oral) Hui Li, Shenzhen Institutes of Advanced Technology, CAS, China	CIOP2021-2021-000605
11:45–12:00	Large-area gastrointestinal tract imaging via 500 μm field-of-view probe-based confocal microendoscope (Oral) Hua Li, Huazhong University of Science and Technology, China	CIOP2021-2021-000553
12:00–12:15	Non-invasive optical focusing and imaging in scattering media (Oral) Dayan Li, Southern University of Science and Technology, China	CIOP2021-2021-000592
12:15–13:30	Lunch Break	
Presider: Zhen Yuan, University of Macau, China		
13:30–14:00	In vivo flow cytometry reveals the diurnal rhythm of circulating tumor cells (Invited) Xunbin Wei, Peking University, China	
14:00–14:30	Organic semiconductor photosensitizers for multi-modal cancer phototherapy (Invited) Xiaochen Dong, Nanjing Tech University, China	
14:30–15:00	Tissue Optical Imaging — principles and biomedical applications (Invited) Jiao Li/Feng Gao, Tianjin University, China, China	
15:00–15:15	Machine learning enabled self-calibrated single fiber endoscopic imaging (Oral) Yi Li, China Jiliang University, China	CIOP2021-2021-000168
15:15–15:45	Assessing the chondrocyte viability in articular cartilage with intrinsic nonlinear optical signatures (Invited) Tong Ye, Clemson University, United States	
15:45–16:15	Neodymium-sensitized nanomedicine: achievements and perspectives (Invited) Timothy Tan, Nanyang Technological University, Singapore	
16:15–16:45	Molecular-resolution imaging using expansion microscopy and STORM (Invited) Xiaoyu Shi, University of California, Irvine, United States	
15:30–17:30	Poster Session & Coffee Break	

SC14. Biophotonics and Optofluidics		Paris Room, 2F July 26, 2021
Presider: Liwei Liu, Shenzhen University, China		
08:30–09:00	Break the unbroken limits towards super-resolution microscopy using photon upconversion (Invited) Qiuqiang Zhan, South China Normal University, China	
09:00–09:30	Deep tissue imaging and its applications in neuroscience (Invited) Ke Si, Zhejiang University, China	
09:30–10:00	Exploration of optical phantoms of vascular and atherosclerotic plaques based on IVOCT technology (Invited) Qin Li, Beijing Institute of Technology, China	
10:00–10:15	NWU integrated toolboxes for biomedical Raman spectral analysis and imaging (Oral) Shuang Wang, Northwest University, China	CIOP2021-2021-000187
10:15–10:30	Coffee Break	
Presider: Qiuqiang Zhan, South China Normal University, China		
10:30–11:00	Tissue optical clearing for whole organs 3D imaging (Invited) Dan Zhu, Wuhan National Laboratory for Optoelectronics, China	
11:00–11:30	Fluorescent surgery navigation probes and systems (Invited) Xiaolong Liu, Mengchao Hepatobiliary Hospital of Fujian Medical University, China	
11:30–11:45	Optimizing parameters of photobiomodulation therapy for alzheimer's disease treatment (Oral) Hao Xu, Shenzhen University, China	CIOP2021-2021-000282
11:45–12:00	Photobiomodulation induces hair regeneration via β-catenin activation in hair follicle stem cells (Oral) Haocai Chang, South China Normal University, China	CIOP2021-2021-000551
12:00–12:15	Technological advance of microwave-induced thermoacoustic tomography (Oral) Huan Qin, South China Normal University, China	CIOP2021-2021-000365
12:15–13:30	Lunch Break	
Presider: Ke Si, Zhejiang University, China		
13:30–14:00	Multimodal optical microscopic imaging technology and its biomedical applications (Invited) Liwei Liu, Shenzhen University, China	
14:00–14:30	Ultra-sensitive optofluidic microcavity resonators for biomolecular detection (Invited) Xiang Wu, Fudan University, China	
14:30–15:00	Optoporation for intracellular delivery of molecules (Invited) Cuiping Yao, Xi'an Jiaotong University, China	
15:00–15:15	A 3D image resolution evaluation method based on sectioned Fourier shell correlation (Oral) Xiliang Luo, Huazhong University of Science and Technology, China	CIOP2021-2021-000557
15:15–15:30	Continuous optical zoom microscope based on liquid lens (Oral) Chao Liu, Beihang University, China	CIOP2021-2021-000106
15:30–15:45	Coffee Break	
Presider: Qin Li, Beijing Institute of Technology, China		
15:45–16:15	Surface SERS based vertical flow assay for high performance point-of-care testing (Invited) Xiangwei Zhao, Southeast University, China	
16:15–16:30	Ultralow-power, single-CW-beam super-resolution microscopy (Oral) Yusen Liang, South China Normal University, China	CIOP2021-2021-000339

SC15. Optical Sensors and Systems		Grand Ballroom B, 3F July 24, 2021
Presider: Tao Zhu, Chongqing University, China		
14:00–14:30	Optical Fiber Laser Spectroscopy (Invited) Wei Jin, The Hong Kong Polytechnic University, China	
14:30–15:15	High-performance distributed acoustic sensing system with coherent detection (Keynote) Zinan Wang, University of Electronic Science and Technology of China, China	
15:15–15:45	In-fiber micro/nano photonic device fabricated by femtosecond laser (Invited) Changrui Liao, Shenzhen University, China	
15:45–16:00	A novel fiber-optic surface plasmon resonance sialic acid nanosensor based on boronic-acid-functionalized Au NPs (Oral) Huizhen Yuan, Dalian University of Technology, China CIOP2021-2021-000277	
16:00–16:15	Hydrogen sensor based on a fiber optic F-P interferometer with a fiber Bragg grating and a nanofilm (Oral) Junxian Luo, Shenzhen University, China CIOP2021-2021-000247	
16:15–16:30	Coffee Break	
Presider: George Y. Chen, Shenzhen University, China		
16:30–17:00	Flexible and miniature Fabry-Perot cavity for sensitive ultrasound detection and wide-view photoacoustic imaging (Invited) Jun Ma, Jinan University, China	
17:00–17:30	Optical fiber shape sensing technology (Invited) Guolu Yin, Chongqing University, China	
17:30–17:45	Ultrafast microfiber microfiber humidity sensor based on three-dimensional molybdenum disulfide network cladding (Oral) Pan Guo, Jinan University, China CIOP2021-2021-000567	
19:00–21:00	Welcome Banquet	

SC15. Optical Sensors and Systems		Grand Ballroom B, 3F July 25, 2021
Presider: Lei Zhang, Zhejiang University, China		
08:30–09:00	Ultra-high-resolution multiplexed fiber-optic grating sensors (Invited) Qingwen Liu, Shanghai Jiao Tong University, China	
09:00–09:30	High performance swept sources for optical coherence tomography (Invited) Dongmei Huang, The Hong Kong Polytechnic University, China	
09:30–10:00	Soft Polymer Optical Fibre Sensors (Invited) Simon C. Fleming, University of Sydney, Australia	
10:00–10:15	Fast and accurate temperature extraction via general regression neural network for BOTDA sensors (Oral) Hengan Zhou, Southwest Jiaotong University, China CIOP2021-2021-000277	
10:15–10:30	Coffee Break	
Presider: Ruohui Wang, Northwest University, China		
10:30–11:00	Skin-like wearable optical sensors based on micro/nanofibers (Invited) Lei Zhang, Zhejiang University, China	
11:00–11:30	3D printing optical preforms and fibres (Invited) John Canning, University of Technology Sydney, Australia	
11:30–11:45	Surface plasmon resonance sensor based on gold-coated hollow fiber structure (Oral) Zhang Xian, Fudan University, China	
11:45–12:00	Ultra-narrow band sensor based on dielectric array coupling metal substrate in the visible region (Oral) Shuwen Chu, Dalian University of Technology, China CIOP2021-2021-000315	
12:00–12:15	A simplified OFDR system with an integrated In-fiber Auxiliary Interferometer (Oral) Rui Jiang, Chongqing University, China CIOP2021-2021-000486	
12:15–13:30	Lunch Break	
Presider: Qingwen Liu, Shanghai Jiao Tong University, China		
13:00–13:30	Optical fiber vector accelerometers based on special fiber Bragg gratings (Invited) Ruohui Wang, Northwest University, China	
13:30–14:00	Plastic optical fiber fuse effect and its sensing applications (Invited) Yosuke Mizuno, Yokohama National University, Japan	
14:00–14:30	Research on optical microcavity biochemical sensing technology (Invited) Yanan Zhang, Northeastern University, China	
14:30–14:45	A fiber laser temperature-sensing system with customizable sensitivity based on beat frequency demodulation method (Oral) Jing Tian, Guizhou University, China CIOP2021-2021-000725	
14:45–15:00	Investigation of SPR refractive index sensor realized by a Bessel-like beam (Oral) Xiang Li, Harbin Engineering University CIOP2021-2021-000729	
15:00–15:15	Polydimethylsiloxane-based micro-nano long-period fiber grating for temperature sensing (Oral) Xiaoxuan Wang, Harbin Engineering University, China CIOP2021-2021-000714	
15:15–15:30	> 225 nm wide-band wavelength-swept laser based on polygonal scanning wavelength filter using two semiconductor optical amplifiers (Oral) Gi-Hyen LEE, Chungnam National University, Korea CIOP2021-2021-000559	
15:30–15:45	Observation of second-order reflection bands from cholesteric liquid crystal using two bands of wavelength-swept Laser (Oral) Soyeon Ahn, Chungnam National University, Korea CIOP2021-2021-000414	
15:30–17:30	Poster Session & Coffee Break	

SC16. Atomic Physics, Quantum Photonics, and Quantum Information		Renoir Room, 1F July 24, 2021
Presider: Xianmin Jin, Shanghai Jiao Tong University, China		
14:00–14:30	thin-film lithium niobate integrated devices (Invited) Xinlun Cai, Sun Yat-sen University, China	
14:30–15:00	Towards quantum repeater and network with cold atoms (Invited) Xiaohui Bao, University of Science and Technology of China, China	
15:00–15:30	Static hybrid quantum nodes: toward perfect state transfer on a photonic chip (Invited) Xuewen Chen, Huazhong University of Science and Technology, China	
15:30–16:00	Chop-based QKD (Invited) Wei Li, University of Science and Technology of China, China	
16:00–16:15	Deterministic distribution of multipartite entanglement and steering in a quantum network by separable states (Oral) Meihong Wang, Shanxi University, China	CIOP2021-2021-000500
16:15–16:30	Coffee Break	
Presider: Xinlun Cai, Sun Yat-sen University, China		
16:30–17:00	Photonic quantum advantage (Invited) Hui Wang, University of Science and Technology of China, China	
17:00–17:30	Fully connected quantum networks based on spontaneous four-wave-mixing quantum Light Sources (Invited) Wei Zhang, Tsinghua University, China	
17:30–17:45	Experimental preparation of twin optical cat states (Oral) Dongmei Han, Shanxi University, China	CIOP2021-2021-000275
17:45–18:00	Integrating deep learning to achieve phase compensation for free-space orbital-angular momentum-encoded quantum key distribution under atmospheric turbulence (Oral) Xingyu Wang, Air Force Engineering University, China; National University of Defense Technology, China	CIOP2021-2021-000495
19:00–21:00	Welcome Banquet	

SC16. Atomic Physics, Quantum Photonics, and Quantum Information		Renoir Room, 1F July 25, 2021
Presider: Qiang Zhang, University of Science and Technology of China, China		
08:30–09:00	Manipulation and amplification of optical cat states (Invited) Xiaolong Su, Shanxi University, China	
09:00–09:30	Topological dynamics and sensing with exceptional points (Invited) Haitan Xu, Southern University of Science and Technology, China	
09:30–10:00	Long-distance quantum communication: quantum repeater and transportable quantum memory (Invited) Zongquan Zhou, University of Science and Technology of China, China	
10:00–10:15	Deterministic distribution of orbital-angular-momentum multiplexed continuous-variable entanglement and quantum steering (Oral) Zhongzhong Qin, Shanxi University, China	CIOP2021-2021-000323
10:15–10:30	Coffee Break	
Presider: Xiaolong Su, Shanxi University, China		
10:30–11:00	Quantum Key Distribution over 511 km optical fibre linking two distant cities (Invited) Yang Liu, Jinan Institute of Quantum Technology, China	
11:00–11:30	Asymmetric light diffraction and its dynamic control in non-Hermitian gratings (Invited) Jinhui Wu, Northeast Normal University, China	
11:30–12:00	Realization of integrated entangled photon sources and its application in drone-based quantum communication (Invited) Yanxiao Gong, Nanjing University, China	
12:00–13:30	Lunch Break	
Presider: Junjie Wu, National University of Defense Technology, China		
13:30–14:00	Application of weak measurement in quantum correlation sharing and bohmian trajectory reconstruction (Invited) Ya Xiao, Ocean University of China, China	
14:00–14:30	Large-scale silicon photonic circuits for quantum computation and quantum Walk (Invited) Xiaogang Qiang, National Innovation Institute of Defense Technology, China	
14:30–15:00	Dynamic behaviors of light in electromagnetically induced photonic lattices (Invited) Zhaoyang Zhang, Xi'an Jiaotong University, China	
15:00–15:30	Single-molecule fluorescence spectroscopy based on advanced single photon counting and correlation analysis (Invited) Guangcun Shan, Beihang University, China	
15:30–17:30	Poster Session & Coffee Break	

SC16. Atomic Physics, Quantum Photonics, and Quantum Information		Renoir Room, 1F July 26, 2021
Presider: Yang Liu, Jinan Institute of Quantum Technology, China		
08:30–09:00	Quantum-enhanced target detection and imaging (Invited) Lijian Zhang, Nanjing University, China	
09:00–09:30	Quantum sensing with twin beams: from quantum reading to quantum conformance test (Invited) Marco Genovese, inrim, Italy	
09:30–10:00	Zero-trade-off multi-parameter quantum estimation (Invited) Guoyong Xiang, University of Science and Technology of China, China	
10:00–10:15	Measurement-device-independent quantum key distribution of frequency-nondegenerate photons (Oral) Rong Xue, Tsinghua University, China	CIOP2021-2021-000305
10:15–10:30	AM modulated microwave communication based on Rydberg atoms (Oral) Jinyun Wu, National University of Defense Technology, China	CIOP2021-2021-000879
10:30–10:45	Coffee Break	

