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Alexander A. Oraevsky

Lihong V. Wang

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Contents

xi	<i>Authors</i>
xv	<i>Conference Committee</i>
xix	<i>Introduction</i>

BRAIN IMAGING

10064 07	Recording membrane potential changes through photoacoustic voltage sensitive dye [10064-6]
----------	---

CLINICAL APPLICATIONS

10064 08	Photoacoustic analysis of thyroid cancer in vivo: a pilot study [10064-7]
10064 09	Photoacoustic evaluation of human inflammatory arthritis in human joints [10064-8]
10064 0A	Optoacoustic mapping of cerebral blood oxygenation in humans [10064-9]
10064 0B	Quantitative photoacoustic elastography of Young's modulus in humans [10064-10]

THERAPY MONITORING AND GUIDANCE

10064 0D	In vivo photoacoustic mouse eye imaging of healing after chemical injury and automated eyeball surface estimation based on a random sample consensus algorithm [10064-12]
10064 0G	Identification and removal of reflection artifacts in minimally invasive photoacoustic imaging for accurate visualization of brachytherapy seeds [10064-15]
10064 0H	Non-contact monitoring during laser surgery by measuring the incision depth with air-coupled transducers [10064-16]
10064 0J	Optimizing light delivery for a photoacoustic surgical system [10064-18]

FUNCTIONAL IMAGING

10064 0M	Imaging small animal whole-body dynamics by single-impulse panoramic photoacoustic computed tomography [10064-21]
10064 0N	Quantitative imaging of tumor vasculature using multispectral optoacoustic tomography (MSOT) [10064-22]

- 10064 0P **Simultaneous measurements of total hemoglobin concentration and blood oxygenation with laser diode-based optoacoustic system** [10064-24]
- 10064 0Q **Cerebral blood oxygenation measurements in neonates with optoacoustic technique** [10064-25]

MULTIMODALITY IMAGING AND CONTRAST AGENTS

- 10064 0T **Real-time intravascular photoacoustic-ultrasound imaging of lipid-laden plaque at speed of video-rate level** [10064-28]
- 10064 0W **First steps towards dual-modality 3D photoacoustic and speed of sound imaging with optical ultrasound detection** [10064-31]

ENDOSCOPY AND INTRAVASCULAR IMAGING

- 10064 0Z **Imaging of post-embryonic stage model organisms at high resolution using multi-orientation optoacoustic mesoscopy** [10064-34]
- 10064 12 **Microstructured polymer optical fiber sensors for optoacoustic endoscopy** [10064-37]

QUANTITATIVE IMAGING

- 10064 15 **Three-dimensional photoacoustic imaging and inversion for accurate quantification of chromophore distributions** [10064-40]
- 10064 16 **Experimental validation of a Monte-Carlo-based inversion scheme for 3D quantitative photoacoustic tomography** [10064-41]
- 10064 17 **Ultrasound spectral analysis of photoacoustic signals from red blood cell populations at different optical wavelengths** [10064-42]
- 10064 19 **Exploiting statistical independence for quantitative photoacoustic tomography** [10064-44]
- 10064 1A **20 frames per second model-based reconstruction in cross-sectional optoacoustic tomography** [10064-45]

PRECLINICAL IMAGING

- 10064 1B **Non-negative constrained inversion approaches for unmixing chromophores in multispectral optoacoustic tomography** [10064-46]
- 10064 1C **Optoacoustic endoscopy with optical and acoustic resolution** [10064-47]
- 10064 1D **Non-invasive volumetric optoacoustic imaging of cardiac cycles in acute myocardial infarction model in real-time** [10064-49]

10064 1E **Real-time photoacoustic flow cytography and photothermolysis of single circulating melanoma cells in vivo** [10064-50]

10064 1F **Photoacoustic imaging with a multi-view Fabry-Pérot scanner** [10064-51]

NOVEL METHODS AND SYSTEMS

10064 1I **Improving visibility in limited-view scenarios with dynamic particle-enhanced optoacoustic tomography** [10064-53]

10064 1N **Development of a photoacoustic handheld probe using 2-axis MEMS scanner** [10064-58]

10064 1O **Multiple speckle illumination for optical-resolution photoacoustic imaging** [10064-59]

10064 1P **Linear-array-based photoacoustic tomography for label-free high-throughput detection and quantification of circulating melanoma tumor cell clusters** [10064-60]

