PROGRESS IN BIOMEDICAL OPTICS AND IMAGING Vol. 25 No. 11

Mechanisms of Photobiomodulation Therapy XVIII

Ann Liebert Jeri-Anne Lyons James D. Carroll Editors

27 January 2024 San Francisco, California, United States

Sponsored and Published by SPIE

Volume 12826

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 *Mechanisms of Photobiomodulation Therapy XVIII*, edited by Ann Liebert, Jeri-Anne Lyons, James D. Carroll, Proc. of SPIE 12826, Seven-digit Article CID Number (DD/MM/YYYY); (DOI URL).

ISSN: 1605-7422

ISSN: 2410-9045 (electronic)

ISBN: 9781510669116

ISBN: 9781510669123 (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.



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

V	Conterence Committee
	NEUROLOGICAL APPLICATIONS OF PHOTOBIOMODULATION
12826 02	Most frequently used red and near infrared photobiomodulation therapy treatment parameters on the patients with post-traumatic stress disorder [12826-3]
	MECHANSIMS OF ENERGY MEDICINE
12826 03	Red and near-infrared light dosimetry: a comprehensive analysis of tissue optical properties [12826-6]
12826 04	Experimental evidence on photobiomodulation induced by short wavelengths blue LED light [12826-7]
	PHOTOBIOMODULATION DOSING PARAMETERS
12826 05	Assessing 661nm photobiomodulation light fluence rate transmission for optimal dose delivery (Invited Paper) [12826-8]
	CLINICAL APPLICATIONS OF PHOTOBIOMODULATION
12826 06	The effect of low-level laser therapy on severe acute respiratory syndrome coronavirus-2 infected cells [12826-11]
12826 07	Design and validation of EEG biomarkers for transcranial photobiomodulation [12826-25]
	APPLICATIONS OF PHOTOBIOMODULATION: JOINT SESSION WITH CONFERENCES 12843 AND 12826
12826 08	Multi-time-frame cell physiology assessment of cold atmospheric plasma emission bioeffects [12826-17]

POSTER SESSION

12826 09	HEK293/ACE2 cells' response to severe acute respiratory syndrome coronavirus-2 infection and low-level-laser therapy under microscopy [12826-20]
12826 0A	Characterization of a 660nm light source for clinical photobiomodulation therapy [12826-22]