SC1. Light-Matter Interactions

CIOP2021-2021-000062	Effects of impurities (Fe, Ce, Cu, Ca) on electronic and optical properties in fused silica: A first-principles calculation Qingyi Feng ^{1*} ; Hongxiang Deng ¹ ; Xiaotao Zu ¹ ; Li Li ¹ ; Sizhao Huang ¹ ; Biyi Wang ² 1.University of Electronic Science and Technology of China; 2.Science and Technology on Electro-Optical Information Security Control Laboratory
CIOP2021-2021-000173	Nonlinear waveguides by femtosecond laser writing of lithium triborate crystals: fabrication and wavelength conversion Bin Zhang ^{1*} 1.School of Physics, Shandong University, China
CIOP2021-2021-000349	Local dynamical properties of Airy beams reflected from a graphene-substrate interface Fuping Wu ¹ ; Yuanfei Hui ¹ ; Zhiwei Cui ^{1*} 1.School of Physics and Optoelectronic Engineering, Xidian University
CIOP2021-2021-000367	Energy absorption and γ -ray emission in the ultra short ultra intense laser-plasma interaction Abudurexiti Abuduresuli ^{1*} 1.Xinjiang university
CIOP2021-2021-000394	Nacre-inspired moisture-responsive graphene actuators with robustness and self-healing properties Jiangwei Mao ¹ ; Yonglai Zhang ¹ 1.College of Electronic Science and Engineering, Jilin University
CIOP2021-2021-000459	Subwavelength Grating Based Design on Deep Learning Shuangshuai Zhang ^{1*} ; Haifeng Liang ^{1*} 1.Xi'an Technological University
CIOP2021-2021-000519	Fabrication of the nano-pore structures with tightly focused Bessel beam Lin Kai ¹ ; Yu Lu ¹ ; Yizhao Meng ¹ ; Caiyi Chen ¹ ; Yi Liu ¹ ; Guangqing Du ¹ ; Feng Chen ^{1*} 1.Xi'an Jiaotong University
CIOP2021-2021-000524	Fresnel zone plate array fabricated by femtosecond laser Wu Peichao ^{1,2} ; Cao Xiaowen ^{1*} ; Wang Ji ¹ ; Chen Zhihao ^{1,3} ; Yuan Hongbing ^{1,3} ; Zhao Ling ¹ ; Zhang Wenwu ^{1*} 1.Ningbo Institute of Materials Technology and Engineering, Chinese Academy of Sciences; 2.University of Chinese Academy of Sciences; 3.Faculty of Mechanical Engineering and Mechanics, Ningbo University
CIOP2021-2021-000779	Multilayer composite membrane (MLCM) surface micro-nano structures processing with temporal/spatial shaping femtosecond laser Peng Yi ¹ 1.Beijing Institute of Technology

SC2. Plasmonics and Metamaterials

CIOP2021-2021-000258	Triangular and honeycomb plasma photonic crystals with triangular elements in dielectric barrier discharge Weili Fan ^{1*} ; Xiaohan Hou ¹ ; Miao Tian ¹ ; Mengmeng Jia ¹ ; Liu Qian ¹ ; Fucheng Liu ^{1*} 1.Hebei University
CIOP2021-2021-000346	Unidirectional electromagnetic wave transmission in hyperbolic-gyroelectric metamaterials Qiyue Zhang ¹ 1.Hubei Polytechnic University
CIOP2021-2021-000447	Metasurface enhancing Magnetic Resonance Imaging Yang Xu ¹ ; Zhiwei Guo ¹ ; Hong Chen ¹ 1.Tongji University
CIOP2021-2021-000453	Cascaded metasurfaces for dynamic control of THz wavefronts Xiaodong Cai ^{1*} ; Shiyi Xiao ^{1*} 1.Shanghai University
CIOP2021-2021-000469	A route to multifunctional fiber sensor based on Fano resonances and LSPR Min Liu ¹ ; Lan Yu ¹ ; Yunze Lei ¹ ; Xiang Fang ¹ ; Peng Gao ^{1*} 1.School of Physics and Optoelectronic Engineering, Xidian University
CIOP2021-2021-000478	Giant Goos-Hänchen shift with high reflectance assisted by edge states in photonic heterostructures Jiaju Wu ¹ ; Haitao Jiang ^{1*} 1.Tongji University
CIOP2021-2021-000482	High Density Hotspots SERS Engineering: Graphene/Silver Fractal Nanostructure Yan Wang ¹ ; Rui Wang ¹ ; Chengyuan Yang ¹ ; Kangzhe Zhao ¹ ; Han Qingyan ¹ ; Jun Dong ^{1*} 1.Xi'an University of Posts and Telecommunications

CIOP2021-2021-000503	Loss and gain in a plasmonic nanolaser Shaolei Wang ¹ ; Suo Wang ¹ ; Xing-Kun Man ^{2*} ; Ren-Min Ma ^{1*} 1.Peking University; 2.Beihang University
CIOP2021-2021-000507	Controlling spin-selective absorption assisted by quasi-bound states in the continuum in Folded metasurfaces Xiaotian Xu ¹ ; Haitao Jiang ^{1*} 1.Tongji University
CIOP2021-2021-000530	Surface-enhanced Raman scattering from Sn-Ag bimetallic dendrite structures Chengyuan Yang ¹ ; Feifei Wu ¹ ; Rui Wang ¹ ; Yan Wang ¹ ; Jun Dong ^{1*} 1.Xi'an University of Posts and Telecommunications
CIOP2021-2021-000532	Significant enhancement of magnetic shielding effect by using the composite metamaterial composed of mu-near-zero media and ferrite Chen Xu ¹ ; Wang Yuqian ¹ ; Guo Zhiwei ^{1*} ; Chen Hong ^{1*} 1.School of Physics Science and Engineering, Tongji University
CIOP2021-2021-000624	UV laser writing of controllable plasmonic nanostructures Dongfang Li ¹ ; Yanping Yuan ¹ ; Chunlian Wang ¹ ; Jimin Chen ¹ 1.Beijing University of Technology
CIOP2021-2021-000682	Revealing the missing dimension at an exceptional point Hongyi Luan ¹ ; Huazhou Chen ¹ ; Renmin Ma ^{1*} 1.Peking University
CIOP2021-2021-000876	A novel broadband polarization rotator with arbitrary angle kaiyue Liu ¹ ; tong Cai ² ; yaqiang Zhuang ³ 1.information engineering university; 2.Air force engineering university; 3.Beijing Institute of Technology
CIOP2021-2021-000913	High-efficiency optical metasurfaces for on-chip near-field manipulations Chen Yizhen ¹ ; Shulin Sun ^{1*} 1.Fudan University
CIOP2021-2021-000929	A novel broadband polarization rotator with arbitrary angle kaiyue LIU ¹ ; Tong Cai ² ; yaqiang Zhuang ³ 1.information engineering university; 2.air force engineering university; 3.School of Information and Electronics, Beijing Institute of Technology

SC3. Ultrafast and Nonlinear Phenomena

CIOP2021-2021-000103	Far-field transient absorption nanoscopy with sub-50 nm optical super-resolution Yali Bi ¹ ; Chi Yang ¹ ; Ping Wang ^{1*} 1.Wuhan National Laboratory for Optoelectronics-Huazhong University of Science and Technology
CIOP2021-2021-000170	Dark topological valley Hall edge solitons Boquan Ren ¹ ; Hongguang Wang ¹ ; Victor O. Kompanets ² ; Yaroslav V. Kartashov ² ; Yongdong Li ¹ ; Yiqi Zhang ^{1*} 1.Key Laboratory for Physical Electronics and Devices of the Ministry of Education & Shaanxi Key Lab of Information Photonic Technique, School of Elec-tronic Science and Engineering, Xi'an Jiaotong University; 2.Institute of Spectroscopy, Russian Academy of Sciences
CIOP2021-2021-000188	Theoretical investigation of properties of filament pumped by Gaussian and super-Gaussian beams at relative low incident power Chenrui Jing ^{1,2*} ; Xiexing Qi ^{1,2} ; Zhaohui Wang ³ 1.Luoyang Normal University; 2.Key Laboratory of Electromagnetic Transformation and Detection of Henan Province; 3.Luoyang Institute of Electro-Optical Equipment, Aviation Industry Corporation of China
CIOP2021-2021-000231	Optimization of SPM-enabled spectral selection by PSO algorithm to achieve octave-spanning wavelength shift Diaoxin Cai ¹ ; Runzhi Chen ¹ ; Zhiyi Wei ¹ ; Guoqing Chang ^{1*} 1.Institute of Physics Chinese Academy of Sciences
CIOP2021-2021-000234	Quantitative and qualitative comparison of mode-locked Yb: fiber oscillators based on different mode locking mechanism Guanguang Gao ^{1*} ; Zhigang Zhao ¹ ; Zhaojun Liu ¹ 1.Shandong University

CIOP2021-2021-000253	Ultra-broadband spectrum generated by quasi-stationary doubly resonant optical parametric oscillator Chengxiao Ning ^{1*} ; Zhaowei Zhang ¹ 1.Huazhong University of Science & Technology
CIOP2021-2021-000254	Spectral broadening in chirped-pulse optical parametric oscillators based on KTiOAsO ₄ Jiaxing Heng ^{1*} ; Zhaowei Zhang ¹ 1.School of Optical & Electronic Information, Huazhong University of Science & Technology
CIOP2021-2021-000255	Broadband mid-IR light source from difference frequency generators based on a 2-mm-long aperiodically-poled lithium-niobate crystal Xi Feng ^{1*} ; Zhaowei Zhang ¹ 1.Huazhong University of Science and Technology
CIOP2021-2021-000286	Single-shot phase reconstruction for fs broadband light source Yingming Xu ¹ ; Xingchen Pan ^{1*} ; Cheng Liu ^{1*} ; Jingqiang Zhu ^{1*} 1.Shanghai Institute of Optics and Fine Mechanics, CAS
CIOP2021-2021-000357	Theory of Topological Corner State Laser in Kagome Waveguide Arrays Zhong Hua ¹ 1.Xi'an JiaoTong university
CIOP2021-2021-000417	Compact, third harmonics generation in Yb-doped femtosecond fiber laser Yuxi Chu ^{1*} ; Meng Zhang ¹ 1.Tianjin University
CIOP2021-2021-000580	515 nm pumped 1100-1540nm continuous tunable BIBO femtosecond optical parametric oscillator Jinfang Yang ^{1,2} ; Zhaohua Wang ^{2,3*} ; Jiajun Song ^{2,4} ; Xianzhi Wang ^{2,4} ; Jiangfeng Zhu ^{1*} ; Zhiyi Wei ^{2,4,5*} 1.School of Physics and Optoelectronic Engineering, Xidian University; 2.Beijing National Laboratory for Condensed Matter Physics, Institute of Physics, Chinese Academy of Sciences; 3.CAS Center for Excellence in Ultra-intense Laser Science; 4.University of Chinese Academy of Sciences; 5.Songshan Lake Materials Laboratory
CIOP2021-2021-000923	Orientation and Ellipticity Dependence of High Harmonics and Fluorescence in CdS Nanowires Fan Yang ¹ ; Ying hui Zheng ^{1*} ; Zhi nan Zeng ^{1*} ; lu yao Zhang ¹ ; Xiao chun Ge ¹ 1.Shanghai Institute of Optics and Fine Mechanics, Chinese Academy of Sciences

SC4. Solid State, Fiber, and Other Laser Sources

CIOP2021-2021-000064	A compact ultrafast GHz mode-locked fiber laser for optical sub-sampling Denghui Song ¹ ; Ke Yin ² ; Jianghua Zhang ² ; Xin Zheng ² ; Tian Jiang ^{1*} 1.Beijing Institute for Advanced Study, National University of Defense Technology; 2.National Innovation Institute of Defense Technology, Academy of Military Sciences PLA China
CIOP2021-2021-000128	Dual-comb generation based on nonlinear polarization rotation and Lyot filter in a single-cavity fiber laser Yueling Hao ¹ ; Jie Chen ^{1*} ; Lingzhen Yang ^{1,2*} ; Juanfen Wang ¹ 1.College of Physics and Optoelectronics, Taiyuan University of Technology; 2.Lab of Advanced Transducers and Intelligent Control System, Ministry of Education, Taiyuan University of Technology
CIOP2021-2021-000167	Ultrafast Multicolor Concentric Vector Beams with controllable polarized orientation Shunlin Huang ¹ ; Jun Liu ^{2*} 1.Tongji University; 2.State Key Laboratory of High Field Laser Physics and CAS Center for Excellence in Ultra-intense Laser Science, Shanghai Institute of Optics and Fine Mechanics, Chinese Academy of Sciences
CIOP2021-2021-000182	Fused Silica with Embedded 2D-Like Ag Nanoparticle Monolayer for a femtosecond all-solid-state laser Xiaoli Sun ¹ ; Yuechen Jia ¹ ; Feng Chen ^{1*} 1.Shandong University
CIOP2021-2021-000195	Study on far-field intensity of phased laser beams with different polarization states Guangsen Ren ^{1*} 1.State Key Laboratory of Complex Electromagnetic Environment Effects on Electronics and Information System
CIOP2021-2021-000199	Soliton and bound-state soliton mode-locking Er-doped fiber laser based on graphene/WS ₂ nanocomposites saturable absorber yu Fang ¹ ; Baole Lu ^{1*} ; Jintao Bai ¹ 1.Northwest university

CIOP2021-2021-000280	Highly stable erbium-doped fiber amplifier (EDFA) pumped with a constant-current-driven semiconductor laser diode (LD) Guangfei Feng ¹ ; Zeyu Yang ^{2,3,4} ; Hao Sun ^{2,3*} 1. Troop 93131, PLA; 2. Key Lab of Ultra-Precision Intelligent Instrumentation (Harbin Institute of Technology), Ministry of Industry and Information Technology; 3. Center of Ultra-Precision Optoelectronic Instrument Engineering, Harbin Institute of Technology; 4. Beijing Microelectronics Technology Institute
CIOP2021-2021-000289	Few-cycle laser pulses characterization by using a FASI device Xiong Shen ¹ ; Jun Liu ^{1*} 1. Shanghai Institute of Optics and Fine Mechanics, CAS
CIOP2021-2021-000298	Direct Amplification Based on Yb:CALGO of High Average Power with 1-MHz Repetition Rate Chuan Bai ¹ ; GeYang Wang ¹ ; WenLong Tian ¹ ; Li Zhen ¹ ; Xuan Tian ¹ ; DaCheng Zhang ¹ ; Jiangfeng Zhu ^{1*} ; ZhiYi Wei ² 1. Xidian University; 2. Chinese Academy of Sciences
CIOP2021-2021-000348	Novel mode control method based on transmission matrix characteristics of a photonic lantern Wenguang Liu ^{1*} ; Changjin Li ¹ ; Yao Lu ¹ ; JiangBin Zhang ¹ ; Junyu Chai ¹ 1. National University of Defense Technology;
CIOP2021-2021-000353	Study on Gain Characteristics of Erbium-Ytterbium Co-Doped Fiber Laser Based on DBR Cavity Jinchao Deng ^{1,2} ; Chenlin Du ^{3,4} ; Encai Ji ⁵ ; Haibing Xiao ⁶ 1. College of Physics and Optoelectronic Engineering, Shenzhen University; 2. College of New Materials and New Energies, Shenzhen Technology University; 3. College of New Materials and New Energies, Shenzhen Technology University; 4. College of Applied Technology, Shenzhen University; 5. MIL Medical LLC; 6. Intelligent Manufacturing & Equipment School, Shenzhen Institute of Information Technology
CIOP2021-2021-000525	The exploration on the all-fiber structured, dispersion-managed, broadband tunable SESAM mode-locked Tm-doped fiber laser Juan Wang ^{1,2} ; Peilong Yang ^{1,2*} 1. Laboratory of Infrared Materials and Devices, Advanced Technology Research Institute, Ningbo University; 2. Key Laboratory of Photoelectric Detection Materials and Devices of Zhejiang Province
CIOP2021-2021-000526	The exploration on the effect of pump pulse central wavelength and initial pulse chirp on the Raman solitons in Tm-doped fiber amplifier Siyu Ge ¹ 1. Ningbo university
CIOP2021-2021-000583	101-MHz all-PM Erbium-doped fiber laser based on a biased nonlinear amplifying loop mirror Zhuoyue Tuo ¹ ; Chuobo Zhao ^{1*} ; Jiali Yao ¹ ; Huibo Wang ¹ ; Yansong Meng ¹ 1. China Academy of Space Technology (Xi'an)
CIOP2021-2021-000591	Detection of carrier-envelope offset frequency of a figure-of-9 Erbium-doped fiber laser Jiali Yao ¹ ; Chunbo Zhao ^{1*} ; Huibo Wang ¹ ; Zhuoyue Tuo ¹ ; Yansong Meng ¹ 1. China Academy of Space Technology (Xi'an)
CIOP2021-2021-000656	Random fiber laser with linearly-polarized supercontinuum generation Jiuru He ^{1,2} ; Rui Song ^{1,2*} ; Li Jiang ^{1,2} ; Jing Hou ^{1,2*} 1. College of Advanced Interdisciplinary Studies, National University of Defense Technology; 2. State Key Laboratory of Pulsed Power Laser Technology
CIOP2021-2021-000768	High efficiency, high power and tunable green Holmium-doped fiber lasers toward the "green gap" wavelengths of 535 - 553 nm Wensong Li ^{1*} 1. Department of Electronic Engineering, School of Electronic Science and Engineering (National Model Microelectronics College), Xiamen University
CIOP2021-2021-000932	The key technologies in kW-class thin-disk laser Yusen Shi ^{1,2} ; Peng Zhang ^{1*} ; Jiangfeng Wang ¹ ; Youen Jiang ¹ ; Wei Fan ¹ ; Xuechun Li ¹ 1. Key Laboratory on High Power Laser and Physics, Shanghai Institute of Optics and Fine Mechanics, Chinese Academy of Science; 2. University of Chinese Academy of Sciences