10064 1Q **Dynamics of the photoacoustic response of single-element PZT transducers to pulse burst excitation** [10064-61]

ALL-OPTICAL AND LASER ULTRASOUND SYSTEMS

10064 1V **Photoacoustic imaging with planoconcave optical microresonator sensors: feasibility studies based on phantom imaging** [10064-66]

10064 1W **All-optical endoscopic probe for high resolution 3D photoacoustic tomography** [10064-67]

10064 1X **Polarization-dependent optical reflection ultrasonic detection** [10064-68]

10064 1Y **Sub-sampled Fabry-Perot photoacoustic scanner for fast 3D imaging** [10064-69]

10064 23 **Optoacoustic microscopy based on pi-FBG ultrasound sensors** [10064-74]

MICROSCOPY

10064 26 **Frequency domain optical resolution photoacoustic and fluorescence microscopy using a modulated laser diode** [10064-77]

10064 27 **Combined synthetic aperture focusing technique and three-dimensional deconvolution for resolution enhancement in photoacoustic microscopy** [10064-78]

MOLECULAR IMAGING

10064 2D **Copper sulfide nanodisk as photoacoustic contrast agent for ovarian tumor detection** [10064-86]

SIGNAL PROCESSING, IMAGE RECONSTRUCTION

- 10064 2H **Photoacoustic super-resolution microscopy using blind structured speckle illumination** [10064-90]
- 10064 2I **Compressed sensing in photoacoustic imaging and application for planar detection geometries** [10064-91]
- 10064 2K **Imaging multi-scale dynamics in vivo with spiral volumetric optoacoustic tomography** [10064-93]
- 10064 2L **Weighted synthetic aperture focusing for optoacoustic microscopy with scanning illumination and detection** [10064-94]
- 10064 2M **Acoustic resolution photoacoustic Doppler flowmetry using a transducer array: optimising processing for velocity contrast** [10064-95]
- 10064 2N **Fast sparse recovery and coherence factor weighting in optoacoustic tomography** [10064-96]

HOT LATEST RESULTS

- 10064 2P **Slit-enabled linear-array photoacoustic tomography with near isotropic spatial resolution in three dimensions** [10064-141]

POSTER SESSION

- 10064 2S **In vivo photoacoustic imaging of uterine cervical lesion and its image processing based on light propagation in biological medium** [10064-98]
- 10064 2U **Possibility of transrectal photoacoustic imaging-guided biopsy for detection of prostate cancer** [10064-100]
- 10064 2V **Accuracy of a novel photoacoustic-based approach to surgical guidance performed with and without a da Vinci robot** [10064-101]
- 10064 2X **Deep-tissue photoacoustic imaging at 1064 nm using a contrast agent based on phosphorus phthalocyanine formulation** [10064-103]
- 10064 2Z **Functional photoacoustic tomography for neonatal brain imaging: developments and challenges** [10064-105]
- 10064 3I **A suite of phantom-based test methods for assessing image quality of photoacoustic tomography systems** [10064-107]
- 10064 3J **A monomeric water-soluble NIR-absorbing porphyrin derivative as in vivo photoacoustic tomography contrast agent** [10064-108]

10064 33	N-doped carbon nanodots for non-invasive photoacoustic imaging and photothermal therapy [10064-109]
10064 34	Dependence of photoacoustic signal generation characteristics on fluorescence quantum yields of small organic molecule based contrast agents [10064-110]
10064 36	Towards non-contact photo-acoustic endoscopy using speckle pattern analysis [10064-112]
10064 38	Study of data analysis methods in functional connectivity photoacoustic tomography (fcPAT) [10064-114]
10064 39	A cost-effective functional connectivity photoacoustic tomography (fcPAT) of the mouse brain [10064-115]
10064 3A	Comparative study on similarity metrics for seed-based analysis of functional connectivity photoacoustic tomography images [10064-116]
10064 3C	Three-dimensional optoacoustic mesoscopy of the tumor heterogeneity in vivo using high depth-to-resolution multispectral optoacoustic tomography [10064-118]
10064 3D	Photo acoustic imaging: technology, systems and market trends [10064-119]
10064 3E	Utilising the radiative transfer equation in quantitative photoacoustic tomography [10064-120]
10064 3G	Three-dimensional photoacoustic tomography through coherent-weighted focal-line-based image reconstruction [10064-122]
10064 3H	Improvement of resolution in full-view linear-array photoacoustic computed tomography using a novel adaptive weighting method [10064-123]
10064 3I	Variational photoacoustic image reconstruction with spatially resolved projection data [10064-124]
10064 3J	A machine learning approach to identifying point source locations in photoacoustic data [10064-125]
10064 3K	Iterative photoacoustic image reconstruction for three-dimensional imaging by conventional linear-array detection with sparsity regularization [10064-126]
10064 3L	Free space ultrasound guided fluorescence diffuse optical tomography [10064-127]
10064 3M	Bayesian approach to image reconstruction in photoacoustic tomography [10064-128]
10064 3N	Estimation and uncertainty quantification of optical properties directly from the photoacoustic time series [10064-130]
10064 3O	Software-based approach toward vendor independent real-time photoacoustic imaging using ultrasound beamformed data [10064-131]

