

PROGRESS IN BIOMEDICAL OPTICS AND IMAGING

Vol. 25 No. 28

Biophotonics and Immune Responses XIX

Wei R. Chen

Feifan Zhou

Editors

28–29 January 2024

San Francisco, California, United States

Sponsored and Published by
SPIE

Volume 12843

Proceedings of SPIE, 1605-7422, V. 12843

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

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 *Biophotonics and Immune Responses XIX*, edited by Wei R. Chen, Feifan Zhou, Proc. of SPIE 12843, Seven-digit Article CID Number (DD/MM/YYYY); (DOI URL).

ISSN: 1605-7422

ISSN: 2410-9045 (electronic)

ISBN: 9781510669451

ISBN: 9781510669468 (electronic)

Published by

SPIE

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

Telephone +1 360 676 3290 (Pacific Time)

SPIE.org

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.

**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

v *Conference Committee*

PHOTOBIMODULATION IN NEUROSTIMULATION AND CANCER TREATMENT: JOINT SESSION WITH CONFERENCES 12843 AND 12826

12843 02 **Skull transmittance of transcranial red and near-infrared light in mouse models** [12843-1]

PHOTO-IMMUNOTHERAPY FOR CANCER

12843 03 **In vitro and in vivo evaluations of focused ultrasound induced immunomodulation in osteosarcoma** [12843-7]

IMAGING OF IMMUNE RESPONSES

12843 04 **Developing a CT-image-based clinical marker to predict vasospasm for aneurysmal subarachnoid hemorrhage patients (Invited Paper)** [12843-15]

12843 05 **Optimizing biophotonics and immune response research: a proposal for in vivo dose escalation and light dosimetry analysis in porcine models** [12843-16]

12843 06 **Evaluating the imaging quality of multiplexed illumination Fourier ptychography microscopy** [12843-17]

POSTER SESSION

12843 09 **Assessing detectability improvement of a self-supervised noise reduction algorithm for phase-sensitive breast tomosynthesis phantom images** [12843-31]

DIGITAL POSTER SESSION

12843 0A **Impaired blood-brain barrier permeability and AD pathogenesis in spontaneous type 2 diabetic cynomolgus monkeys** [12843-41]

12843 0B **Pancreatic pathology severity correlates with A β 42 deposits and tau pathology in spontaneous type 2 diabetes mellitus cynomolgus monkeys** [12843-42]