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<td>J. Yao, K. I. Maslov, S. Hu, L. V. Wang, Washington Univ. in St. Louis (United States)</td>
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<tr>
<td>7564 2K</td>
<td>Clinical combination of multiphoton tomography and high frequency ultrasound imaging for evaluation of skin diseases</td>
<td>K. König, JenLab GmbH (Germany) and Saarland Univ. (Germany); M. Speicher, JenLab GmbH (Germany); M. J. Koehler, Friedrich-Schiller-Univ. Hospital Jena (Germany); R. Scharenberg, Taberna pro medicum GmbH (Germany); P. Elsner, M. Kaatz, Friedrich-Schiller-Univ. Hospital Jena (Germany)</td>
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<tr>
<td>7564 2M</td>
<td>Photoacoustic concave transmitter for generating high frequency focused ultrasound</td>
<td>H. W. Baac, T. Ling, S. Ashkenazi, S. Huang, L. J. Guo, Univ. of Michigan (United States)</td>
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<tr>
<td>7564 2N</td>
<td>Design and characterization of acoustic 4f imaging system by using an optical microring ultrasound detector</td>
<td>H. W. Baac, T. Ling, L. J. Guo, Univ. of Michigan (United States)</td>
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<td>7564 2O</td>
<td>Frequency-selective multiphoton-excitation-induced photoacoustic microscopy (MEPAM) to visualize the cross sections of dense objects</td>
<td>Y. Yamaoka, M. Nambu, T. Takamatsu, Kyoto Prefectural Univ. of Medicine (Japan)</td>
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<tr>
<td>7564 2P</td>
<td>Photoacoustic and ultrasound imaging contrast enhancement using a dual contrast agent</td>
<td>K. Wilson, K. Homan, S. Emelianov, The Univ. of Texas at Austin (United States)</td>
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Photoacoustic microscopy of collagenase-induced Achilles tendinitis in a mouse model
P.-H. Wang, National Tsing Hua Univ. (Taiwan); W. Chen, National Taiwan Univ. Hospital (Taiwan) and National Taiwan Univ. (Taiwan); M.-L. Li, National Tsing Hua Univ. (Taiwan)

Tissue classification by wavelet modified generic Fourier descriptor and their recognition using hybrid correlator
R. B. Yadav, The Univ. of Electro-Communications (Japan); A. K. Gupta, Instruments Research and Development Establishment (India)

Reconstruction of photoacoustic tomography with finite-aperture detectors: deconvolution of the spatial impulse response
M.-L. Li, C.-C. Cheng, National Tsing Hua Univ. (Taiwan)

Multispectral photoacoustic microscopy using a photonic crystal fiber supercontinuum source
Y. N. Billeh, Univ. of Michigan (United States); M. Liu, T. Buma, Univ. of Delaware (United States)

Photoacoustic micro-imaging of focused ultrasound induced blood-brain-barrier opening in a rat model
P.-H. Wang, National Tsing Hua Univ. (Taiwan); P.-H. Hsu, H.-L. Liu, Chang Gung Univ. (Taiwan); C.-R. C. Wang, National Chung-Cheng Univ. (Taiwan); M.-L. Li, National Tsing Hua Univ. (Taiwan)

Multicolor photoacoustic imaging by a single transducer with piezoelectric copolymer film in a wide frequency range
T. Ohmori, M. Ishihara, National Defense Medical College (Japan); K. Tsujita, FUJIFILM Corp. (Japan); I. Bansaku, M. Kikuchi, National Defense Medical College (Japan)

In vivo dual-modality imaging of lymphatic systems using indocyanine green in rats: three-dimensional photoacoustic imaging and planar fluorescence imaging
C. Kim, Washington Univ. in St. Louis (United States); K. H. Song, Univ. of Texas Southwestern Medical Ctr. at Dallas (United States); L. V. Wang, Washington Univ. in St. Louis (United States)

Photoacoustic tomography of pathological tissue in ex vivo mouse hearts
M. Holotta, Innsbruck Medical Univ. (Austria); H. Grossauer, Leopold-Franzens-Univ. Innsbruck (Austria); C. Kremser, P. Torbica, J. Völkl, G. Degenhart, R. Esterhammer, Innsbruck Medical Univ. (Austria); R. Nuster, G. Paltauf, Karl-Franzens-Univ. Graz (Austria); W. Jaschke, Innsbruck Medical Univ. (Austria)