10064 3P	SNR enhancement for catheter based intravascular photoacoustic/ultrasound imaging [10064-132]
10064 3R	Compression-tracking photoacoustic perfusion and microvascular pressure measurements [10064-134]
10064 3S	Effect of small and large animal skull bone on photoacoustic signal [10064-135]
10064 3T	Photoacoustic investigation of a neonatal skull phantom [10064-136]
10064 3U	Modeling skull's acoustic attenuation and dispersion on photoacoustic signal [10064-137]
10064 3W	Modified delay-and-sum reconstruction algorithm to improve tangential resolution in photoacoustic tomography [10064-139]
10064 3X	Compact photoacoustic tomography system [10064-140]
10064 40	Photoacoustic measurements of red blood cell oxygen saturation in blood bags in situ [10064-144]
10064 41	Multi-wavelength photoacoustic system based on high-power diode laser bars [10064-145]
10064 43	Frequency domain non-contact photoacoustic microscopy [10064-147]
10064 45	Multi-modality analysis of glucose aqueous solution using photoacoustic and dielectric spectroscopy for non-invasive glucose monitoring [10064-149]
10064 47	Photoacoustic remote sensing microscopy with lock-in amplification [10064-151]
10064 48	Needle tip visualization by bevel-point ultrasound generator and prototype photoacoustic imaging system [10064-152]
10064 4A	Multi-wavelength photoacoustic imaging for monitoring lesion formation during high-intensity focused ultrasound therapy [10064-154]
10064 4E	Low-cost high-power light emitting diodes for photoacoustic imaging [10064-158]
10064 4F	Cost-effective optoacoustic system based on the combination of high-power diode lasers [10064-159]
10064 4G	Optoacoustic system based on 808-nm high energy short pulse diode laser stacks [10064-160]
10064 4I	Optoacoustic effect from a point source moving in a circular orbit [10064-162]
10064 4M	Multispectral photoacoustic bioimaging using low power continuous wave lasers [10064-166]
10064 4N	Early-stage tumor detection using photoacoustic microscopy: a pattern recognition approach [10064-167]
10064 4P	Combined optical and acoustic resolution photoacoustic microscopy [10064-170]

- 10064 4R **Low-cost laser scanning photoacoustic microscopy system with a pulsed laser diode excitation source** [10064-172]
- 10064 4S **Photonic nanojet engineering to achieve super-resolution in photoacoustic microscopy: a simulation study** [10064-173]
- 10064 4T **Hybrid ultrasound and dual-wavelength optoacoustic biomicroscopy for functional neuroimaging** [10064-174]
- 10064 4U **Rapid computation of photoacoustic fields from normal and pathological red blood cells using a Green's function method** [10064-175]
- 10064 4W **pMUT+ASIC integrated platform for wide range ultrasonic imaging** [10064-176]
- 10064 4X **Detection of ICG at low concentrations by photoacoustic imaging system using LED light source** [10064-177]
- 10064 53 **Spatial interference encoding patterns based super resolved photoacoustic microscopy** [10064-183]
- 10064 54 **Ultrasound modulation of bioluminescence generated inside a turbid medium** [10064-184]
- 10064 55 **Hybrid microscopy of human carotid atheroma by means of optical-resolution optoacoustic and non-linear optical microscopy** [10064-185]
- 10064 57 **Light activated microbubbles for imaging and microsurgery** [10064-187]
- 10064 5A **Evaluation of blood glucose concentration measurement using photoacoustic spectroscopy in near-infrared region** [10064-190]
- 10064 5B **Biological tissue component evaluation by measuring photoacoustic spectrum** [10064-191]
- 10064 5C **Optical-frequency-comb based ultrasound sensor** [10064-192]
- 10064 5D **Effect of spatial filtering of ultrasound transducers on photoacoustic measurements** [10064-193]
- 10064 5E **Micromachined silicon acoustic delay line with improved structural stability and acoustic directivity for real-time photoacoustic tomography** [10064-194]
- 10064 5F **Quantitative photoacoustic assessment of red blood cell aggregation under pulsatile blood flow: experimental and theoretical approaches** [10064-195]
- 10064 5G **Adipocyte property evaluation with photoacoustic spectrum analysis: a feasibility study on human tissues** [10064-196]
- 10064 5H **Comparison study on the feasibility of photoacoustic power spectrum analysis in osteoporosis detection** [10064-197]
- 10064 5J **Monte-Carlo-based inversion scheme for 3D quantitative photoacoustic tomography** [10064-199]