SC5. Silicon Photonics

CIOP2021-2021-000076	Generation of a 100GHz Kerr soliton frequency comb in an auxiliary laser assisted Si3N4 micro-ring resonator Manling Shen ¹ ; Ke Yin ¹ ; Runlin Miao ¹ ; Zhongjie Xu ¹ ; Jie Yang ¹ ; Xin Zheng ¹ ; Tian Jiang ^{1*} 1. National University of Defense Technology
CIOP2021-2021-000217	Investigation of defect formation in InGaAs on GaP/Si (100) substrates Xuefei Li ^{1*} ; Tieshi Wei ¹ ; Wenxian Yang ² ; Shan Jin ² ; Yuanyuan Wu ² ; Hua Qin ² ; Shulong Lu ² 1. School of Nano-Tech and Nano-Bionics, University of Science and Technology of China; 2. Suzhou Institute of Nano-Tech and Nano-Bionics, Chinese Academy of Sciences
CIOP2021-2021-000267	Ultra-compact optical switch based on Sb2Se3-assisted PhC-like subwavelength structures Yuxing Su ¹ ; Deming Liu ¹ ; Minming Zhang ^{1*} 1. Huazhong university of science and technology
CIOP2021-2021-000285	Extra electric dipole induced in dielectric nanodimers Jinze Liu ¹ ; Yongqian Li ^{1*} ; Yang Yu ¹ ; Yidu Yu ¹ ; Ruobing Shen ¹ ; Yuwen Fu ¹ ; Muhammad Saleem ¹ 1. Northwestern Polytechnical University

SC6. Microwave Photonics

CIOP2021-2021-000081	A simple self-oscillating optical frequency comb generator based on the monolithic integrated laser subject to the gain-switching state Jin Li ^{1*} ; Jilin Zheng ^{1*} ; Tao Pu ^{1*} ; Hua Zhou ¹ ; Xin Zhang ¹ ; Yunkun Li ¹ ; Yukai Chen ¹ 1. College of Communications Engineering, PLA Army Engineering University
CIOP2021-2021-000472	A novel beat interference cancellation receiver for polarization multiplexing single-sideband signals Zhonghan Su ¹ ; Xinlu Gao ¹ ; Hanxiao Xue ¹ ; Jiasi Yang ¹ ; Zhennan Zheng ^{1*} ; Shanguo Huang ^{1*} 1. Beijing University of Posts and Telecommunications
CIOP2021-2021-000496	Broadband image rejection downconverter based on parallel installed dual-drive Mach-Zehnder modulators Jiasi Yang ¹ ; Xinlu Gao ¹ ; Hanxiao Xue ¹ ; Zhonghan Su ¹ ; Zhennan Zheng ^{1*} ; Xinchao Zhao ¹ ; Shanguo Huang ^{1*} 1. Beijing University of Posts and Telecommunications
CIOP2021-2021-000531	Photonic Frequency-multiplying Vector Millimeter-wave Signal Generation with Extended Fiber-optic Transmission Distance lizhi Zhu ¹ ; Peixuan Li ² ; Xihua Zou ^{2*} 1. Southwest Jiaotong University; 2. School of Information Science and Technology, Southwest Jiaotong University
CIOP2021-2021-000571	A fiber nano-optomechanic system for low power light-control-light and sub-pN optical force measurement Yu Zhang ¹ ; Wenguo Zhu ¹ ; Huadan Zheng ¹ ; Jieyuan Tang ¹ ; Jun Zhang ¹ ; Yongchun Zhong ¹ ; Jianhui Yu ^{1*} ; Zhe Chen ¹ 1. Jinan University
CIOP2021-2021-000623	Spectral reconstruction with dictionary learning based on spatially modulated photonic crystal Wen Miao ¹ ; Chenwei Huang ¹ ; Jihai Yan ¹ ; Xinxuan Ma ¹ ; Xin Zhao ¹ ; Yuhang Wan ^{1*} 1. Beihang University
CIOP2021-2021-000698	Multi-band Microwave Up-Conversion Based on Photonic Sampling Lijuan Liu ^{1,2} ; Di Peng ^{1,2} ; Yuwen Qin ^{1,2,3*} 1. Guangdong University of Technology; 2. Guangdong Provincial Key Laboratory of Information Photonics Technology; 3. Synergy Innovation Institute of GDUT

SC7. Micro and Nanophotonics

CIOP2021-2021-000153	The manipulation of light based on the localization effect of synthetic Lieb-type lattice Danying Yu ¹ ; Xianfeng Chen ¹ ; Luqi Yuan ^{1*} 1. Shanghai Jiao Tong University
CIOP2021-2021-000197	Laser induced nano domain engineering in lithium niobate crystal Xiaoyi Xu ¹ 1. Nanjing University
CIOP2021-2021-000220	Theoretical proposal of optical neural network in one ring resonator with synthetic dimension Bo Peng ¹ 1. School of Physics and Astronomy, Shanghai Jiao Tong University

CIOP2021-2021-000259	Second Harmonic Generation in a Dual-Layer Lithium Niobate Thin Film Ridge Waveguide Lei Wang ^{1*} ; Xiuquan Zhang ¹ ; Hu Hui ¹ ; Feng Chen ¹ 1. Shandong University
CIOP2021-2021-000400	Photonic generator of even-symmetry waveform based on high order harmonics manipulation Jing Li ^{1*} ; Li Pei ¹ ; Tigang Ning ¹ ; Jingjing Zheng ¹ 1. Beijing Jiaotong University
CIOP2021-2021-000439	Tunable Terahertz Plasmon-Induced Transparency in Resonator-Coupled Dirac Semimetal Waveguides Daobin Wang ^{1*} ; Jiahuan Yang ¹ 1. Lanzhou University of Technology
CIOP2021-2021-000464	Low dark current and high bandwidth waveguide photodetector by selective area growth technique for photonic integration Feng Xiao ¹² ; Qin Han ^{1*} ; Han Ye ¹ ; Shuai Wang ¹ ; Fan Xiao ¹² 1. Institute of Semiconductors, Chinese Academy of Science; 2. College of Materials Science and Opto-Electronic Technology, University of Chinese Academy of Sciences
CIOP2021-2021-000470	Dynamical Evolution of Topological Edge States in Integrated Optical Waveguides Licheng Wang ¹ ; Zhenan Tian ^{1*} 1. State Key Laboratory of Integrated Optoelectronics, College of Electronic Science and Engineering, Jilin University
CIOP2021-2021-000477	Obtaining ultrahigh-quality factor form a strong coupling submillimeter resonator Meng Zhang ¹ ; Xianfeng Chen ^{1*} ; Hailang Dai ^{1*} 1. School of Physics and Astronomy, Shanghai Jiao Tong University
CIOP2021-2021-000499	Radius phase shift spiral zone plate fabrication using direct laser writing for generating a perfect vortex beam Yi Huang ¹ ; Pu Tu ¹ ; Haodong Zhu ¹ ; Qi Zhang ¹ ; Ruichun Lin ¹ ; Junyu Xia ¹ ; Ming Zhao ^{1*} ; Zhenyu Yang ^{1*} 1. Huazhong University of Science and Technology
CIOP2021-2021-000635	Routing valley exciton emission of a WS ₂ monolayer via delocalized Bloch modes of in-plane inversion-symmetry broken photonic crystal slabs Jiajun Wang ¹ 1. Department of Physics, Fudan University
CIOP2021-2021-000730	Polarization Singularities of Photonic Quasicrystals in Momentum Space Zhiyuan Che ¹ 1. State Key Laboratory of Surface Physics, Key Laboratory of Micro- and Nano-Photonic Structures (Ministry of Education) and Department of Physics, Fudan University
CIOP2021-2021-000911	Fluorescence properties of electron beam exposed solid anisole Yihan Lu ¹ ; Jin Binbin ¹ ; Zhao Ding ¹ ; Qiu Min ¹ 1. Westlake University
CIOP2021-2021-000933	Quantum Dots Emission Driven by Bound States in the Continuum in a Silicon Nanodisk Liu Li ¹ 1. Shanghai Institute of Microsystem and Information Technology

SC8. Optical Materials

CIOP2021-2021-000146	Study on optical properties of InGaN quantum dots grown by molecular beam epitaxy Xue Zhang ¹ ; Wenxian Yang ^{2*} ; Haibing Qiu ¹ ; Shulong Lu ^{2*} ; Lifeng Bian ² 1. USTC; 2. SINANO
CIOP2021-2021-000151	Effects of different preparation processes on the transparent electromagnetic shielding performance of graphene Kai Shi ^{1*} ; Junhong Su ¹ 1. Xi'an Technological University, School of Optoelectronic Engineering
CIOP2021-2021-000388	Highly Emissive Deep-Red Perovskite Quantum Dots in Glass: Photoinduced Thermal Engineering and Applications Ke Sun ¹ ; Dezhi Tan ^{1*} ; Jianrong Qiu ^{1*} 1. State Key Laboratory of Modern Optical Instrumentation College of Optical Science and Engineering Zhejiang University
CIOP2021-2021-000516	Enhancing upconversion emission of Er ³⁺ in single b-NaYF ₄ microrod through constructing different inert and active shells with doping Yb ³⁺ ions Shanshan Han ¹ ; Wei Gao ^{1*} 1. Xi'an University of Posts & Telecommunications
CIOP2021-2021-000518	Enhancing red upconversion emission of Ho ³⁺ ions through constructing NaYF ₄ : Yb ³⁺ /Ho ³⁺ /Ce ³⁺ @NaYF ₄ :Yb ³⁺ /Nd ³⁺ core-shell structures Xiaotong Cheng ¹ ; Wei Gao ¹ 1. Xi'an University of Posts and Telecommunications

CIOP2021-2021-000529	Tunable upconversion emission of Ho ³⁺ /Yb ³⁺ -doped single β-NaYF ₄ microrod yu Xing ¹ ; wei Gao ^{1*} 1. Xi'an University of Posts & Telecommunications
CIOP2021-2021-000649	Structural-colored silk based on Ti-Si bilayer Jiao Chu ¹ 1. Fudan University
CIOP2021-2021-000686	Compact high temperature resistant single longitudinal mode self-Q-switched DBR fiber laser based on FBG fabricated by femtosecond laser Ruidong Lv ¹ ; Tao Chen ^{1*} ; Jinhai Si ¹ ; Yuxing Hou ¹ ; Jin Huang ¹ ; Xun Hou ¹ 1. Shaanxi Key Laboratory of Information Photonics Technology, School of Electronic Science and Engineering, Faculty of Electronic and Information Science, Xi'an Jiaotong University
CIOP2021-2021-000778	Three-dimensional micro-nano structures processing with temporal/spatial shaping femtosecond laser Taoyong Li ¹ 1. Laser Micro/Nano Fabrication Laboratory, School of Mechanical Engineering, Beijing Institute of Technology

SC9. Optical Measurement and Metrology

CIOP2021-2021-000100	A new measurement method for contrast sensitivity and color difference threshold characteristics of human eyes Jiyan Zhang ^{1*} 1. National Institute of Metrology
CIOP2021-2021-000104	A method for measuring single photon level tiny light spot on sub-micrometer scale Guoqing Zhang ^{1*} ; Yaxian Yang ² 1. School of Science, Xi'an Polytechnic University; 2. Xi'an Polytechnic University
CIOP2021-2021-000131	Spectral calibration method for Stokes polarimeter Guodong Zhou ¹ ; Jianhui Li ¹ ; Yanqiu Li ^{1*} ; Yuanhe Li ¹ 1. Beijing Institute of Technology
CIOP2021-2021-000138	Deep learning-based 3D shape reconstruction with multi-frequency projection fringes Min Xu ¹ ; Yu Zhang ^{1*} ; Nan Wang ¹ ; Lin Luo ¹ 1. School of Physical Science and Technology, Southwest Jiaotong University
CIOP2021-2021-000172	Residual amplitude modulation suppression to 6×10^{-7} in frequency modulation Xinqian Guo ^{123*} ; Linbo Zhang ¹³ ; Jun Liu ¹³ ; Long Chen ¹³ ; Le Fan ¹³ ; Tao Liu ¹²³ 1. National Time Service Center (NTSC); 2. University of Chinese Academy of Science (UCAS); 3. Key Laboratory of Time and Frequency Standards
CIOP2021-2021-000237	A scanner matching method based on covariance matrix adaptation evolution strategy Yuguang Chen ¹²³ ; Sikun Li ^{13*} ; Shaobo Hu ¹²³ ; Guodong Chen ¹³ ; Ming Tang ⁴ ; Xiangzhao Wang ¹³ 1. Laboratory of Information Optics and Opto-Electronic Technology, Shanghai Institute of Optics and Fine Mechanics, Chinese Academy of Sciences; 2. School of Optical and Electronic Information, Huazhong University of Science and Technology; 3. Center of Materials Science and Optoelectronics Engineering, University of Chinese Academy of Sciences; 4. Wuhan National Laboratory for Optoelectronics (WNLO) & National Engineering Laboratory for Next Generation Internet Access System, School of Optical and Electronic Information, Huazhong University of Science and Technology
CIOP2021-2021-000260	Dynamic Fizeau interferometer for vibration optical measurement Caiyun Yu ¹ ; Yi Zong ¹ ; Mingliang Duan ¹ ; Jianxin Li ^{1*} 1. School of Electronic and Optical Engineering, Nanjing University of Science and Technology
CIOP2021-2021-000276	Measurement and inversion of Muller matrix on metal surface Zifei Zhang ¹ ; Yanhui Li ^{1*} ; Tianjiao Zhang ¹ ; Pengfei Yang ¹ 1. Xidian University
CIOP2021-2021-000279	Structural modal shapes visualization by using two-step motion magnification Chengtao Hu ¹ ; Dashan Zhang ^{1*} 1. College of Engineering, Anhui Agricultural University
CIOP2021-2021-000283	Defocusing detection based on asymmetric placement of dual-quadrant detector Jinlun Zheng ¹² ; Xing Liu ¹² ; Guodong Chen ¹² ; Zhengwei Wang ¹² ; Lu Wang ¹² ; Tianyu Gao ¹² ; Jingsong Wei ^{12*} 1. Laboratory of Micro-Nano Optoelectronic Materials and Devices, Shanghai Institute of Optics and Fine Mechanics, Chinese Academy of Sciences; 2. Center of Materials Science and Optoelectronics Engineering, University of Chinese Academy of Sciences

