

PROGRESS IN BIOMEDICAL OPTICS AND IMAGING
Vol. 15 No. 18

Photons Plus Ultrasound: Imaging and Sensing 2014

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Lihong V. Wang

Editors

2–5 February 2014

San Francisco, California, United States

Sponsored and Published by

SPIE

Volume 8943

Proceedings of SPIE, 1605-7422, V. 8943

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

Photons Plus Ultrasound: Imaging and Sensing 2014, edited by Alexander A. Oraevsky, Lihong V. Wang,
Proc. of SPIE Vol. 8943, 894301 · © 2014 SPIE · CCC code: 1605-7422/14/\$18 · doi: 10.1117/12.2052742

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Please use the following format to cite material from this book:

Author(s), "Title of Paper," in *Photons Plus Ultrasound: Imaging and Sensing 2014*, edited by Alexander A. Oraevsky, Lihong V. Wang, Proceedings of SPIE Vol. 8943 (SPIE, Bellingham, WA, 2014)
Article CID Number.

ISSN: 1605-7422
ISBN: 9780819498564

Published by
SPIE
P.O. Box 10, Bellingham, Washington 98227-0010 USA
Telephone +1 360 676 3290 (Pacific Time) · Fax +1 360 647 1445
SPIE.org

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The CID Number appears on each page of the manuscript. The complete citation is used on the first page, and an abbreviated version on subsequent pages. Numbers in the index correspond to the last two digits of the six-digit CID Number.

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Introduction

We would like to start by congratulating our biomedical research community of light and sound technologies on their accomplishments made in 2013. Once again, our conference on "Photons Plus Ultrasound: Imaging and Sensing" reported to the Photonics West Symposium a significant increase in both the quantity and quality of research. A total of 216 papers, including 110 oral papers and 106 posters, were presented in the course of four days with stimulating discussions.

While our conference remains the main forum for the technology developers, it was interesting to see other SPIE conferences (within and outside the BiOS Symposium) discuss clinical applications of optoacoustic/photoacoustic tomography and preclinical applications of optoacoustic/photoacoustic microscopy. This indicates that our technologies are gradually reaching maturity and becoming ready for further commercialization. Major progress was made in the quality and quantification accuracy of optoacoustic images and record depths, resolution and scanning speed of *in vivo* microscopy, while the number of specific parameters being measured continues to grow.

As in the previous years, the Organizing Committee consisting of 18 leading experts acknowledged outstanding researchers in the field by presenting the Best Paper Award and the Best Poster Award, sponsored by Seno Medical Instruments (San Antonio, Texas). Recognizing the accomplishments achieved by our community and increased competition for the awards, the total monetary award was increased to \$5000 this year.

The Best Paper Awards went to:

"Optical focusing in scattering media with photoacoustic wavefront shaping (PAWS)" by Puxiang Lai, Jian Wei Tay, Lidai Wang, Lihong V. Wang, Washington University in St. Louis (United States)

and

"Optical resolution photoacoustic microscopy using a Blu-ray DVD pickup head" by Meng-Lin Li, Po-Hsun Wang, National Tsing Hua University (Taiwan).

The Best Poster Awards went to:

"High-speed time-reversed ultrasonically encoded (TRUE) optical focusing inside dynamic scattering media at 793 nm" by Yan Liu, Puxiang Lai, Cheng Ma, Xiao Xu, Yuta Suzuki, Washington University in St. Louis (United States); Alexander A. Grabar, Uzhgorod National University (Ukraine); Lihong V. Wang, Washington University in St. Louis (United States)

and

"Combined photoacoustic and speed-of-sound imaging using integrating optical detection" by Gerhild Wurzinger, Robert Nuster, Sibylle Gratt, Günther Paltauf, Karl-Franzens-University, Graz (Austria).

We would like to congratulate the winners and thank all the contributors of this conference and the Organizing Committee for their hard work. This volume of SPIE Proceedings summarizes research and development conducted by our growing community in the past year.

**Alexander A. Oraevsky
Lihong V. Wang**