- 10064 5K **Fluence compensated optoacoustic measurements of blood oxygen saturation in vivo at two optimal wavelengths** [10064-200]
- 10064 5L **Photoacoustic signal enhancement: towards utilization of very low-cost laser diodes in photoacoustic imaging** [10064-201]
- 10064 5N **Optimising probe holder design for sentinel lymph node imaging using clinical photoacoustic system with Monte Carlo simulation** [10064-203]
- 10064 5O **Pulsed laser diode photoacoustic tomography (PLD-PAT) system for fast in vivo imaging of small animal brain** [10064-204]
- 10064 5R **A charge amplification approach for photoacoustic tomography (PAT) with parallel acoustic delay line (PADL) arrays** [10064-207]

Authors

Numbers in the index correspond to the last two digits of the seven-digit citation identifier (CID) article numbering system used in Proceedings of SPIE. The first five digits reflect the volume number. Base 36 numbering is employed for the last two digits and indicates the order of articles within the volume. Numbers start with 00, 01, 02, 03, 04, 05, 06, 07, 08, 09, 0A, 0B...0Z, followed by 10-1Z, 20-2Z, etc.

Abou, Diane S., 07	Cheng, Ji-Xin, 0T
Acker, Jason P., 40	Cheng, Qian, 5G
Adabi, Saba, 2Z	Cherkashin, Maxim, 1Q
Adhikari, Arunabha, 4U	Chiang, Huihua Kenny, 3L
Agano, Toshitaka, 4X	Chitnis, Parag V., 43
Ahmad, Junaid, 54	Cho, Seonghee, 3P
Ahn, Joongho, 3P	Cho, Young, 5E, 5R
An, Lu, 15, 19	Choi, Changhoon, 3P
Ansari, R., 1W	Choi, Min, 3R
Arbeit, Jeffrey M., 4N	Cochard, Jacques, 3D
Arridge, Simon R., 15, 1Y, 3E, 3N	Cook, Timothy R., 2X
Asano, Tomohiko, 2U	Cox, Ben T., 15, 19, 1F, 1Y, 3E, 3N
Avanaki, Mohammad R. N., 2Z	Dai, Xianjin, 4E
Bagga, Karan, 40	Déan-Ben, Xosé Luís, 0H, 1A, 1B, 1D, 1I, 2K
Bai, Wenyu, 4I	Dehghani, Hamid, 54
Balabani, S., 2M	Desjardins, A. E., 1W
Beack, Songeun, 33	d'Humières, Benoît, 3D
Beard, Paul C., 15, 1F, 1V, 1W, 1Y, 2M	Diebold, Gerald J., 4I
Behnam, H., 3U	Ding, Lu, 1A, 1B, 1I
Bell, Kevan, 47	Diop, Mamadou, 3H
Berer, Thomas, 26, 2H, 2I	Döpke, Benjamin, 1Q
Betcke, Marta, 1Y	Douplik, Alexandre, 40
Boctor, Emad M., 07, 3O	Dundar, Murat, 4A
Bohndiek, Sarah E., 0N	Eakins, Gregory, 0T
Bok, Tae-Hoon, 5F	Eddins, Blackberrie, 0J
Borri, Claudia, 57	Ellwood, Robert, 15, 19, 1F
Bossy, Emmanuel, 1O	Erfanzadeh, Mohsen, 32, 4R
Brenner, Carsten, 1Q	Esenaliev, Rinat O., 0A, 0P, 0Q
Brückner, Christian, 32	Estrada, Héctor, 2L, 4T
Brunker, J., 2M	Fadhel, Muhannad N., 17, 4U
Buchegger, Bianca, 26	Fang, Cheng, 5R
Buchmann, Jens, 16, 5J	Fatima, Afreen, 39, 3S, 3T
Bücking, T. M., 2M	Faucheux, Marc, 3D
Buehler, Andreas, 1C, 2N	Fehm, Thomas F., 2K
Burgholzer, Peter, 2H, 2I	Feng, Ting, 5H
Burton, Neal C., 1B	Fonseca, Martina, 15, 19
Cai, De, 27	Fonseca, Rafael A., 0A, 0Q
Cao, Meng, 5G	Ford, Steven J., 2K
Cao, Yingchun, 0T	Furuya, Kenichi, 2S
Carpintero, Guillermo, 4I	Gallego, Daniel C., 12, 4I, 4F, 4G
Carson, Jeffrey, 3H	Gandhi, Neeraj, 2V
Carson, Paul, 5G, 5H	Garra, Brian S., 3I
Cavigli, Lucia, 57	Gateau, Jerome, 0Z
Centi, Sonia, 57	Gawali, Sandeep Babu, 4I, 4F, 4G
Chang, Kiyuk, 3P	Gelovani, Juri, 2Z
Chekkoury, Andrei, 3C	Geng, Jumin, 2P, 2X
Chen, Sung-Liang, 27	George, Deepu, 43
Chen, Wanyi, 0M	Gerhardt, Nils C., 1Q
Chen, Weibiao, 0T	Girish, Gandikota, 09