CIOP2021-2021-000308	Retrieval of Size and Concentration of Monodisperse Au-Ag Alloy Nanospheres from Extinction Spectra Yuxia Zheng ^{1,2} ; Paerhatijiang Tuersun ^{1,2*} ; Remilai Abulaiti ^{1,2} ; Long Cheng ^{1,2} ; Dengpan Ma ^{1,2} 1.School of Physics and Electronic Engineering, Xinjiang Normal University; 2.Key Laboratory of Mineral Luminescent Material and Microstructure of Xinjiang
CIOP2021-2021-000319	Compact portable laser system for transportable communication band ultra-narrow linewidth laser Zhang Linbo ^{1,2*} ; Jiao Dongdong ¹ ; Guo Xinqian ¹ ; Fan Le ¹ ; Xu Guanjun ¹ ; Liu Tao ¹ ; Zhang Shougang ¹ 1.National Time Service Center, Chinese Academy of Sciences; 2.State Key Laboratory of Transient Optics and Photonics, Chinese Academy of Sciences
CIOP2021-2021-000327	Scanning splice Mueller microscope Weinan Zhang ¹ ; Lihui Liu ^{1*} ; Guodong Zhou ¹ ; Jiazhi Wang ¹ ; Yuanhe Li ¹ ; Yanqiu Li ^{1*} 1.Beijing Institute of Technology
CIOP2021-2021-000332	Study on the Influence of laser seeker tracking state on far field direct laser Ruiguang Yin ^{1*} 1.State Key Laboratory of Complex Electromagnetic Environment Effects on Electronics and Information System
CIOP2021-2021-000350	End-to-End Algorithm for Absolute Phase Retrieval Jin Lu ^{1*} ; Yuan Li ¹ ; Jian Xu ¹ ; Fu Ping Wang ¹ ; Xiao Guang Sun ² 1.XI'AN University of Posts&Telecommunications; 2.Yangzhou University
CIOP2021-2021-000352	Analysis of the influence of aberration on the LMA fiber laser decomposition system Junyu Chai ^{1*} ; Wenguang Liu ¹ ; Kun Xie ² ; Guomin Zhao ¹ ; Qiong Zhou ¹ ; Jiangbin Zhang ¹ ; Changjin Li ¹ ; Yao Lu ¹ 1.National University of Defense Technology; 2.Xi'an Satellite Control Center
CIOP2021-2021-000360	Error compensation of the multi-visual structured light 3D measurement system based on 3-D point cloud for accuracy consistency Rongjun Shi ¹ ; Junhui Huang ^{1*} 1.Xi'an Jiaotong University
CIOP2021-2021-000408	Slope and curvature detection algorithm with high noise immunity in four-hole amplitude-modulated wavefront sensor Peng Qin ¹ ; Ke Liu ^{1*} ; Hui Zhong ¹ ; Yanqiu Li ^{1*} 1.Beijing Institute of Technology
CIOP2021-2021-000528	Study on target location of non-line-of-sight polarized ultraviolet light Chunyan Li ¹ ; Dou Luo ^{1*} ; Gengpeng Li ¹ ; Lin Qiao ¹ ; Qi Tang ¹ 1.Xi'an University of Posts & Telecommunications
CIOP2021-2021-000575	Design of a distributed Brillouin optical fiber sensing system based on high efficiency and cost-effective consideration Lidong Lu ^{1*} 1.Anhui University of Technology
CIOP2021-2021-000600	A novel method to simultaneously obtain phase modulation depth and residual amplitude modulation ratio in sinusoidal phase modulating interferometer Yunlong Zhu ^{1,2*} ; Yonggui Yuan ^{1,2} ; Jun Yang ^{3,1} 1.Key Laboratory of In-fiber Integrated Optics, Ministry of Education of China, Harbin Engineering University; 2.College of Physics and Optoelectronic Engineering, Harbin Engineering University; 3.School of Information Engineering, Guangdong University of Technology
CIOP2021-2021-000612	Inversion of Atmospheric Turbulence Profile based on Generalized Hufnagel-Valley Model and DCIM Lidar Zhi Cheng ¹ ; Lixin He ¹ ; Chao Mu ^{2*} 1.Hefei University; 2.Anhui Institute of Optics and Fine Mechanics, Chinese Academy of Science
CIOP2021-2021-000621	Sub-kilohertz laser linewidth measurement using the recirculating self-heterodyne method with short fiber Jing Gao ¹ ; Tao Liu ^{1*} 1.National Time Service Center
CIOP2021-2021-000648	Full description of dipole orientation in organic light-emitting diodes Lingjie Fan ¹ 1.Fudan University
CIOP2021-2021-000654	Optical Metrology Technique based on Momentum-space Dispersion Tongyu Li ¹ 1.Fudan university

CIOP2021-2021-000655	Comparative Study of Two Target Detection Algorithms in UAV Aerial Photography Detection Zhi Cheng ¹ ; Jingyuan Chen ^{1*} 1.Hefei University
CIOP2021-2021-000869	Study on the effect of GRIN lens eccentricity on the propagation characteristics of Gaussian beam Ke Li ^{1*} 1.Xi'an University Of Posts and Telecommunications
CIOP2021-2021-000873	Simulation calculation and analysis of laser detection radius Hao Guo ^{1*} ; Qianrong Chen ¹ ; Ruiguang Yin ¹ ; Guangsen Ren ¹ ; Weiwei Liang ¹ 1.CEMEE
CIOP2021-2021-000875	Study on the influence of laser seeker tracking state on far field direct laser Ruiguang Yin ¹ 1.State Key Laboratory of Complex Electromagnetic Environment Effects on Electronics and Information System
SC10. Infrared and Terahertz Technologies	
CIOP2021-2021-000067	Detection and analysis of soil contaminants by terahertz time-domain spectroscopy Meihui Yang ¹ ; Haochong Huang ^{1*} ; Caiqin Liu ¹ ; Dongshun Zhang ¹ ; Zhiyaun Zheng ¹ ; Zili Zhang ¹ 1.China University of Geosciences
CIOP2021-2021-000074	1 μ s Imaging with A Frequency Up-conversion Terahertz Imager Zhanglong Fu ^{1*} 1.Shanghai Institute of Microsystems and Information Technology
CIOP2021-2021-000144	GaN based resonant tunneling diodes for terahertz light sources Haibing Qiu ¹ ; Xiangpeng Zhou ² ; Wenxian Yang ³ ; Xue Zhang ² ; Shan Jin ³ ; Shulong Lu ³ ; Lifeng Bian ^{3*} 1.university of science and technology of china; 2.USTC; 3.Key Laboratory of Nano-devices and Applications, Suzhou Institute of Nano-Tech and Nano-Bionics, Chinese Academy of Sciences
CIOP2021-2021-000235	Design and simulation of electromagnetically induced transparent structure based on terahertz metamaterials Jian Zhang ¹ ; Ying Li ¹ ; Bin Li ^{1*} 1.Communication University of China
CIOP2021-2021-000268	Research on Beam Universality Transfer Factor of Coherent Array Laser Wei Li ¹ ; Jingjing Dai ¹ ; Zhiyong Wang ^{1*} 1.Beijing University of Technology
CIOP2021-2021-000291	Construction of narrow-band infrared radiation characteristics database for high-temperature hydrocarbon combustion media Jinluli ¹ ; Lu Bai ^{1,2*} ; Jingyu Bai ¹ ; Yueyuan Xu ¹ ; Tianjiao Zhang ¹ ; Danmeng Zhang ³ 1.School of Physics and Optoelectronic Engineering, Xidian University; 2.Collaborative Innovation Center of Information Sensing and Understanding at Xidian University; 3.Xidian University
CIOP2021-2021-000324	Research on scanning infrared digital holography with large field of view Dongshun Zhang ¹ ; Hao Feng ¹ ; Zhiyuan Zheng ¹ ; Zili Zhang ¹ ; Haochong Huang ^{1*} 1.China University of Geosciences, Beijing
CIOP2021-2021-000331	Modeling study of UV optical characteristics of multiphase alumina cluster in the plume Yueyuan Xu ¹ ; Lu Bai ^{1*} ; Jinlu Li ¹ ; Tianjiao Zhang ¹ 1.Xidian University
CIOP2021-2021-000334	Design and analysis of terahertz EIT structure based on cross split ring Ying Li ¹ ; Jian Zhang ¹ ; Bin Li ^{1*} 1.Communication University of China
CIOP2021-2021-000421	Excite Spoof Surface Plasmons with Tailored Wavefronts Using High-Efficiency Terahertz Metasurfaces Zhuo Wang ¹ 1.Department of Physics, Fudan University

CIOP2021-2021-000523	Room temperature high sensitivity GaAs millimeter wave detector based on a hemispherical lens Chenyu Yao ¹ 1.State Key Laboratory for Infrared Physics, Shanghai Institute of Technical Physics, Chinese Academy of Sciences
CIOP2021-2021-000615	A low cost ammonia measurement system based on wavelength modulation TDLAS system Xiaokun Li ¹ 1.Huazhong University of Science and Technology
CIOP2021-2021-000676	Terahertz image segmentation of occluded objects based on mean clustering Fangrong Gan ^{1*} ; Qi Li ¹ 1.Harbin Institute of Technology
CIOP2021-2021-000775	Dynamic and multifunctional all-dielectric terahertz metasurfaces modulators based on quasi-bound states in the continuum mode Xu Chen ¹ ; Xiaoqiang Jiang ¹ ; Wenhui Fan ^{1*} 1.State Key Laboratory of Transient Optics and Photonics, Xi'an Institute of Optics and Precision Mechanics, Chinese Academy of Sciences
CIOP2021-2021-000871	Terahertz Time Domain Spectral Reflective Tomography Jichen Lou ¹ ; Yan Zhang ^{1*} 1.Beijing Key Laboratory of Metamaterials and Devices, Key Laboratory of Terahertz Optoelectronics, Ministry of Education, Beijing Advanced Innovation Center for Imaging Theory and Technology, Department of Physics, Capital Normal University
CIOP2021-2021-000872	Fourier Transform Infrared Spectra Of Pyrimidine Biological Samples Kaixuan Li ¹ ; Ding Li ¹ ; Yan Zhang ^{1*} 1.Beijing Key Laboratory of Metamaterials and Devices, Key Laboratory of Terahertz Optoelectronics, Ministry of Education, Beijing Advanced Innovation Center for Imaging Theory and Technology, Department of Physics, Capital Normal University

SC11. Optical Imaging, Display, and Storage

CIOP2021-2021-000046	Comparison of sparse-based full chip source optimization with different bases Guanghui Liao ¹ ; Lihui Liu ¹ ; Yiyu Sun ¹ ; Pengzhi Wei ¹ ; Miao Yuan ¹ ; Zhaoxuan Li ¹ ; Yanqiu Li ^{1*} 1.Beijing Institute of Technology
CIOP2021-2021-000047	Fast lithographic source pupil optimization using difference of convex functions algorithm for transformed L1 penalty Yiyu Sun ¹ ; Lihui Liu ¹ ; Guanghui Liao ¹ ; Miao Yuan ¹ ; Yang Liu ¹ ; Yaning Li ¹ ; Lulu Zou ¹ ; Yanqiu Li ^{1*} 1.Beijing Institute of technology
CIOP2021-2021-000191	Large depth of field imaging method based on liquid lens Lei Cheng ¹ ; Yuwei Wang ^{1*} 1.Anhui Agricultural University
CIOP2021-2021-000203	Single-shot photon recording for three-dimensional memory with prospects of high capacity Zhuo Wang ¹ ; Dezhi Tan ^{1*} ; Jianrong Qiu ^{1*} 1.Zhejiang University
CIOP2021-2021-000209	Generation of Multi-focus Abruptly Autofocusing Beams Menglin Wu ¹ ; Shuqing Lin ¹ ; Yujie Chen ^{1*} 1.Sun Yat-sen University
CIOP2021-2021-000226	A Deep Learning Approach for Noise Reduction of Off-axis Computer Generated Holograms Xusheng Zhuang ¹ ; Aimin Yan ^{1*} 1.Shanghai Normal University
CIOP2021-2021-000240	Optically Stimulated Synaptic Device Based on Silicon-tin Alloyed Thin Film Wen Rui Xu ¹ ; Nasir Ilyas ¹ ; Hong Zhuo Gao ¹ ; Rajwali Khan ² ; Wei Li ¹ ; Xiang Dong Jiang ^{1*} 1.School of Optoelectronic Science and Engineering, University of Electronic Science and Technology of China; 2.Department of Physics, Lakki Marwat University
CIOP2021-2021-000265	Simulations of impacts on aerial image performance of defocus on different resolution enhancement technologies Yaning Li ¹ ; Yanqiu Li ^{1*} ; Yiyu Sun ¹ ; Pengzhi Wei ¹ 1.Beijing Institute of Technology
CIOP2021-2021-000274	Fabrication of 12-Channel Micro Integrated Filter in 550 ~ 650nm by Combine Masks and Plating Fan Feihu ¹ ; Liang Haifeng ^{1*} 1.Xi'an Technological University

CIOP2021-2021-000284	Auto-Focusing of ultra-clean sample Based on projection View Method Xing Liu ^{1,2} ; Guodong Chen ^{3,2} ; Jinlun Zheng ^{1,2} ; Jingsong Wei ^{1,2*} 1.Laboratory of Micro-Nano Optoelectronic Materials and Devices, Shanghai Institute of Optics and Fine Mechanics, Chinese Academy of Sciences; 2.Center of Materials Science and Optoelectronics Engineering, University of Chinese Academy of Sciences; 3.a Laboratory of Micro-Nano Optoelectronic Materials and Devices, Shanghai Institute of Optics and Fine Mechanics, Chinese Academy of Sciences
CIOP2021-2021-000296	Airborne Geiger-mode LiDAR System with Real-time Data Compression Fanghua Liu ^{1,2} ; Yan He ^{1,2*} ; Jiayong Yu ³ ; Yongqiang Chen ^{1,2} ; Shouchuan Guo ^{1,4} ; Yifan Huang ^{1,2} ; Weibiao Chen ^{1,2*} 1.Key Laboratory of Space Laser Communication and Detection Technology, Shanghai Institute of Optics and Fine Mechanics, Chinese Academy of Sciences; 2.Center of Materials Science and Optoelectronics Engineering, University of Chinese Academy of Sciences; 3.School of Civil Engineering, Anhui Jianzhu University; 4.School of Physical and Technology, ShanghaiTech University
CIOP2021-2021-000310	Time-frequency image based signal recognition by using improved CenterNet Junhui Weng ¹ ; Lei Yu ¹ ; Hongna Zhu ^{1*} ; Le Cheng ¹ ; Hao Sui ¹ ; Zhilong Li ¹ ; Jinli Zhang ² 1.School of Physical Science and Technology, Southwest Jiaotong University; 2.National Key Laboratory of Science and Technology on Blind Signal Processing
CIOP2021-2021-000320	Research on Edge Enhancement of Optical Image Based on Acousto-optic Filtering Yukun Chu ¹ ; Hao Wang ^{1*} ; Hao Wang ^{1*} ; Wenyao Liu ^{1*} 1.Fujian Normal University
CIOP2021-2021-000321	Hyperspectral maging system based on fiber endoscope Liqun Chen ¹ ; Chunguang Zhang ^{1*} ; Hao Wang ^{1*} ; Wenyao Liu ^{2*} 1.Fujian Normal University; 2.Fujian Normal University Hospital
CIOP2021-2021-000420	A compact optical module to generate arbitrary vector vortex beams Yuan Zhou ^{1,2} ; Xing Li ^{1,2} ; Yanan Cai ^{1,2} ; Yanan Zhang ^{1,2} ; Shaohui Yan ¹ ; Meiling Zhou ¹ ; Manman Li ¹ ; Baoli Yao ^{1,2*} 1.State Key Laboratory of Transient Optics and Photonics, Xi'an Institute of Optics and Precision Mechanics, Chinese Academy of Sciences; 2.University of Chinese Academy of Sciences
CIOP2021-2021-000474	High resolution lensless imaging with a compound zone plate Sun Da ¹ ; Ping Su ^{1*} 1.Tsinghua University
CIOP2021-2021-000479	Ultra-depth lensless optical fiber endoscope with active distance perception Haogong Feng ¹ ; Fei Xu ¹ 1.Nanjing University
CIOP2021-2021-000488	Auto detection and risk assessment of vulnerable plaques based on IVOCT images Yaoyang Qiu ¹ ; Qin Li ^{1*} 1.Beijing Institute of Technology
CIOP2021-2021-000494	Measurement of Optical Characteristic Parameters of Biological Tissue Based on Optical Coherence Tomography Huang Lin ¹ ; Li Qin ^{1*} 1.Beijing Institute of Technology
CIOP2021-2021-000533	An image encryption method based on structured fringe modulation and coded sampling yingjie li ¹ ; ping su ² 1.Department of Precision Instrument, Tsinghua University; 2.Tsinghua Shenzhen International Graduate School, Tsinghua University
CIOP2021-2021-000543	Image-based noise filtering method for Geiger-mode APD array Lidar data Yongqiang Chen ^{1,2} ; Yan He ^{1,2*} ; Yuan Luo ¹ ; Fanghua Liu ^{1,2} ; Shouchuan Guo ^{1,3} ; Yifan Huang ^{1,2} ; Weibiao Chen ^{1,2*} 1.Key Laboratory of Space Laser Communication and Detection Technology, Shanghai Institute of Optics and Fine Mechanics, Chinese Academy of Sciences; 2.Center of Materials Science and Optoelectronics Engineering, University of Chinese Academy of Sciences; 3.School of Physical and Technology, Shanghai Tech University
CIOP2021-2021-000640	A characterization method for particle extraction from raw-reconstructed images by using U-net Zhitao Hao ¹ ; Wei-Na Li ² ; Ping Su ^{1*} 1.Tsinghua Shenzhen International Graduate School; 2.Shantou University

