PROCEEDINGS OF SPIE

AOPC 2024: Micro-Nano Optics

Min QiuFditor

23–26 July 2024 Beijing, China

Sponsored and Organized by Chinese Society for Optical Engineering (CSOE) (China)

Technical Cosponsor SPIE

Published by SPIE

Volume 13500

Proceedings of SPIE 0277-786X, V. 13500

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

AOPC 2024: Micro-Nano Optics, edited by Min Qiu, Proc. of SPIE Vol. 13500, 1350001 · © 2024 SPIE · 0277-786X · doi: 10.1117/12.3058428

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 SPIEDigitalLibrary.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 AOPC 2024: Micro-Nano Optics, edited by Min Qiu, Proc. of SPIE 13500, Seven-digit Article CID Number (DD/MM/YYYY); (DOI URL).

ISSN: 0277-786X

ISSN: 1996-756X (electronic)

ISBN: 9781510687899

ISBN: 9781510687905 (electronic)

Published by

SPIE

P.O. Box 10, Bellingham, Washington 98227-0010 USA Telephone +1 360 676 3290 (Pacific Time)

SPIE.ora

Copyright © 2024 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.



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

v Conference Committee

MICRO-NANO OPTICS

13500 02	Study on the influence of alkaline corrosion process on the uniformity of white-light neutron microchannel plate [13500-1]
13500 03	Mode-splitting of size-mismatched coupling microspheres [13500-2]
13500 04	Synthesis of PbSe quantum dots and characterization of the nonlinear optical properties [13500-3]
13500 05	Analysis of band-gap and photoluminescence performance of low-symmetry InGaAsP photonic crystal [13500-4]
13500 06	Design and simulation of a four-band polarization-insensitive terahertz absorption metamaterial [13500-5]
13500 07	Spectral sensitivity analysis of the conventional prism-based SPR sensor [13500-6]
13500 08	Metasurfaces for nonlinear Brillouin light scattering [13500-7]
13500 09	The elimination of polarization-dependent crosstalk between radial displacements of levitated nanospheres in optical tweezers in vacuum [13500-8]
13500 0A	Single-polarization single-mode photonic crystal fiber based on Sierpiński gasket without holes in the cladding [13500-9]
13500 OB	Automatic measurement of particle size based on scanning electron microscopy [13500-10]
13500 OC	Tunable SiO ₂ -VO ₂ metasurfaces for multidimensional structural color control in optical applications [13500-11]

Conference Committee

Conference Chair

Min Qiu, Westlake University (China)

Program Committee

Yaoyu Cao, Jinan University (China)

Hui Gao, Huazhong University of Science and Technology (China)

Yingchun Guan, Beihang University (China)

Wenhao Li, Changchun Institute of Optics, Fine Mechanics and

Physics, Chinese Academy of Sciences (China)

Linhan Lin, Tsinghua University (China)

Junpeng Lv, Southeast University (China)

Dondlin Pu, Soochow University (China)

Jainxin Tang, Soochow University (China)

Kai Zhang, Suzhou Institute of Nano-Tech and Nano-Bionics, Chinese

Academy of Sciences (China)

Lijun Zhang, Jilin University (China)

Haizheng Zhong, Beijing Institute of Technology (China)

Chenggang Zhou, University of Science and Technology of China (China)

Jinfeng Zhu, Xiamen University (China)