Gjedde, Albert, 07
 Glasl, Sarah, 3C
 Gong, Lei, 0B
 Gottschalk, Sven, 2K, 4T
 Guggenheim, James A., 1V
 Guo, Zhendong, 27
 Ha, Jeonghoon, 08
 Haas, Helena, 1D
 Hai, Pengfei, 0B, 1P
 Hajireza, Parsin, 47
 Haltmeier, Markus, 2H, 2I
 Hammernik, Kerstin, 3I
 Hanaoka, Takamitsu, 4X
 Hariri, Ali, 2Z, 39, 3S, 3T, 5L
 Hase, Eiji, 5C
 Hashimoto, Atsushi, 48
 Hayakawa, Toshiro, 48
 He, Hailong, 1C, 2N
 He, Weizhen, 5H
 He, Yun, 1E
 Hendriksen, Ellen, 0G
 Henkel, S. Nan, 0P
 Herrmann, Stephen, 0Q
 Hill, Philip J., 54
 Hirasawa, Takeshi, 2S, 34
 Hirota, Kazuhiro, 2S
 Hofmann, Martin R., 1Q
 Honarvar, Mohammad, 3K
 Horiguchi, Akio, 2U
 Hosseinzadeh, M., 5L
 Hsu, Su-Wen, 2D
 Hu, Song, 4N
 Huang, Chih-Hsien, 1E
 Huang, Howard, 3O
 Huang, Zhiyu, 1X
 Hubbell, Ryan, 2P
 Hui, Jie, 0T
 Huynh, Nam, 1Y
 Hysi, Eno, 5F
 Irisawa, Kaku, 2S, 2U, 48
 Ishihara, Miya, 2S, 2U, 34
 Iwatate, Ryu J., 34
 Jacak, Jaroslaw, 26
 Jayet, Baptiste, 54
 Jeon, Seungwan, 0D
 Jia, Congxian, 3I
 Jiang, Huabei, 4E
 Jo, Janggun, 09
 Jo, Kwanhoon, 08
 Jokerst, Jesse V., 2D
 Joseph, James, 0N
 Kaipio, Jari P., 3N
 Kalva, Sandeep Kumar, 3W, 3X, 5O
 Kamiya, Mako, 34
 Kang, DongYel, 5D
 Kang, Jeeun, 07
 Kang, Jin U., 07
 Kang, Yeonsu, 3P
 Kaplan, Bernhard A., 16, 5J
 Karlas, Angelos, 5S
 Karmakar, Subhajit, 4U
 Kazantzides, Peter, 2V
 Khazaaleh, S., 4W
 Khodaei, Afsoon, 38, 3A
 Kim, Chulhong, 08, 0D, 1N, 33, 3P
 Kim, Jaewoo, 0D
 Kim, Jeesu, 08
 Kim, Jeong Hun, 0D
 Kim, Jin Young, 1N
 Kim, Jinmoo, 3P
 Kim, Min-Hee, 08
 Kim, Sungmin, 2V
 Kim, Taehoon, 3P
 Kim, Yongmin, 08, 3P
 Kim, Younsu, 3O
 Kimm, Melanie, 1D
 Kirillin, M. Yu., 5K
 Kitagawa, Kazuo, 4X
 Klämpfl, Florian, 36
 Klar, Thomas A., 26
 Kneipp, Moritz, 2L
 Koberstein-Schwarz, Benno, 3C
 Kole, Ayeeshik, 0T
 Kolios, Michael C., 17, 40, 4M, 4U, 53, 5F
 Kondo, Kengo, 5A, 5B
 Kosanke, Katja, 1D
 Kumar, Akhil, 5E
 Kuniyil Ajith Singh, Mithun, 0G
 Kushibiki, Toshihiro, 2S
 Kwon, Woosung, 33
 Lai, Sarah, 57
 Lamela, Horacio, 12, 41, 4F, 4G
 Langer, Andreas, 26
 Langer, Gregor, 26
 Laufer, Jan, 16, 5J
 Lawrence, Aamna, 4U
 Le, Hanh N. D., 07
 Lediju Bell, Muyinatu A., 0J, 2V, 3J
 Lee, Byung Joo, 0D
 Lee, Changho, 1N
 Lee, Changho, 33
 Lee, Donghyun, 33
 Lee, Seunghoon, 3P
 Leggio, Luca, 41, 4F, 4G
 Lei, Chen, 3O
 Leiss-Holzinger, E., 2H
 Lengenfelder, Benjamin, 36
 Li, Changhui, 1X
 Li, Jiao, 3C
 Li, Lei, 0M
 Li, Lei, 1E
 Li, Wenzhao, 1X
 Li, Yan, 3Y
 Li, Yang, 1P
 Li, Yao, 27
 Li, Zhongfei, 27
 Liang, Jinyang, 4N
 Lim, Dong-Jun, 08
 Lim, Geunbae, 1N
 Lin, Hasiao-Chun Amy, 1D