CIOP2021-2021-000690	Deep Homography Convolutional Neural Network for Fast and Accurate Image Registration Liu Xingzi ¹ ; Luo Lin ¹ ; Peng Chaoyong ^{1*} 1.Southwest Jiaotong University
CIOP2021-2021-000719	Image restoration in optical synthetic aperture imaging system via deep learning Ju Tang ^{1,2} ; Jianglei Di ^{1,2*} ; Jianlin Zhao ^{1,2} 1.Key Laboratory of Light Field Manipulation and Information Acquisition, Ministry of Industry and Information Technology, Northwestern Polytechnical University; 2.Shaanxi Key Laboratory of Optical Information Technology, School of Physical Science and Technology, Northwestern Polytechnical University
CIOP2021-2021-000741	Optical manipulation of chiral particles by vector beams Manman Li ¹ ; Shaohui Yan ¹ ; Yanan Zhang ¹ ; Baoli Yao ¹ 1.Xi'an Institute of Optics and Precision Mechanics, Chinese Academy of Sciences
CIOP2021-2021-000770	Non-line-of-sight imaging with picosecond temporal resolution Bin Wang ¹ ; Mingyang Zheng ² ; Jinjian Han ¹ ; Xin Huang ¹ ; Xiuping Xie ² ; Feihu Xu ^{1*} ; Qiang Zhang ^{1*} ; Jianwei Pan ¹ 1.University of Science and Technology of China; 2.Jinan Institute of Quantum Technology
CIOP2021-2021-000771	The progress of high-density multidimensional optical data storage Zijian Xie ¹ ; Xiangping Li ¹ 1.Guangdong Provincial Key Laboratory of Optical Fiber Sensing and Communications, Institute of Photonics Technology, Jinan University
CIOP2021-2021-000773	Six-Dimensional Orbital Angular Momentum Multiplexed Optical Recording Xu Ouyang ¹ ; Yi Xu ² ; Xiangping Li ^{1*} 1.Guangdong Provincial Key Laboratory of Optical Fiber Sensing and Communications, Institute of Photonics Technology, Jinan University; 2.Department of Electronic Engineering, College of Information Science and Technology, Jinan University
CIOP2021-2021-000777	An Efficient Point Sampling Algorithm for Train Bottom Key Component Detection Bingren Chen ¹ ; Jinlong Li ^{1*} ; Qian Zhao ¹ ; Xiaorong Gao ¹ ; Lin Luo ¹ 1.Southwest Jiaotong University
CIOP2021-2021-000780	Filtering algorithm in 3D reconstruction of wheel tread based on moire profilometry Ruyu MA ¹ ; Jinlong LI ^{1*} ; Kailang HE ¹ ; Xiaorong GAO ¹ ; Yu ZHANG ¹ ; Xingzi LIU ¹ 1.Southwest Jiaotong University
CIOP2021-2021-000781	3D Point Cloud Surface Reconstruction Algorithm of Pantograph Slide Qian Zhao ¹ ; Xiaorong Gao ¹ ; Jinlong Li ^{1*} ; Yu Zhang ¹ ; Bingren Chen ¹ ; Binghua Cai ¹ 1.Southwest Jiaotong University
CIOP2021-2021-000886	High-accuracy real-time omnidirectional 3D scanning and inspection system Jiaming Qian ^{1*} ; Shijie Feng ¹ ; Yixuan Li ¹ ; Qian Chen ¹ ; Chao Zuo ¹ 1.Nanjing University of Science and Technology
CIOP2021-2021-000899	High-throughput dark-field transport of intensity microscopy Linpeng Lu ^{1*} 1.Nanjing University Of Science And Technology
CIOP2021-2021-000900	Structured Illumination Microscopy and Super-resolution Image Reconstruction Ying Bi ^{1*} ; Jiaming Qian ¹ ; Yu Cao ¹ 1.Nanjing University of Science and Technology
CIOP2021-2021-000901	A computational pixel super-resolution method based on coded aperture modulation Bowen Wang ^{1*} ; Zuo Chao ¹ 1.Nanjing University of Science and Technology
CIOP2021-2021-000902	Super-resolution microscopy based on structural illumination Yu Cao ^{1*} ; Jiaming Qian ¹ ; Ying Bi ¹ 1.Nanjing University of Science and Technology
CIOP2021-2021-000903	Digital holographic microscopy based on Hilbert transform phase retrieval Qian Shen ^{1*} 1.Nanjing University of Science and Technology
CIOP2021-2021-000904	Multi-mode illuminated refractive index tomography microscope for opaque specimens Zhidong Bai ^{1*} ; Ning Zhou ¹ ; Jiaji Li ¹ 1.Nanjing University of Science and Technology

CIOP2021-2021-000905	Realized accelerated Fourier ptychographic diffraction tomographic imaging using sparse annular LED illumination Shun Zhou ¹ 1.Nanjing University of Science and Technology
CIOP2021-2021-000906	Single-shot 3D refractive index distribution microscopy based on color-multiplexed intensity diffraction tomography Ning Zhou ^{1*} ; Jiaji Li ¹ ; Zhidong Bai ¹ ; Chao Zuo ¹ 1.Nanjing University of Science and Technology
CIOP2021-2021-000907	Deep learning-based single-shot spatial frequency multiplexing composite fringe projection profilometry Yixuan Li ^{1*} ; Jiaming Qian ¹ ; Shijie Feng ¹ ; Qian Chen ¹ ; Chao Zuo ¹ 1.Nanjing Univ. of Science and Technology
CIOP2021-2021-000914	An aberration recovery method for Fourier ptychography based on annular illumination Yefeng Shu ^{1*} 1.Nanjing University of Science and Technology
CIOP2021-2021-000921	Denoising method for image quality improvement in photoacoustic tomography using deep learning Ziming Yu ¹ ; Kanggao Tang ¹ ; Xianlin Song ^{2*} 1.Ji luan Academy, Nanchang University; 2.School of Information Engineering, Nanchang University
CIOP2021-2021-000174	Bionic Retina-like First-photon Imaging Xinyu Zhao ¹ ; Lijing Li ¹ ; Mingjie Sun ^{1*} 1.Beihang University
SC12. Optical Communications and Networks	
CIOP2020-2020-000004	ARMA Modelling and Sigmoid Fitting Based Optical Fiber Security Intrusion Recognition System Xiangdong Huang ¹ ; Biyao Wang ¹ 1.Tianjin University
CIOP2020-2020-000006	A Novel MIMO DSP based on Square Contour Algorithm for Joint Few-mode/Multi-core Optical Transmission System Hepeng Hou ^{1*} 1.Beijing University of Posts and Telecommunications
CIOP2021-2021-000026	Optimal Relay Placement and Performance Analysis of All-optical Dual-hop Free-space Optical Communication System Liqiang Han ^{1*} 1.Yanshan University
CIOP2021-2021-000171	Improving Stability of Turbulent FSO Links with OAM-Hopping Jiancang Liu ¹ ; Bing Lei ^{1*} 1.College of Advanced Interdisciplinary Studies, National University of Defense Technology
CIOP2021-2021-000179	Design of Special Cylinder Support for Reflective Mirror in Space Optical Instrument for Laser Communication Yang Song ¹ ; Wenyi Chai ¹ ; Zhong Shen ¹ ; Jing Ye ^{1,2*} ; Tengfei Ma ¹ ; Yongming Hu ¹ 1.Xi'an Institute of Optics and Precision Mechanics, Chinese Academy of Sciences; 2.University of Chinese Academy of Sciences
CIOP2021-2021-000513	High-performance surface-illuminated pin photodetector array for 200Gbps receiving system Fan Xiao ^{1,2} ; Qin Han ^{1,2} ; Shuai Wang ¹ ; Feng Xiao ^{1,2} ; Han Ye ^{1*} 1.State Key Laboratory of Integrated Optoelectronics, Institute of Semiconductors, Chinese Academy of Science; 2.College of Materials Science and Opto-Electronic Technology, University of Chinese Academy of Sciences
CIOP2021-2021-000560	Simulation of non-line-of-sight communication with nonuniform Monte-Carlo model Changquan Xia ^{1,2} ; Zhuangzhuang Shi ¹ ; Li Zhang ^{3*} ; Siyun Xu ¹ ; Ying Zhu ¹ ; Lichao Wang ¹ ; Wenfeng Lu ¹ 1.School of Physical Science and Technology, Yangzhou University; 2.State Key Laboratory of High Field Laser Physics, Shanghai Institute of Optics and Fine Mechanics, Chinese Academy of Sciences; 3.Communications and Electronic Information Department, Shanghai Vocational College of Science and Technology
CIOP2021-2021-000593	Geometric shaping optimization of 64-APSK constellation in discrete nonlinear frequency division multiplexing systems Chen Junda ¹ ; Chen Yizhao ¹ ; Duan Yuxiang ¹ ; Tong Tianhao ¹ ; Wang Xuefeng ¹ ; Xiang Yating ¹ ; Zhao Can ¹ ; Wang Li ¹ ; Liu Deming ¹ ; Tang Ming ^{1*} 1.Huazhong University of Science and Technology
CIOP2021-2021-000614	Modulation classification of MQAM signals in optical networks using convolutional neural networks Yongle Lee ^{1*} ; Long Chu ¹ ; Meng Liang ¹ 1.Xi'an University of Posts and Telecommunications

CIOP2021-2021-000620	Propagation properties of a double-half inverse Gaussian hollow beam with vortex through paraxial ABCD optical systems Kaicheng Zhu ¹ ; Taofen Wang ² ; Jie Zhu ^{3*} 1.School of Engineering, Guangzhou College of Technology and Business; 2.School of Physics, Hunan University of Science and Technology; 3.College of Science, Guizhou Institute of Technology
CIOP2021-2021-000684	Simultaneous Transmission of Power and Microwave Signal in Single-Mode Fiber Hailin Yang ¹ ; Di Peng ¹ ; Yuwen Qin ¹ 1.Guangdong University of Technology
SC13. Optical Fiber and Waveguide Technologies	
CIOP2021-2021-000154	Multimode assisted open-cavity Mach-Zehnder interferometer Hui Zhang ¹ ; Chuanxu Liu ¹ ; Meng Zhang ¹ ; Jiuru Yang ^{1,2*} 1.College of Engineering, Heilongjiang University; 2.Key lab of Electronics Engineering, College of Heilongjiang Province, Heilongjiang University
CIOP2021-2021-000157	Intensity modulated optical liquid level sensor based on cascaded multimode-single-mode-multimode fiber structure Jinwen Zhang ¹ ; Hui Zhang ¹ ; Huaicheng Zhang ¹ ; Xue Zhang ¹ ; Jiuru Yang ^{1,2*} 1.College of Engineering, Heilongjiang University; 2.Key lab of Electronics Engineering, College of Heilongjiang Province, Heilongjiang University
CIOP2021-2021-000227	Design of stretchable near-eye display optical system Xinguang Jiao ^{1*} ; Haifeng Liang ^{1*} 1.Xi'an Technological University
CIOP2021-2021-000333	Fiber Mach-Zehnder interferometer micro-cavity length adjustment in tens of nanometers by chemical etching for sensing system miniaturization Shuhao Cai ^{1,2*} 1.Nanjing University of Science and Technology; 2.ITMO University
CIOP2021-2021-000337	Label free graphene oxide long period grating cancer embryo immunosensor Yang Hongyan ¹ ; Liu Mengyin ^{1*} ; Xiao Gongli ¹ 1.Guilin University of Electronic Technology
CIOP2021-2021-000361	Reduction of backscattering noise by carrier suppression in resonator integrated optic gyroscope Xuebao Kuai ^{1,2} ; Lei Wei ² ; Yuming He ² ; Zuo Feng ^{3,5,6} ; Fuhua Yang ^{3,5,7,8} ; Zhaofeng Li ⁴ ; XiaoDong Wang ^{4,6*} 1.University of Science and Technology of China; 2.Institute of Semiconductors, Chinese Academy of Sciences; 3.Engineering Research Center for Semiconductor Integrated Technology, Institute of Semiconductors, Chinese Academy of Sciences; 4.Engineering Research Center for Semiconductor Integrated Technology, Institute of Semiconductors, Chinese Academy of Sciences; 5.Center of Materials Science and Optoelectronics Engineering, University of Chinese Academy of Sciences; 6.School of Microelectronics, University of Chinese Academy of Science; 7.State Key Laboratory for Superlattices and Microstructures, Institute of Semiconductors, Chinese Academy of Science; 8.Beijing Academy of Quantum Information Science
CIOP2021-2021-000431	Circular cross-section waveguides processed by multi-foci-shaped femtosecond pulses Zezheng Li ¹ ; Xiaoyan Li ¹ ; Yu Feng ¹ ; Zhennan Tian ^{1*} 1.Jilin University
CIOP2021-2021-000461	High-Q, submicron-confined chalcogenide microring resonators Yang Zhen ¹ 1.Ningbo University
CIOP2021-2021-000506	Design and analysis of polarization-splitting low-loss rectangular fiber Ji Wang ¹ ; Li Pei ^{1*} ; Zuliang Ruan ¹ ; Tigang Ning ¹ ; Kai He ¹ 1.Beijing Jiaotong University
CIOP2021-2021-000512	A sensitized fiber optic Fabry-Perot temperature sensor based on virtual Vernier effect Cheng Zhang ¹ ; Jing Yang ^{1*} ; Guanghuan Cui ¹ ; Zheng Sun ¹ ; Yafeng Zhao ¹ ; Jixuan Wu ¹ ; Shanshan Zhang ¹ ; Junfa Zhao ¹ ; Hua Bai ¹ ; Changchun Miao ¹ 1.TianGong University
CIOP2021-2021-000527	Fiber optic refractive index sensor based on tapered capillary Cheng Zhang ¹ ; Jing Yang ^{1*} ; Guanghuan Cui ¹ ; Zheng Sun ¹ ; Yafeng Zhao ¹ ; Jixuan Wu ¹ ; Shanshan Zhang ¹ ; Junfa Zhao ¹ ; Hua Bai ¹ ; Changchun Miao ¹ 1.TianGong University