Multiparametric optimization of multispectral optoacoustic tomography for deep tissue imaging
J. Glatz, N. C. Deliolanis, L. Ding, A. Taruttis, A. Rosenthal, R. Schulz, D. Razansky, V. Ntziachristos, Technische Univ. München (Germany) and Helmholtz Zentrum München GmbH (Germany)
Photoacoustic quantification of the optical absorption cross-sections of gold nanostructures [7564-111]
C. Kim, E. C. Cho, Washington Univ. in St. Louis (United States); F. Zhou, Institute of Physics (China); C. M. Cobley, Washington Univ. in St. Louis (United States); K. H. Song, Univ. of Texas Southwestern Medical Ctr. at Dallas (United States); J. Chen, Washington Univ. in St. Louis (United States); Z.-Y. Li, Institute of Physics (China); Y. Xia, L. V. Wang, Washington Univ. in St. Louis (United States)

Optimization of the acousto-optic signal detection in cylindrical geometry [7564-112]
S. Gunadi, S. Powell, C. E. Elwell, T. S. Leung, Univ. College London (United Kingdom)

Analysis of a photoacoustic imaging system by singular value decomposition [7564-113]
M. Roumeliotis, Lawson Health Research Institute, St. Joseph’s Health Care (Canada) and Univ. of Western Ontario (Canada); G. Chaudhary, M. Anastasio, Illinois Institute of Technology (United States); R. Stodilka, Lawson Health Research Institute, St. Joseph’s Health Care (Canada) and Univ. of Western Ontario (Canada); A. Immucci, Lawson Health Research Institute, St. Joseph’s Health Care (Canada); E. Ng, J. J. L. Carson, Lawson Health Research Institute, St. Joseph’s Health Care (Canada) and Univ. of Western Ontario (Canada)

Combined photoacoustic and magneto-motive ultrasound imaging (Best Poster Award) [7564-114]
M. Qu, S. Kim, M. Mehrmohammadi, S. Mallidi, P. Joshi, K. Homan, Y.-S. Chen, S. Emelianov, The Univ. of Texas at Austin (United States)

Comparison of reconstruction algorithms for sparse-array detection photoacoustic tomography [7564-115]
G. Chaudhary, Illinois Institute of Technology (United States); M. Roumeliotis, J. J. L. Carson, Lawson Health Research Institute, St. Joseph’s Health Care (Canada) and The Univ. of Western Ontario (Canada); M. A. Anastasio, Illinois Institute of Technology (United States)

Evaluation of Her2 status using photoacoustic spectroscopic CT techniques [7564-116]
M. Shaffer, Purdue Univ. (United States); R. Kruger, D. Reinecke, OptoSonics, Inc. (United States); H. Chin-Sinex, M. Mendonca, Indiana Univ. (United States); K. M. Stantz, Purdue Univ. (United States) and Indiana Univ. (United States)

Biodegradable plasmonic nanoclusters as contrast agent for photoacoustic imaging [7564-118]
S. J. Yoon, S. Mallidi, J. M. Tam, J. O. Tam, A. Murthy, P. Joshi, K. P. Johnston, The Univ. of Texas at Austin (United States); K. V. Sokolov, The Univ. of Texas at Austin (United States) and The Univ. of Texas M.D. Anderson Cancer Ctr. (United States); S. Y. Emelianov, The Univ. of Texas at Austin (United States)

Characterization of sparse-array detection photoacoustic tomography using the singular value decomposition [7564-119]
G. Chaudhary, Illinois Institute of Technology (United States); M. Roumeliotis, P. Ephrat, R. Stodilka, J. J. L. Carson, Lawson Health Research Institute, St. Joseph’s Health Care (Canada) and The Univ. of Western Ontario (Canada); M. A. Anastasio, Illinois Institute of Technology (United States)
Monitor hemoglobin concentration and oxygen saturation in living mouse tail using photoacoustic CT scanner [7564-120]
B. Liu, Purdue Univ. (United States); R. Kruger, D. Reinecke, OptoSonics, Inc. (United States); K. M. Stantz, Purdue Univ. (United States) and Indiana Univ. (United States)

Ex vivo hemoglobin status study using photoacoustic computed tomography small animal scanner [7564-121]
B. Liu, Purdue Univ. (United States); R. Kruger, D. Reinecke, OptoSonics, Inc. (United States); K. M. Stantz, Purdue Univ. (United States) and Indiana Univ. (United States)