Lin, Li, 0M
 Lloyd, Harriet, 43
 Lo, Pei-An, 3L
 Loew, Leslie M., 07
 Lohöfer, Fabian, 1D
 Lopez-Schier, Hernan, 0Z
 Lovell, Jonathan F., 2P, 2X, 3G
 Luciano, Michael, 32
 Lucka, Felix, 15, 1F, 1Y
 Ma, Cheng, 0M
 Ma, Jun, 1P
 Malone, Emma, 15
 Manohar, Srirang, 0G
 Mappes, Timo, 0Z
 Marquardt, April, 09
 Maslov, Konstantin, 0M
 Masuoka, Takashi, 5C
 Mather, Melissa L., 54
 Mehari, Fanuel, 36
 Meier, Reinhard, 1D
 Meiri, Amihai, 53
 Micheletti, Filippo, 57
 Minamikawa, Takeo, 5C
 Minoshima, Kaoru, 5C
 Mohammadi, L., 3U
 Montero de Espinosa, Francisco, 0H
 Moothanchery, Mohesh, 4P, 4S, 5O
 Moradi, Hamid, 3K
 Morgan, Stephen P., 54
 Morisono, Koji, 4X
 Moser, Christophe, 1O
 Murakoshi, Dai, 48
 Murata, Yuya, 5B
 Murray, T. W., 2H
 Nakajima, Yoshiaki, 5C
 Nakamura, Masahito, 45
 Nakatsuka, Hitoshi, 4X
 Namita, Takeshi, 5A, 5B
 Nasiriavanaki, Mohammadreza R., 38, 39, 3A,
 3H, 3S, 3T, 3U, 5L
 Noei, Sh., 5L
 Ntziachristos, Vasilis, 0Z, 1B, 1C, 23, 2N, 3C, 55
 Nuster, Robert, 0W, 3I
 Ogura, Takashi, 5C
 Okawa, Shinpei, 2S, 34
 Omar, Murad, 0Z, 3C
 Omidi, Parsa, 3H
 Oralkan, Ömer, 4A
 O'Rourke, Robert, 5G
 Ovsepian, Saak V., 1C
 Oyaga Landa, Francisco Javier, 0H
 Paltauf, Guenther, 0W
 Parameshwarappa, Vinay, 0G
 Park, Hyoeun, 3P
 Park, Kyungjin, 1N
 Park, Sungjo, 3P
 Pelisek, Jaroslav, 55
 Perekatova, V. V., 5K
 Periyasamy, Vijitha, 5N
 Petrov, Irene Y., 0A, 0P, 0Q
 Petrov, Yuriy, 0A, 0P, 0Q
 Pfefer, T. Joshua, 3I
 Pini, Roberto, 57
 Pinto, Ruben N., 40
 Pock, Thomas, 3I
 Poisson, Florian, 1O
 Prakash, Jaya, 2N
 Pramanik, Manojit, 3W, 3X, 4P, 4S, 5N, 5O
 Prohaska, Steffen, 16, 5J
 Prough, Donald S., 0A, 0P, 0Q
 Psaltis, Demetri, 1O
 Pulkkinen, Aki, 3E, 3M, 3N
 Putro, Widodo D., 1Q
 Quiros-Gonzalez, Isabel, 0N
 Rahmim, Arman, 07
 Ratto, Fulvio, 57
 Razansky, Daniel, 0H, 1A, 1B, 1D, 1I, 2K, 2L, 4T
 Rebling, Johannes, 0Z, 4T
 Reiter, Austin, 3J
 Richardson, C. Joan, 0A, 0Q
 Robertson, Claudia S., 0A
 Rodríguez, Sergio, 4I, 4F, 4G
 Rossi, Francesca, 57
 Saeed, N., 4W
 Saha, Ratan K., 4U
 Salcudean, Septimiu E., 3K
 Sánchez, Miguel, 4I, 4F, 4G
 Sanders, Jean, 4A
 Saratoon, Teedah, 19
 Sathiyamoorthy, K., 4M
 Sato, Mitsuki, 5A
 Sato, Naoto, 4X
 Schmidt, Michael, 36
 Schmitt-Manderbach, Tobias, 0Z
 Schwarz, Mathias, 0Z
 Seeger, Markus, 55
 Seeton, Roger, 0P
 Sei, Kiguna, 2S
 Sela, Gali, 4T
 Seyama, Michiko, 45
 Shi, Junhui, 0M, 1E
 Shi, Wei, 47
 Shigeta, Yusuke, 4X
 Shiina, Tsuyoshi, 5A, 5B
 Shinch, Masayuki, 2U
 Shinmoto, Hiroshi, 2U
 Shnaiderman, Rami, 23
 Silverman, Ronald H., 43
 Sivasubramanian, Kathyayini, 5N
 Sobol, Robert W., 1B
 Sohn, Rebecca E., 4N
 Soliman, Dominik, 23, 55
 Song, Hyun Beom, 0D
 Stasio, Nicolino, 1O
 Steenbergen, Wiendelt, 0G, 2M
 Strohm, Eric M., 4M, 53
 Sturek, Michael, 0T
 Subochev, P. V., 5K
 Sundari Krisnan, Mogana, 4S
 Tajima, Takuro, 45