CIOP2021-2021-000534	Photosensitive polymer-based micro/nano long-period fiber grating for refractive index sensing Yaxun Zhang ^{1*} ; Xiaoyun Tang ¹ 1.Key Lab of In-fiber Integrated Optics, Ministry Education of China, Harbin Engineering University
CIOP2021-2021-000547	Magnetic Field Sensor Based on Multilongitudinal Mode Fiber Laser and Radio-Frequency Demodulation Ling Liu ¹ ; Jian Xu ¹ ; Tigang Ning ^{1*} ; Li Pei ¹ ; Jingjing Zheng ¹ ; Jing Li ¹ ; Jianshuai Wang ¹ 1.Institute of Lightwave Technology, Beijing Jiaotong University
CIOP2021-2021-000558	Mode-conversion in few-mode fibers based on PC-FWM Longtao Yang ¹ ; Jiamin Li ¹ ; Cong Chen ¹ ; Zhenhua Xu ¹ ; Zujun Qin ^{1*} ; Jianyuan Li ² 1.Guilin University of Electronic Technology; 2.Shandong Branch of China Mobile Group Design Institute Co, Ltd
CIOP2021-2021-000561	Bending Vector Sensing Based on Periodic Core-Offset Ultra-Long Period Fiber Grating Shanshan Zhang ¹ ; Jizhe Yin ¹ ; Cheng Zhang ^{1*} ; Jixuan Wu ¹ 1.Tiangong university
CIOP2021-2021-000584	A 15-user quantum secure direct communication network Zhangtong Qi ¹ ; Yuanhua Li ^{1*} ; Xianfeng Chen ^{1*} 1.Shanghai Jiao Tong University
CIOP2021-2021-000660	New doping Design of Double-Ring-Core FM-EDFA with Low Differential Modal Gain and High Saturation Input Power Yihong Fang ¹ ; Yan Zeng ¹ ; Yuwen Qin ^{1*} ; Ou Xu ¹ ; Jianping Li ¹ ; Songnian Fu ¹ 1.Guangdong University of Technology
CIOP2021-2021-000661	Multi-core Fiber Design for Hybrid Power & Radio-over-Fiber System Shan Wang ¹ ; Yuwen Qin ^{1*} ; Ou Xu ¹ ; Jianping Li ¹ ; Songnian Fu ¹ 1.Guangdong University of Technology
CIOP2021-2021-000669	Single-polarization hollow anti-resonance fiber with comb transmission spectrum Weiqin Zheng ¹ ; Ou Xu ¹ ; Jianping Li ¹ ; Songnian Fu ¹ ; Yuwen Qin ^{1*} 1.Guangdong University of Technology
CIOP2021-2021-000679	Displacement Sensor Based on a Macrobending Plastic Optical Fiber with a Multi-notched Structure Chuanxin Teng ^{1*} ; Peng Shao ¹ ; Youwei Wang ¹ ; Maosen Li ¹ 1.Guilin University of Electronic Technology
CIOP2021-2021-000709	L-band FM-EDFA with the DMG mitigation Zeng Yan ¹ ; Fang Yihong ¹ ; Qin Yuwen ^{1*} ; Xu Ou ¹ ; Li Jianping ¹ ; Fu Songnian ¹ 1.Guangdong University of Technology
CIOP2021-2021-000758	A Core-offset Hetero Structured Optical Fiber based Surface Plasmon Resonance Sensor Chuanxin Teng ^{1*} ; Youwei Wang ¹ ; Peng Shao ¹ 1.Guilin University of Electronic Technology
CIOP2021-2021-000861	Dual-parameter sensing with tapered single mode fiber and FBG Shengli Pu ^{1*} ; Yuxiu Zhang ¹ 1.University of Shanghai for Science and Technology
SC14. Biophotonics and Optofluidics	
CIOP2020-2020-000005	Digitally enhanced stimulated emission depletion nanoscopy based on time modulation Luwei Wang ¹ ; Yue Chen ¹ ; Xiao Peng ¹ ; Jia Zhang ¹ ; Jialin Wang ¹ ; Liwei Liu ¹ ; Zhigang Yang ¹ ; Wei Yan ^{1*} ; Junle Qu ^{1*} 1.Shenzhen University
CIOP2021-2021-000057	Research on the Low Frequency Vibration Spectrum of DNA Solution and Its Intercalation and Binding Mechanism with Adriamycin Liqing Ren ^{1*} ; Junbo Deng ¹ 1.Yulin College
CIOP2021-2021-000090	Pulse-Sheet Chemical Tomography by Counter-Propagating Stimulated Raman Scattering Chi Yang ^{1,2} ; Yali Bi ^{1,2} ; Ping Wang ^{1,2} 1.Britton Chance Center for Biomedical Photonics, Wuhan National Laboratory for Optoelectronics-Huazhong University of Science and Technology; 2.MoE Key Laboratory for Biomedical Photonics, Collaborative Innovation Center for Biomedical Engineering, School of Engineering Sciences, Huazhong University of Science and Technology, Wuhan
CIOP2021-2021-000141	Suppression of image defects induced by acoustic heterogeneity in photoacoustic tomography using ultrasound computed tomography Mingchun Yang ¹ ; Yiwu Zhao ¹ ; Chao Tian ^{1*} 1.Department of Precision Machinery and Precision Instrumentation, School of Engineering Science, University of Science and Technology of China

CIOP2021-2021-000200	Identification of true and fake blood based on the NIR spectroscopy combined with PCA-WNN-PSO algorithm Zhong Ren ^{1*} ; Tao Liu ¹ 1.Key Laboratory of Optic-electronics and Communication, Jiangxi Science and Technology Normal University
CIOP2021-2021-000212	Superresolution Image Reconstruction Based on Single-Molecule Localization Algorithm Lixin Liu ^{1*} ; Meijie Qi ¹ ; Yujie Liu ¹ 1.Xidian University
CIOP2021-2021-000213	Pneumonia image classification based on improved VGG19 convolutional neural network Feng Xiong ¹ ; Di He ¹ ; Meijie Qi ¹ ; Yujie Liu ¹ ; Zhoufeng Zhang ² ; Lixin Liu ^{1*} 1.Xidian University; 2.CAS Key Laboratory of Spectral Imaging Technology
CIOP2021-2021-000243	3D morphological reconstruction based on single-phase image by machine learning Jinbin Huang ^{1*} ; Xinyu Wei ¹ ; Lingran Gong ¹ ; Ying Ji ¹ 1.Jiangsu University
CIOP2021-2021-000250	Imaging the ultrastructures and dynamics of live erythrocyte membranes at the single-molecule level with a far-red probe on a microfluidic platform Wei Yang ¹ 1.Dalian University of Technology
CIOP2021-2021-000263	Catalase nanocrystals loaded with methylene blue as oxygen self-supplied, imaging guided platform for photodynamic therapy of hypoxic tumors Renbin Zhou ¹ ; Tymish Y. Ohulchanskyy ^{1*} ; Junle Qu ^{1*} 1.Center for Biomedical Photonics & College of Physics and Optoelectronic Engineering, Shenzhen University
CIOP2021-2021-000270	Photobiomodulation regulate the phagocytosis of Amyloid- β by microglia Renlong Zhang ¹ ; Junle Qu ^{1*} ; Zhou Ting ¹ ; Liu Liwei ¹ 1.Center for Biomedical Photonics & College of Physics and Optoelectronic Engineering, Shenzhen University
CIOP2021-2021-000273	In vivo label-free imaging of cerebrovascular for cerebral amyloid angiopathy by multimodal nonlinear optical imaging Ziyi Luo ¹ ; Junle Qu ^{1*} ; Hao Xu ¹ ; Liwei Liu ¹ ; Tymish Y Ohulchanskyy ¹ 1.Center for Biomedical Photonics & College of Physics and Optoelectronic Engineering, Shenzhen University
CIOP2021-2021-000303	Detection of microparticles in flow by 2D light scattering and fluorescence imaging Xuanta Su ¹ ; Zhuo Wang ² ; Xin Qi ² 1.School of Microelectronics, Shandong University; 2.Institute of Biomedical Engineering, School of Control Science and Engineering, Shandong University
CIOP2021-2021-000399	Photobiomodulation Enhances Macrophage Phagocytic Capacity via Rac1 Activation Haocao Chang ^{1*} 1.MOE Key Laboratory of Laser Life Science & Institute of Laser Life Science, College of Biophotonics, South China Normal University
CIOP2021-2021-000413	Resolution enhancement through scattering media by wavefront shaping and photon reassignment based PSF suppressing Tong Peng ¹ ; Dan Dan ¹ ; Runze Li ¹ ; Chen Bai ¹ ; Junwei Min ¹ ; Meiling Zhou ¹ ; Baoli Yao ^{1*} 1.State Key Laboratory of Transient Optics and Photonics, Xi'an Institute of Optics and Precision Mechanics, Chinese Academy of Sciences
CIOP2021-2021-000540	Gamma frequency neuromodulation ameliorates Alzheimer's disease-associated pathology Qi Shen ¹ ; Xiaolei Wu ¹ ; Haocai Chang ¹ ; Sihua Yang ^{1*} 1.South China Normal University
CIOP2021-2021-000549	Phase shaping supercontinuum two-photon microscopy for fluorescence imaging of multiple, spectrum overlapping fluorophores label Zhongyun Chen ^{1,2} ; Xinyuan Huang ^{1,2} ; Xiujuan Gao ^{1,2} ; Ling Fu ^{1,2*} 1.Britton Chance Center for Biomedical Photonics, Wuhan National Laboratory for Optoelectronics-Huazhong University of Science and Technology; 2.MoE Key Laboratory for Biomedical Photonics, School of Engineering Sciences, Huazhong University of Science and Technology
CIOP2021-2021-000550	Real-time mosaicking algorithm of probe-based confocal laser endomicroscopy image sequences Zhengyi Hao ^{1,2} ; Hua Li ^{1,2} ; Tingting Lu ^{1,2} ; Ling Fu ^{1,2} 1.Britton Chance Center for Biomedical Photonics, Wuhan National Laboratory for Optoelectronics-Huazhong University of Science and Technology; 2.MoE Key Laboratory for Biomedical Photonics, School of Engineering Sciences, Huazhong University of Science and Technology

CIOP2021-2021-000556	Decoupling the refractive index and thickness distribution of cells based on dual-wavelength phase microscopy imaging Jingrong Liao ¹ ; Yawei Wang ¹ ; Xinyun Wang ¹ ; Ziqi Wang ¹ ; Yuanyuan Xu ^{1*} ; Yujuan Sun ¹ 1.Jiangsu University
CIOP2021-2021-000562	In vivo through skull NIR-II fluorescence mesoscope Jiuling Liao ¹ ; Wei Zheng ^{1*} 1.Research Laboratory for Biomedical Optics and Molecular Imaging, Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences
CIOP2021-2021-000568	GRIN Lenses Evaluation and Selection for Deep Brain Imaging Ruonan Fan ^{1,2} ; Jiangfeng Huang ^{1,2} ; Lu He ^{1,2} ; Ling Fu ^{1,2*} 1.Britton Chance Center for Biomedical Photonics, Wuhan National Laboratory for Optoelectronics-Huazhong University of Science and Technology; 2.MoE Key Laboratory for Biomedical Photonics, School of Engineering Sciences, Huazhong University of Science and Technology
CIOP2021-2021-000581	Transmissive-detected laser speckle contrast imaging for blood flow monitoring in thick tissue: from Monte Carlo simulation to experimental demonstration Qing Xia ^{1,2} ; Dongyu Li ^{1,2} ; Tingting Yu ^{1,2} ; Jingtian Zhu ^{1,2} ; Dan Zhu ^{1,2} 1.Britton Chance Center for Biomedical Photonics, Wuhan National Laboratory for Optoelectronics, Huazhong University of Science and Technology; 2.MoE Key Laboratory for Biomedical Photonics, Huazhong University of Science and Technology, Wuhan
CIOP2021-2021-000582	Expansion Correlated Fluorescent Lifetime Nanoscopy with Emission Overlapped Polymer Dots Zhihe Liu ¹ ; Changfeng Wu ^{1*} 1.Department of Biomedical Engineering, Southern University of Science and Technology
CIOP2021-2021-000602	Tissue optical clearing assisted three-dimensional analysis of microcirculation in ischaemic stroke Yusha Li ^{1,2} ; Tingting Yu ^{1,2} ; Jianyi Xu ^{1,2} ; Ang Xuan ^{1,2} ; Xiaomei Liu ^{1,2} ; Pingfu Wang ^{1,2} ; Dan Zhu ^{1,2*} 1.Britton Chance Center for Biomedical Photonics, Wuhan National Laboratory for Optoelectronics, Huazhong University of Science and Technology; 2.MoE Key Laboratory for Biomedical Photonics, School of Engineering Sciences, Huazhong University of Science and Technology
CIOP2021-2021-000607	Establishment of cortical photothrombosis based on skull optical clearing Zhengwu Hu ^{1,2} ; Lu Deng ^{1,2} ; Dongyu Li ^{1,2} ; Tingting Yu ^{1,2} ; Dan Zhu ^{1,2*} 1.Britton Chance Center for Biomedical Photonics, Wuhan National Laboratory for Optoelectronics, Huazhong University of Science and Technology; 2.MoE Key Laboratory for Biomedical Photonics, Huazhong University of Science and Technology
CIOP2021-2021-000611	A 3D Intramuscular Injection Approach to Maximize Retrograde Transport Based on the Spatial Distribution of Motor Endplates in Mouse Hindlimb Muscles Jianyi Xu ^{1,2} ; Ang Xuan ^{1,2} ; Zhang Liu ^{1,2} ; Yusha Li ^{1,2} ; Jingtian Zhu ^{1,2} ; Yingtao Yao ^{1,2} ; Tingting Yu ^{1,2*} ; Dan Zhu ^{1,2} 1.Britton Chance Center for Biomedical Photonics, Wuhan National Laboratory for Optoelectronics, Huazhong University of Science and Technology, Wuhan, Hubei 430074, China; 2.MoE Key Laboratory for Biomedical Photonics, School of Engineering Sciences, Huazhong University of Science and Technology, Wuhan, Hubei 430074, China
CIOP2021-2021-000629	Human serum albumin gradient in serous ovarian cancer cryosections measured by fluorescence lifetime Fangrui Lin ¹ ; Liwei Liu ^{1*} ; Junle Qu ^{1*} 1.Key Laboratory of Optoelectronic Devices and Systems of Guangdong Province & Ministry of Education, College of Physics and Optoelectronic Engineering, Shenzhen University
CIOP2021-2021-000630	Supercontinuum and super-wide-tuning integrated multimodal platform for label-free evaluation (SIMPLE) Binglin Shen ¹ ; Rui Hu ¹ ; Liwei Liu ^{1*} ; Junle Qu ^{1*} 1.Shenzhen University
CIOP2021-2021-000631	Adaptive optical two photon multi-focal scanning microscopy with super resolution in deep tissues Chenshuang Zhang ¹ ; Bin Yu ^{1*} ; Junle Qu ^{1*} 1.Key Laboratory of Optoelectronic Devices and Systems of Guangdong Province & Ministry of Education, College of Physics and Optoelectronic Engineering, Shenzhen University, Shenzhen, Guangdong Province 518060, China
CIOP2021-2021-000632	Simultaneous multi-nonlinear and lifetime microscopy reveals ovarian carcinoma optical and metabolic signatures Yanping Li ¹ ; Gengjin Zou ¹ ; Rui Hu ¹ ; Junle Qu ^{1*} ; Liwei Liu ^{1*} ; Binglin Shen ¹ 1.Shenzhen University
CIOP2021-2021-000678	Modulation of three-dimensional polymorphic beams and in situ determination of topological charges Xue Yun ¹ ; Yan sheng Liang ¹ ; Ming Lei ^{1*} 1.Xi'an Jiaotong University
CIOP2021-2021-000772	High-speed large-scale imaging for photoacoustic tomography based on ROMP compressed sensing Zihao Li ¹ ; Xianlin Song ^{1*} 1.School of Information Engineering, Nanchang University

