PROCEEDINGS OF SPIE

SPIDigitalLibrary.org/conference-proceedings-of-spie

Front Matter: Volume 11905

, "Front Matter: Volume 11905," Proc. SPIE 11905, Quantum and Nonlinear Optics VIII, 1190501 (8 November 2021); doi: 10.1117/12.2618931

SPIE.

Event: SPIE/COS Photonics Asia, 2021, Nantong, Jiangsu, China

PROCEEDINGS OF SPIE

Quantum and Nonlinear Optics VIII

Qiongyi He
Dai-Sik Kim
Chuan-Feng Li
Editors

10–12 October 2021
Nantong, China

Sponsored by
SPIE
COS—Chinese Optical Society

Cooperating Organizations
Tsinghua University (China) • Peking University (China) • University of Science and Technology of China (China) • Zhejiang University (China) • Tianjin University (China) • Beijing Institute of Technology (China) • Beijing University of Posts and Telecommunications (China) • Nankai University (China) • Changchun University of Science and Technology (China) • University of Shanghai for Science and Technology (China) • Capital Normal University (China) • Huazhong University of Science and Technology (China) • Beijing Jiaotong University (China) • China Jiliang University (China) • Shanghai Institute of Optics and Fine Mechanics, CAS (China) • Changchun Institute of Optics, Fine Mechanics and Physics, CAS (China) • Institute of Semiconductors, CAS (China) • Institute of Optics and Electronics, CAS (China) • Institute of Physics, CAS (China) • Shanghai Institute of Technical Physics, CAS (China) • China Instrument and Control Society (China) • The Optical Society of Japan (Japan) • Optical Society of Korea (Korea, Republic of) • Australia and New Zealand Optical Society (Australia) • Optics and Photonics Society of Singapore (Singapore) • European Optical Society

Supporting Organizations
China Association for Science and Technology (CAST) (China)
Department of Information of National Nature Science Foundation, China (NSFC) (China)

Published by
SPIE

Volume 11905

Proceedings of SPIE 0277-786X, V. 11905

SPIE is an international society advancing an interdisciplinary approach to the science and application of light.

Quantum and Nonlinear Optics VIII, edited by Qiongyi He, Dai-Sik Kim,
Chuan-Feng Li, Proc. of SPIE Vol. 11905, 1190501 • © 2021 SPIE
CCC code: 0277-786X/21/\$21 • doi: 10.1117/12.2618931

Proc. of SPIE Vol. 11905 1190501-1

The papers in this volume were part of the technical conference cited on the cover and title page. Papers were selected and subject to review by the editors and conference program committee. Some conference presentations may not be available for publication. Additional papers and presentation recordings may be available online in the SPIE Digital Library at SPIDigitalLibrary.org.

The papers reflect the work and thoughts of the authors and are published herein as submitted. The publisher is not responsible for the validity of the information or for any outcomes resulting from reliance thereon.

Please use the following format to cite material from these proceedings:

Author(s), "Title of Paper," in *Quantum and Nonlinear Optics VIII*, edited by Qiongyi He, Dai-Sik Kim, Chuan-Feng Li, Proc. of SPIE 11905, Seven-digit Article CID Number (DD/MM/YYYY); (DOI URL).

ISSN: 0277-786X

ISSN: 1996-756X (electronic)

ISBN: 9781510646599

ISBN: 9781510646605 (electronic)

Published by

SPIE

P.O. Box 10, Bellingham, Washington 98227-0010 USA

Telephone +1 360 676 3290 (Pacific Time)

SPIE.org

Copyright © 2021 Society of Photo-Optical Instrumentation Engineers (SPIE).

Copying of material in this book for internal or personal use, or for the internal or personal use of specific clients, beyond the fair use provisions granted by the U.S. Copyright Law is authorized by SPIE subject to payment of fees. To obtain permission to use and share articles in this volume, visit Copyright Clearance Center at copyright.com. Other copying for republication, resale, advertising or promotion, or any form of systematic or multiple reproduction of any material in this book is prohibited except with permission in writing from the publisher.