In vivo multi-modality photoacoustic and pulse echo tracking of prostate tumor growth using a window chamber [7564-122]
D. R. Bauer, R. Olafsson, L. G. Montilla, R. S. Witte, The Univ. of Arizona (United States)

Real-time pulse echo and photoacoustic imaging using an ultrasound array and in-line reflective illumination [7564-123]
L. G. Montilla, R. Olafsson, R. S. Witte, The Univ. of Arizona (United States)

Optical-resolution photoacoustic microscopy of amyloid-β deposits in vivo [7564-124]
S. Hu, P. Yan, K. Maslov, J.-M. Lee, L. V. Wang, Washington Univ. in St. Louis (United States)

In vivo label-free photoacoustic microscopy of the anterior segment of the mouse eye [7564-125]
B. Rao, S. Hu, L. Li, K. Maslov, L. V. Wang, Washington Univ. in St. Louis (United States)

In vivo functional photoacoustic micro-imaging of the electrically stimulated rat brain with multiwavelengths [7564-126]
L.-D. Liao, National Chiao Tung Univ. (Taiwan); M.-L. Li, National Tsing Hua Univ. (Taiwan); H.-Y. Lai, Y.-Y. Chen, P. C.-P. Chao, National Chiao Tung Univ. (Taiwan); P.-H. Wang, National Tsing Hua Univ. (Taiwan)

Photoacoustic characterization of human ovarian tissue [7564-127]
A. Aguirre, Y. Ardeshirpour, Univ. of Connecticut (United States); M. M. Sanders, M. Brewer, Univ. of Connecticut Health Ctr. (United States); Q. Zhu, Univ. of Connecticut (United States)

Photoacoustic tomography of foreign bodies in soft biological tissue [7564-128]
X. Cai, C. Kim, M. Pramanik, L. V. Wang, Washington Univ. in St. Louis (United States)

Optoacoustic imaging of HIFU-induced thermal lesions in tissue [7564-129]
P. V. Chitnis, Riverside Research Institute (United States); H.-P. Brecht, R. Su, A. A. Oraevsky, Fairway Medical Technologies, Inc. (United States)

Effect of ultrasound transducer face reflectivity on light fluence distribution inside turbid medium [7564-130]
B. Tavakoli, P. D. Kumavor, A. Aguirre, Q. Zhu, Univ. of Connecticut (United States)

Time-resolved photoacoustic Doppler characterization of flow using pulsed excitation [7564-146]
A. Sheinfeld, S. Gilead, A. Eyal, Tel Aviv Univ. (Israel)
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9. Molecular Imaging
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10. Multimodality Imaging
    Stanislav Y. Emelianov, The University of Texas at Austin (United States)
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11 Computed Tomography
Steven L. Jacques, Oregon Health & Science University (United States)
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12 Novel Systems and Applications
Claude Boccara, Ecole Supérieure de Physique et de Chimie Industrielles (France)
Charles A. DiMarzio, Northeastern University (United States)
Introduction

Our conference on Photons plus Ultrasound: Imaging and Sensing celebrated its 11th anniversary in San Francisco. With a 35% increase in the number of presentations, this conference continues to lead the Photonics West BiOS Symposia in size. This volume of SPIE Proceedings reflects the high-quality research being conducted by our community and offers the latest information on developments in the field of optoacoustic (photoacoustic) computed tomography, microscopy, sensing, and monitoring as well as other related fields.

As in the past, the organizing committee recognized the leading researchers in the field by presenting the Best Paper Award and the Best Poster Award, sponsored by Fairway Medical Technologies, Houston, Texas. This year, the Best Paper Award went to the presenting author Konstantin Maslov, and his coauthors Geng Ku and Lihong V. Wang, Washington University in St. Louis (United States), for the presentation entitled “Photoacoustic microscopy with submicron resolution” (Paper 75640W:7564-31). The Best Poster Award was given to the presenting author Min Qu and her coauthors Seungsoo Kim, Mohammad Mehmohammad, Srivalleesha Mallidi, Pratixa Joshi, Kimberly Homan, Yun-Sheng Chen, and Stanislav Emelianov, The Univ. of Texas at Austin (United States), for the poster entitled “Combined photoacoustic and magneto-motive ultrasound imaging” (Paper 756433:7564-114).

We would like to congratulate the winners and thank all the contributors to this conference for making it another great success!

Alexander A. Oraevsky
Lihong V. Wang