Tanaka, Chizuyo, 4X
 Tanaka, Yujiro, 45
 Tang, Shuo, 3K
 Tang, Yuqi, 36
 Tao, Andrea R., 2D
 Tarvainen, Tanja, 3E, 3M, 3N
 Tavakoli, Emytis, 2Z
 Thorek, Daniel L. J., 07
 Tick, Jenni, 3M
 Tillak, J., 4W
 Tokuyama, Junji, 5B
 Tomaszewski, Michal R., 0N
 Tortoli, Paolo, 57
 Tsuda, Hitoshi, 2U
 Turchin, I. V., 5K
 Turner, Jake, 2L
 Upputuri, Paul Kumar, 4S, 5O
 Urano, Yasuteru, 34
 Ustun, Arif, 5R
 van den Berg, P. J., 2M
 Vetschera, Paul, 3C
 Viegas, J., 4W
 Vogt, William C., 31
 Volinski, Bridget, 3S, 3T
 Wada, Takatsugu, 2S, 2U
 Wang, Depeng, 2P, 2X, 3G
 Wang, Guohe, 1X
 Wang, Huaideng, 5G, 5H
 Wang, Junxin, 2D
 Wang, Liang, 4N
 Wang, Lidai, 0M, 1E
 Wang, Lihong V., 0B, 0M, 1E, 1P, 4N
 Wang, Pu, 0T
 Wang, Xueding, 09, 5G, 5H
 Wang, Yuehang, 2P, 2X, 3G
 Wear, Keith A., 31
 Wen, Kew Kok, 5N
 Wicker, Kai, 0Z
 Wildgruber, Moritz, 1D
 Wiśniowski, Bartosz, 41
 Wissmeyer, Georg, 1C, 23
 Wong, Dean F., 07
 Wu, Xun, 4A
 Wurzing, Gerhild, 0W
 Xia, Jun, 2P, 2X, 3G
 Xu, Guan, 09, 5G, 5H
 Xu, Qiuyun, 3S, 3T
 Xu, Song, 5E
 Yamakawa, Makoto, 5A, 5B
 Yamamoto, Katsuya, 48
 Yamaoka, Yoshihisa, 5C
 Yan, Ping, 07
 Yang, Hao, 4E
 Yao, Junjie, 0M, 1E
 Yasui, Takeshi, 5C
 Yeh, Chenghung, 4N
 Yoo, J., 4W
 Yu, Guangli, 0T
 Yuan, Jie, 5G, 5H
 Zalevsky, Zeev, 36, 53
 Zemp, Roger, 3R, 47
 Zhang, Edward Z., 1F, 1V, 1W, 1Y
 Zhang, Haichong K., 07, 3O
 Zhang, Ruiying, 0M, 1E, 1P
 Zhang, Songhe, 3C
 Zhang, Yi, 0T
 Zhang, Yumiao, 2P, 2X
 Zhang, Yuzhen, 2X
 Zhou, Feifei, 32
 Zhou, Yang, 2X, 3G
 Zhou, Yong, 0B, 1P, 4N
 Zhu, Liren, 0M
 Zhu, Quing, 32, 4R
 Zhu, Xiaoyi, 1X
 Zhu, Yunhao, 5G, 5H
 Zou, Jun, 1E, 5E, 5R
 Zwack, Michael, 4T