SC15. Optical Sensors and Systems	
CIOP2021-2021-000086	High-speed camouflage detection with checkerboard projection Jiaxu Cai ¹ ; Dongdong Xi ¹ ; Yuwei Wang ¹ ; Lu Liu ^{1*} 1.College of Engineering, Anhui Agricultural University
CIOP2021-2021-000096	A probe-shaped sensor with FBG and fiber-tip bubble for pressure and temperature sensing Bonan Liu ¹ ; Junxian Luo ¹ ; Shen Liu ^{1*} ; Yanping Chen ¹ ; Bo Huang ¹ ; Changrui Liao ¹ ; Yiping Wang ¹ 1.Shenzhen University
CIOP2021-2021-000192	Vibration detection and Reconstruction based on Φ -OTDR with dual AOM Bei Dai ^{1,2,3} ; Zhihua Yu ^{1,2,3*} ; Ao Chen ^{1,2,3} ; Yutong Li ^{1,2,3} 1.School of Automation, China University of Geosciences, Wuhan; 2.Hubei Key Laboratory of Advanced Control and Intelligent Automation for Complex Systems; 3.Engineering Research Center of Intelligent Technology for Geo-Exploration, Ministry of Education
CIOP2021-2021-000193	The influence of the assembly error of the plenoptic sensor on the wavefront detection Tao Jiang ^{1,2,3} ; Jing-hui Zhang ^{1,3*} ; Chao Mu ^{1,3} ; Xiao-xing Feng ^{1,3} ; Chun-hong Qiao ^{1,3} ; Cheng-yu Fan ^{1,3} 1.Key Laboratory of Atmospheric Optics, Anhui Institute of Optics and Fine Mechanics, HFIPS, Chinese Academy of Sciences; 2.Science Island Branch of Graduate School, University of Science and Technology of China; 3.Advanced Laser Technology Laboratory of Anhui Province
CIOP2021-2021-000194	Obtain The Phase Velocity of Ocean Waves by Using Distributed Acoustic Sensing Yutong Li ^{1,2,3} ; Zhihua Yu ^{1,2,3*} ; Ao Chen ^{1,2,3} ; Bei Dai ^{1,2,3} 1.School of Automation, China University of Geosciences; 2.Hubei Key Laboratory of Advanced Control and Intelligent Automation for Complex Systems; 3.Engineering Research Center of Intelligent Technology for Geo-Exploration, Ministry of Education
CIOP2021-2021-000216	Research on a sensitive structure with high sensitivity for MOEMS application Meng Zhang ^{1*} ; Shaoyu Zhao ¹ ; Xiaoyan Hu ¹ 1.Information Science Academy of China Electronics Technology Group Cooperation
CIOP2021-2021-000230	High-sensitivity strain sensor based on a micro-air-cavity with asymmetrical tapered-fiber Yanping Chen ¹ ; Shen Liu ^{1*} ; Yiping Wang ¹ 1.Shenzhen Key Laboratory of Photonic Devices and Sensing Systems for Internet of Things, College of Physics and Optoelectronic Engineering, Shenzhen University
CIOP2021-2021-000306	Wide refractive index detection range surface plasmon resonance sensor based on photonic crystal fiber Honggang Pan ¹ ; Fei Pan ¹ ; Ailing Zhang ¹ ; Chuanbo Cao ¹ 1.Engineering Research Center of Communication Devices and Technology, Ministry of Education, Tianjin Key Laboratory of Film Electronic and Communication Devices, School of Electrical and Electronic Engineering, Tianjin University of Technology
CIOP2021-2021-000307	Parallel-cascaded Mach-Zehnder interferometers Fiber-optic disturbance detecting system Xiaowei Dong ^{1*} 1.North China University of Technology
CIOP2021-2021-000369	A fiber Bragg grating curvature sensor with carbon nanotube and magnesium oxide reinforced silicone rubber substrate Xia Wang ^{1*} ; Zhuoyang Fan ¹ ; yizhu Wang ¹ 1.State Key Laboratory of Electrical Insulation and Power Equipment, Xi'an Jiaotong University
CIOP2021-2021-000387	Compressive imaging of natural light field Cheng Zhang ¹ ; JinBo Jiang ^{1*} ; JinBing Zhu ¹ 1.Key Laboratory of Computational Intelligence and Signal Processing, Ministry of Education, Anhui University
CIOP2021-2021-000504	Long-Range distributed vibration sensing with flexible and high frequency response Shuai Li ¹ ; Zengguang Qin ¹ ; Zhaojun Liu ¹ ; Shuai Qu ¹ ; Wenchen Yang ¹ ; Yanping Xu ^{1*} ; Zequn Wang ¹ 1.Shandong University
CIOP2021-2021-000508	Photoelectronic synaptic performance of SiO ₂ /a-Si _{1-x} Rux bilayer based memristors Kexin Chen ¹ ; Zhiqiang Yang ¹ ; Chunmei Li ¹ ; Jinyong Wang ¹ ; Peng Gu ¹ ; Nasir Ilyas ² ; Xiangdong Jiang ¹ ; Deen Gu ³ ; Wei Li ^{3*} 1.School of Optoelectronic Science and Engineering, UESTC; 2.School of Physics, UESTC; 3.State Key Laboratory of Electronic Thin Films and Integrated Devices, UESTC

CIOP2021-2021-000509	Ag:SrTiO ₃ /CuAlO ₂ based photoelectronic synapse for artificial vision system Zhiqiang Yang ¹ ; Kexin Chen ¹ ; Chunmei Li ¹ ; Jinyong Wang ¹ ; Peng Gu ¹ ; Nasir Ilyas ² ; Xiangdong Jiang ¹ ; Deen Gu ³ ; Wei Li ^{3*} 1.School of Optoelectronic Science and Engineering, UESTC; 2.School of Physics, UESTC; 3.State Key Laboratory of Electronic Thin Films and Integrated Devices, UESTC
CIOP2021-2021-000539	Performance study of a fiber Bragg grating accelerometer based on double-semicircle cantilever Xiaodong Luo ^{1*} ; Yongfang Li ¹ ; Dequan Feng ² ; Huan Cheng ² 1.Shaanxi Normal University; 2.Xi'an Shiyou University;
CIOP2021-2021-000541	Dynamically adjustable-induced THz circular dichroism and biosensing application of symmetric silicon-graphene-metal composite nanostructures Jun Dong ¹ ; Zhiduo Li ¹ ; Qijing Wang ¹ ; Qianying Wang ¹ ; Yongkai Wang ^{1*} 1.Xi'an University of Posts & Telecommunications
CIOP2021-2021-000586	A grating interferometric displacement sensor based on polarization demodulation Jiayi Liu ¹ ; Sinuo Wang ¹ ; Jihong Liu ^{1*} 1.Xi'an University of Posts and Telecommunications
CIOP2021-2021-000597	Tunable polydimethylsiloxane based microsphere for magnetic field sensing Xinjiang Wang ¹ ; Minghui Bai ¹ ; Yaqi Wen ¹ ; Fei Li ¹ ; Chaozheng Xu ¹ ; Mian Wu ¹ ; Bing Sun ^{1*} 1.Nanjing University of Posts and Telecommunications
CIOP2021-2021-000603	Magnetic field sensor based on PDMS incorporated with ferromagnetic nanocrystals Minghui Bai ¹ ; Xinjiang Wang ¹ ; Xiaobo Ma ¹ ; Fei Li ¹ ; Yaqi Wen ¹ ; Wenjun Sun ¹ ; Bing Sun ^{1*} 1.Nanjing University of Posts and Telecommunications
CIOP2021-2021-000619	Control Bandwidth of Adaptive Optics System Based on Delayed Stochastic Parallel Gradient Descent Algorithm Guan Huang ¹ ; Guoyun Lv ^{1*} ; Yangyu Fan ¹ 1.Northwestern Polytechnical University
CIOP2021-2021-000738	Research on performance of vector magnetic field sensor based on side-polished hollow-core fiber coated with magnetic fluid Ronghui Xu ^{1,2,3*} ; Guozhen Niu ^{1,2} ; Yipu Xue ^{1,2} ; Chengran Ke ^{1,2} ; Shijie Deng ^{1,2} ; Hongchang Deng ^{1,2} ; Ming Chen ^{1,2} ; Libo Yuan ^{1,2} 1.Photonics Research Center, School of Electronic Engineering and Automation, Guilin University of Electronic Technology; 2.Guangxi Key Laboratory of Optoelectronic Information Processing, Guilin University of Electronic Technology; 3.Guangxi Key Laboratory of Automatic Detection Technology and Instrument, Guilin University of Electronic Technology
CIOP2021-2021-000867	Research on vibration sensing characteristics of FBG packaged with carbon fiber composites Dequan Feng ^{1*} ; Weiquan Zhou ¹ ; Xiaodong Luo ¹ ; Li Yang ¹ ; Shaoyang Sun ¹ 1.Xi'an Shiyou University

SC16. Atomic Physics, Quantum Photonics, and Quantum Information

CIOP2021-2021-000126	Shot-Noise-Limited Displacement Measurement with Frequency-Synthesized Light Peng Yang ^{1,2*} ; Xuezhi Ke ¹ ; Lei Zhang ¹ ; Guozhen Hu ³ 1.Laboratory of Precision Optic-Electronic Measurement, School of Electrical and Electronic Information Engineering, Hubei Polytechnic University; 2.Key Office of Scientific Research, Hubei Polytechnic University; 3.Laboratory of Precision Optic-Electronic Measurement, School of Electrical and Electronic Information Engineering, Hubei Polytechnic University; Office of Academic Affairs, Hubei Polytechnic University.
CIOP2021-2021-000201	Study of Phase-Sensitive Heterodyne Locking Peng Yang ^{1*} ; Xuezhi Ke ² ; Lei Zhang ² ; Guozhen Hu ³ 1.Laboratory of Precision Optic-Electronic Measurement, School of Electrical and Electronic Information Engineering, Key Office of Scientific Research, Hubei Polytechnic University; 2.Laboratory of Precision Optic-Electronic Measurement, School of Electrical and Electronic Information Engineering, Hubei Polytechnic University; 3.Laboratory of Precision Optic-Electronic Measurement, School of Electrical and Electronic Information Engineering, Office of Academic Affairs, Hubei Polytechnic University
CIOP2021-2021-000405	Observing the different two-photon interference phenomena at ultrashort timescale with a series of polarizers based on two-photon absorption detection Luo Sheng ¹ ; Yu Zhou ² ; Huaibin Zheng ^{1*} ; Jianbin Liu ¹ ; Hui Chen ¹ ; Zhuo Xu ¹ 1.Electronic Materials Research Laboratory, Key Laboratory of the Ministry of Education & International Center for Dielectric Research, School of Electronic Science and Engineering, Xi'an Jiaotong University; 2.MOE Key Laboratory for Nonequilibrium Synthesis and Modulation of Condensed Matter, Department of Applied Physics, Xi'an Jiaotong University
CIOP2021-2021-000622	Simulation and analysis the proton radiation effects on Si radiation detector Shuhuan Liu ^{1*} 1.Xi'an Jiaotong University

特色专题

单光子与单像素成像

58卷第10期 | 2021年5月

为集中展示单光子与单像素成像方向研究成果，《激光与光电子学进展》推出了“单光子与单像素成像”专题...

此次专题共收录32篇高质量论文，其中包括20篇特邀综述和5篇特邀研究论文。内容覆盖了单光子与单像素成像研究领域内从探测器件到实际成像应用系统...

所收录文章均由我国单像素成像方向有影响力的专家团队撰写，包含中科院上海光机所韩申生团队、中科院上海微系统所尤立星团队...



专题客座编辑



韩申生 研究员
中国科学院上海光学精密机械研究所



吴令安 研究员
中国科学院物理研究所



尤立星 研究员
中国科学院上海微系统与信息技术研究所

封面文章



封面文章 | 特邀综述
运动物体关联成像研究现状及展望
作者:刘伟涛,孙帅,胡宏康,林惠祖
第一单位:国防科技大学

封面解读
风入四蹄马如飞,髯面模糊知是谁。
关联成像有新招,疾行犹可辨细微。



封底文章 | 特邀综述
超导纳米线延迟线单光子成像器件进展及应用
作者:孔令东,赵清源,涂学凑,张蜡宝,贾小氢,康琳,陈健,吴培亨
第一单位:南京大学

封底解读
披沙沥金,方显光子之万象。



内封面文章 | 特邀综述
基于相干探测的单像素激光成像雷达研究进展
作者:龚文林,孙建锋,邓陈进,卢智勇,周煜,韩申生
第一单位:苏州大学

内封面解读
小娃嬉戏尽情欢,五音寂寂画面孤。
何以遥闻稚子趣,光子相干绘音图。

综述

特邀 | 基于弱值的量子精密测量与量子层析研究进展
作者:胥亮,张利剑
第一单位:南京大学

特邀 | 基于超导纳米线单光子探测技术的成像研究进展
作者:周慧,张成俊,吕超林,张兴雨,李浩,尤立星,王镇
第一单位:中国科学院上海微系统与信息技术研究所

特邀 | 超导纳米线单光子探测的时间分辨率研究
作者:张恒彬,谢军
第一单位:钱学森空间技术实验室

特邀 | 基于频率关联的长距离光纤传送时域鬼成像
作者:姚鑫,张巍,黄翊东
第一单位:清华大学

特邀 | X射线及粒子关联成像技术研究进展
作者:谈志杰,李晴宇,喻虹,韩申生
第一单位:中国科学院上海光学精密机械研究所

特邀 | InP 基单光子探测器的发展和应用
作者:黄润宇,赵伟林,曾辉,李再波,侯泽鹏,叶海峰,王伟,张家鑫,刘辰,杨雪艳,朱泓遐,史衍丽,江云天
第一单位:云南大学

特邀 | 单像素成像信噪比分析及其在特殊波段的发展
作者:赵海潇,郭岩,李珮明,陈炳霖,孙宝清
第一单位:山东大学

特邀 | Correlation Holography with a Single-Pixel Detector: A Review
作者:Tushar Sarkar, Aditya Chandra Mandal, Chen Ziyang, Pu Jixiong, Rakesh Kumar Singh
第一单位: Indian Institute of Technology

