

Advanced Photonics in Urology

Hyun Wook Kang
Ronald Sroka
Editors

6–11 March 2021
Online Only, United States

Sponsored and Published by
SPIE

Volume 11619

Proceedings of SPIE, 1605-7422, V. 11619

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

Advanced Photonics in Urology, edited by Hyun Wook Kang,
Ronald Sroka, Proc. of SPIE Vol. 11619, 1161901 · © 2021 SPIE
CCC code: 1605-7422/21/\$21 · doi: 10.1117/12.2596646

Proc. of SPIE Vol. 11619 1161901-1

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 *Advanced Photonics in Urology*, edited by Hyun Wook Kang, Ronald Sroka, Proc. of SPIE 11619, Seven-digit Article CID Number (DD/MM/YYYY); (DOI URL).

ISSN: 1605-7422
ISSN: 2410-9045 (electronic)

ISBN: 9781510640733
ISBN: 9781510640740 (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

LASER LITHOTRIPSY I

- 11619 08 **Simulating manual manipulation of small optical fibers within flexible ureteroscopes for potential application in thulium fiber laser lithotripsy [11619-6]**

OPTICAL IMAGING AND DIAGNOSIS II

- 11619 0B **A novel magnetic resonance imaging protocol to investigate how visual triggers impact urgency urinary incontinence [11619-9]**
- 11619 0C **A comparative in-vivo study of the female urethra with cross-polarization optical coherence tomography using two types of endoscopic probes [11619-10]**

LASER LITHOTRIPSY II

- 11619 0D **In-vitro investigations on improved laser lithotripsy using a diode pumped Tm:YAG laser with a new temporal pulse regime [11619-11]**
- 11619 0E **The optimal dusting mode for Ho:YAG laser lithotripsy [11619-12]**
- 11619 0F **Characterization of a prototype miniature digital ureteroscope tip for enabling office-based thulium fiber laser lithotripsy [11619-13]**
- 11619 0G **Transient thermal simulation of lamp-pumped Ho:YAG laser [11619-14]**

POSTER SESSION

- 11619 0I **Effects of laser power on laser fiber stiffness: momentum of photons [11619-16]**
- 11619 0J **Laparoscopic optical coherence tomography system for 3D bladder tumor detection [11619-17]**