Printed in the United States of America by Curran Associates, Inc., under license from SPIE.

Publication of record for individual papers is online in the SPIE Digital Library.

**SPIE. DIGITAL
LIBRARY**

SPIDigitalLibrary.org

Paper Numbering: A unique citation identifier (CID) number is assigned to each article in the Proceedings of SPIE at the time of publication. Utilization of CIDs allows articles to be fully citable as soon as they are published online, and connects the same identifier to all online and print versions of the publication. SPIE uses a seven-digit CID article numbering system structured as follows:

- The first five digits correspond to the SPIE volume number.
- The last two digits indicate publication order within the volume using a Base 36 numbering system employing both numerals and letters. These two-number sets start with 00, 01, 02, 03, 04, 05, 06, 07, 08, 09, 0A, 0B ... 0Z, followed by 10-1Z, 20-2Z, etc. The CID Number appears on each page of the manuscript.

Contents

QUANTUM OPTICS

- 11905 08 **Distribution and quantification of Wigner negativity remotely generated via Einstein-Podolsky-Rosen steering** [11905-6]

POSTER SESSION

- 11905 0Q **Fourier transform analysis on random quasi-phase matching problems** [11905-24]
- 11905 0R **High-peak-power, high-efficiency, widely tunable sub-nanosecond optical parametric generator based on PPMgLN** [11905-25]
- 11905 0S **Noise limits of polar-interferogram estimation at low light levels** [11905-26]
- 11905 10 **Widely tunable eye-safe optical parametric oscillation in an x-cut KTP crystal with noncollinear confocal pumping** [11905-34]
- 11905 11 **Phase compensation of continuous variable quantum key distribution based on mean denoising methods** [11905-35]
- 11905 12 **Nonlinear dynamics of sole ground-state emitting quantum dot laser subject to optical injection** [11905-36]
- 11905 13 **External digital power stabilization system for levitated optomechanics sensor** [11905-37]
- 11905 14 **Frequency-shifted-assisted continuous variable quantum key distribution with a local-local oscillator based on Gaussian modulated coherent state** [11905-38]
- 11905 15 **Experimental demonstration of high-rate Gaussian-modulated continuous-variable quantum key distribution with a local-local oscillator** [11905-39]
- 11905 16 **Practical intensity attack on continuous-variable quantum key distribution with a true local oscillator** [11905-41]
- 11905 17 **Nonlinear dynamics of a diode-pumped solid-state passively Q-switched Nd:YAG/Cr⁴⁺:YAG laser** [11905-42]
- 11905 1A **Femtosecond laser direct writing of photonic quantum logic gate chips for generating path-encoded entangled states** [11905-45]
- 11905 1B **Propagation of temporal mode multiplexed optical fields in fibers: influence of dispersion** [11905-46]

- 11905 1C **Polarization demultiplexing for CV-QKD system based on Stokes space** [11905-47]
- 11905 1D **1- and 2-photon-absorption properties of two organic molecules based on the Lorentz quantum impedance oscillator** [11905-48]
- 11905 1F **Freeform configurations to improve system resolution** [11905-50]
- 11905 1H **Passively mode-locked and Q-switched fiber laser utilizing a same tungsten oxide (WO₃) film as absorbers** [11905-52]
- 11905 1J **High-efficiency in-fiber nonlinear conversion of nanosecond optical pulses into structured packets of high-peak-power ultrashort pulses** [11905-55]
- 11905 1K **Noise-like pulses: useful or harmful?** [11905-56]
- 11905 1L **Numerical simulation of a picosecond fiber optical parametric oscillator based on a PCF** [11905-57]
- 11905 1M **Effects of spectral phase on ionization-induced self-compression of 100-GW pulse in hollow-core waveguide** [11905-58]
- 11905 1N **Analysis of the coherent properties of ultrashort pulses inside embedded cavities of mode-locked fiber laser and Raman oscillator** [11905-59]