特邀 | 基于量子关联的超分辨荧光显微技术研究进展
作者:李文文,王中阳
第一单位:中国科学院上海高等研究院基础交叉研究中心

特邀 | 动态单像素成像
作者:俞文凯,唐菲遥,王硕飞,魏宁
第一单位:北京理工大学

特邀 | 光学图像边缘检测技术研究进展
作者:刘世凯,周志远,史保森
第一单位:中国科学技术大学

特邀 | 基于量子测量优化的非相干点光源分辨
作者:薛舒东,李雅男,忻俊,陆晓铭
第一单位:杭州电子科技大学

特邀 | 基于压缩感知的单光子时间分辨成像光谱技术
作者:刘璠,姚旭日,刘雪峰,翟光杰
第一单位:中国科学院国家空间科学中心复杂航天系统电子信息重点实验室

特邀 | 信道气流干扰下的关联成像研究
作者:傅喜泉,黄贤伟,谭威,白艳锋
第一单位:湖南大学

特邀 | 单像素成像及其概率统计分析综述
作者:肖许意,陈刘雅,张学智,王翀,兰瑞君,任承,曹德忠
第一单位:烟台大学

特邀 | 散射介质中强度关联成像的研究综述
作者:宋明悦,李高亮,余远金,杨照华
第一单位:北京航空航天大学

特邀 | 单像素成像相关图像处理算法综述
作者:黄威,焦述铭,肖昌炎
第一单位:湖南大学

单光子激光测距技术研究进展
作者:邵禹,王德江,张迪,陈成
第一单位:中国科学院长春光学精密机械与物理研究所

研究论文

特邀 | 自对准超导纳米线单光子探测器
作者:耿荣鑫,李浩,黄佳,胡鹏,肖游,余慧勤,尤立星
第一单位:中国科学院上海微系统与信息技术研究所

特邀 | 日盲紫外单光子成像
作者:李召辉,申光跃,庞程凯,吴光
第一单位:华东师范大学

特邀 | 基于特殊 RGB 排列的彩色 LED 阵列计算鬼成像
作者:黄宏旭,李立京,孙鸣捷
第一单位:北京航空航天大学

特邀 | 光子计数计算鬼成像
作者:李明飞,袁梓豪,刘院省,邓意成
第一单位:北京航天控制仪器研究所

特邀 | 基于单微波量子探测器的微波信号量子二阶相干性实验研究
作者:严会玲,吴养曹,赵军民,尤立星,赵卫岗,李桂红,王平,段可欣
第一单位:中国电子科技集团公司第三十九研究所陕西省天线与控制技术重点实验室

基于 SPAD 阵列的共光路扫描三维成像
作者:康岩,薛瑞凯,李力飞,张同意,高奇
第一单位:中国科学院西安光学精密机械研究所

基于目标形貌测量的空间频域成像矫正方法—单像素实现与验证
作者:刘美慧,但迈,高峰
第一单位:天津大学

烟幕环境下计算关联成像
作者:胡洋頔,程正东,曾波,杨勇
第一单位:国防科技大学电子对抗学院

利用鬼成像技术恢复被遮挡物体信息的实验研究
作者:孟晨,王晓茜,高超,苟丽丹,陈鹏,姚治海
第一单位:长春理工大学理学院

水下鬼成像抗扰动能力的实验研究
作者:吴泳波,杨志慧,唐志列
第一单位:华南师范大学物理与电信工程学院

基于压缩感知重构算法的哈达玛鬼成像
作者:李畅,高超,邵嘉琪,王晓茜,姚治海
第一单位:长春理工大学

激光与光电子学进展

Laser & Optoelectronics Progress

特别专辑

“先进成像”封面文章

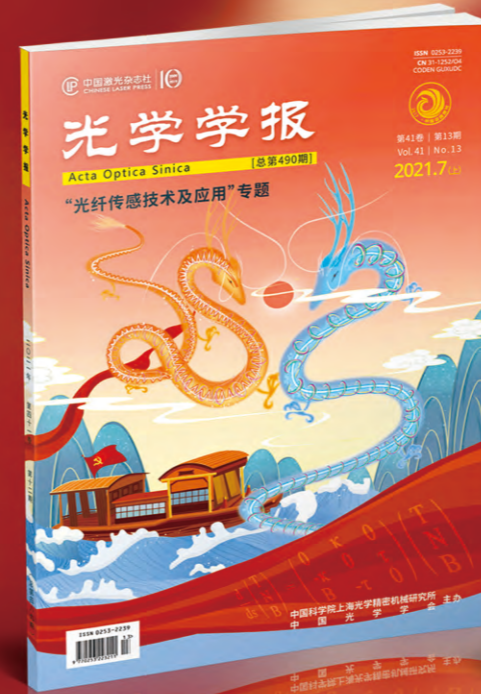
2020年



中国科学院上海光学精密机械研究所 主办



专题官网



光
之巨龙正开创新的奇迹

红船开天辟地 劈波斩浪前行
红日东方升起 蓬勃照耀中华



★热烈庆祝★

中国共产党成立100周年

《光学学报》《激光与光电子学进展》联合推出
“光纤传感技术及应用”特别专题

激光评论

报道

激光物理
激光技术
激光应用
最新进展

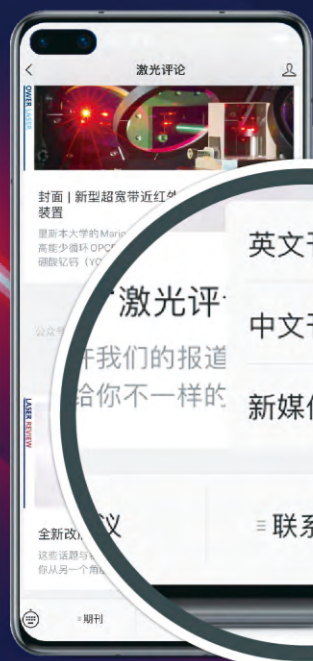
期刊论文 | 会议信息 | 行业资讯



邀请

主编评论
作者评论
编辑评论
您来评论

快来“联系编辑”!



英文刊编辑
中文刊编辑
新媒体编辑
联系编辑

有事咨询?

要合作?

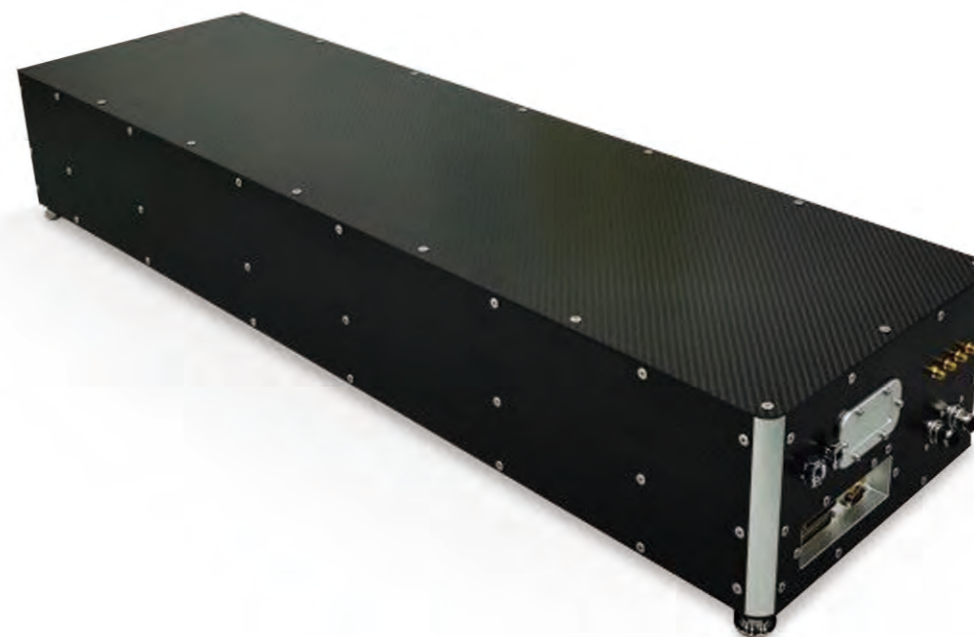
论文投稿?

要参会?

要应聘?

1mJ 400fs

FemtoYL²-100飞秒光纤激光器快速更新迭代
可以达到单脉冲1mJ 400fs输出!



欢迎咨询

sales@yslphotonics.com
027-87204039



Dr. Thomas Renner, CEO

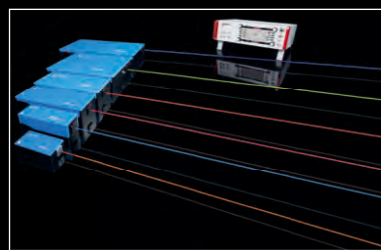
全波长覆盖

190 nm - 0.1 THz

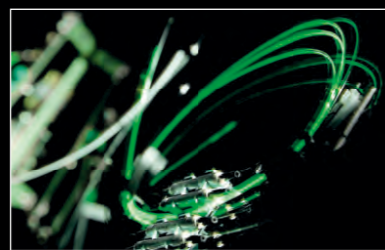
TOPTICA的激光器覆盖了一个独特的波长范围从190nm到0.1 THz (相当于3mm), 这是激光市场上最广覆盖范围之一。半导体激光器、超快光纤激光器和太赫兹光源使这种独特的光谱范围成为可能, 并且可应用于物理、化学、生物和工业计量或材料加工等多种领域。

用您的应用领域挑战我们-任意一个波长。

全波长覆盖@ TOPTICA



▶ 半导体激光器:
190 - 4000 nm



▶ 超快光纤激光器:
488 - 15000 nm



▶ 太赫兹系统:
0 - 6 (20) THz



www.toptica.com



寒燕电子(上海)有限公司是一家专业致力于温湿度管控设备研发生产销售于一体的企业, 主要产品包括: 全系列电子防潮箱、氮气柜、环境温湿度看板、恒温恒湿柜、温湿度管理软件、烘箱、除湿机、防潮防静电自动货柜, 条码电子寄包柜, 高低温试验箱等。企业座落于国际化大都市上海, 我公司生产的温湿度控制类产品已经被广泛用于各个行业。

电子防潮箱



精密热风循环烤箱



专业团队
品质保证

寒燕电子(上海)有限公司

电话: 021-60346964 18918480530

网址: www.hanyandz.com

地址: 上海市闵行区元江路3599号福克斯工业园3栋

期待与您相见在第十二届国际信息光学与光子学学术会议!

瞬态光学与光子技术国家重点实验室
State Key Laboratory of Transient Optics and Photonics
(Xi'an Institute of Optics and precision Mechanics, CAS
中国科学院西安光学精密机械研究所)



The State Key Laboratory of Transient Optics and Photonics (SKLTOP) was founded in 1991 and opened to international and domestic scientists from 1993. It had passed four times the national assessment, respectively, in 2002, 2007, 2012 and 2017. Professor Yao Baoli is the director of the Lab, and Professor Xu Tao is the director of academic committee of the Lab.



Main Research Fields:

1) Ultrafast photonics: theory, technology and application

Focused on attosecond pulse generation and measurement, femtosecond optical frequency comb, high power ultrashort pulsed fiber laser, ultrafast laser micro-fabrication and machining, etc.

2) Advanced optical imaging

Focused on super-resolution and 3D imaging, quantitative phase imaging, computational imaging, polarization imaging, imaging through scattering medium, optical manipulation, freeform optics, etc.

3) Ultrafast diagnostic technology

Focused on streak camera, MCP-gated framing camera, all-optical solid-state framing camera, time-resolved electron diffraction, compressed ultrafast imaging, large area photomultiplier, etc.

4) High-rate optical communication in space and underwater

Focused on high-rate space long-distance laser transmission and detection, high-speed optical switching, underwater wireless optical communication, etc.

5) Photofunctional materials and devices

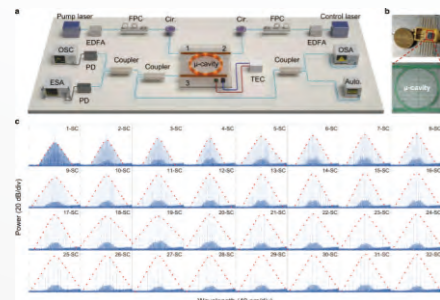
Focused on Micro/Nano photonics, photonic integrated circuits, fiber-grating-based devices, Infrared glass fiber, Terahertz metamaterials, etc. There are 107 research staffs in the Lab, including 1 CAS academician and 69 professors. There are 190 PhD & MSc graduate students studying in the Lab, majored in Optics, Optical Engineering, Physical Electronics, Communication and Information Processing, Signal and Information Processing. Two postdoctoral stations of Physics and Optical Engineering are set in the Lab.

The Lab has established widespread academic cooperation with institutions domestic and abroad including Germany, USA, UK, France, Austria, Italy, Japan, etc., promoting its reputation in the field of ultrafast photonics, and playing an important role as the base of opening academic exchange and cooperation. The Lab will keep strengthening the innovation ability, developing leading-edge techniques and training more high-level talents.

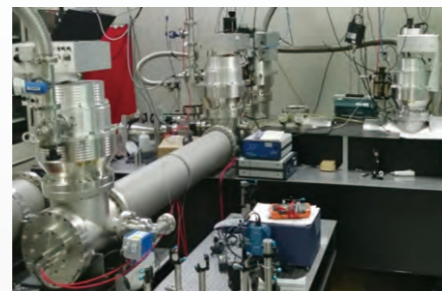


Address: No.17 Xinxu Road, Xi'an Hi-Tech Industrial Development Zone, Xi'an, China
Zip: 710119
Support institution: Xi'an Institute of Optics and Precision Mechanics, CAS.
Phone: +86-29-88887603
Fax: +86-29-88887603
Contact: Ms. Li Ping, Duan Tao
E-mail: Liping@opt.ac.cn, duantao@opt.ac.cn

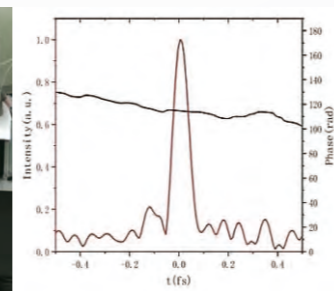
Recent progress in laboratory research



Integrated micro-cavity OFC



The experimental system for generation and measurement of attosecond pulse



Publish Your High-Impact Papers
in CLP Journals!

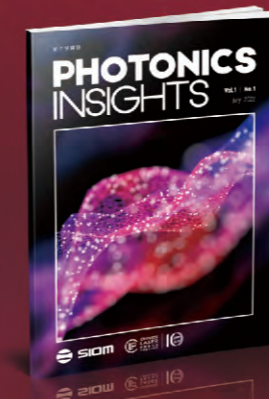
NEW

Indexed in
SCIE

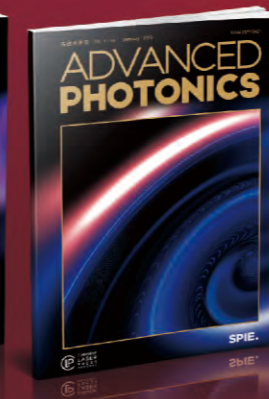
2020
Impact
Factor 7.080

2020
Impact
Factor 3.992

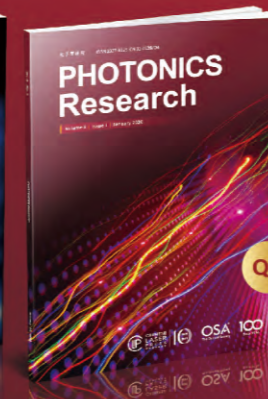
2020
Impact
Factor 2.448



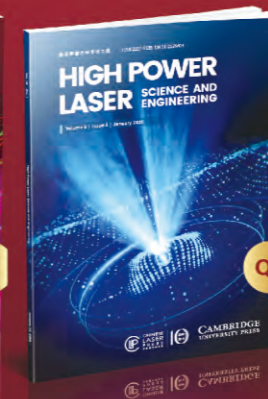
PHOTONICS
INSIGHTS



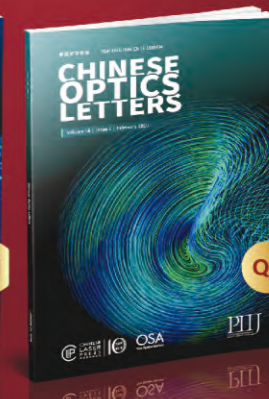
ADVANCED
PHOTONICS



PHOTONICS
Research



HIGH POWER
LASER
SCIENCE AND
ENGINEERING



CHINESE
OPTICS
LETTERS

Read and Never Miss
the Cutting-edge Research Results!

www.researching.cn

According to the 2021 Journal Citation Reports®