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Matthew O'Donnell, University of Washington (United States)
- 14 Signal Processing, Image Reconstruction
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- 15 Hot Latest Results
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Introduction

This volume of SPIE Proceedings summarizes research and development conducted by our community in the past year. The field of biomedical optoacoustic (photoacoustic) imaging continues to experience healthy growth. The conference remains the largest at Photonics West.

The conference started at 8:00 am Sunday, 29 January 2017 with a special session on brain imaging, chaired by Dr. Edmund M. Talley, National Institute of Health (United States). Despite the early hour, there was standing room only. The session started with three invited talks:

- Photoacoustic tomography: deep imaging beyond the optical diffusion limit. Lihong V. Wang, Washington Univ. in St. Louis (United States)
- Towards genetically encoded Indicators for photoacoustic detection of neuronal activity. Robert E. Campbell, Univ. of Alberta (Canada)
- Engineering of bacterial phytochromes for in vivo imaging. Vladislav Verkhusha, Daria M. Shcherbakova, Andrii A. Kaberniuk, Mikhail Baloban, Albert Einstein College of Medicine (United States)

Beginning last year, the Best Paper of the conference have been selected through a two-tiered process. In the first tier, the conference organizing committee composed of leading researchers from our community selected the following finalists:

Paper 10064-7: Photoacoustic analysis of thyroid cancer in vivo: a pilot study. Jeesu Kim, Pohang Univ. of Science and Technology (Korea, Republic of); MinHee Kim, Kwanhoon Jo, Jeonghoon Ha, The Catholic Univ. of Korea (Korea, Republic of); Yongmin Kim, Pohang Univ. of Science and Technology (Korea, Republic of); DongJun Lim, The Catholic Univ. of Korea (Korea, Republic of); Chulhong Kim, Pohang Univ. of Science and Technology (Korea, Republic of)

Paper 10064-21: Photoacoustic computed tomography of small-animal wholebody dynamics. Lei Li, Liren Zhu, Cheng Ma, Junjie Yao, Washington Univ. in St. Louis (United States); Jun Xia, Univ. at Buffalo (United States); Lidai Wang, City Univ. of Hong Kong (China); Konstantin I. Maslov, Ruiying Zhang, Yang Li, Wanyi Chen, Junhui Shi, Lihong V. Wang, Washington Univ. in St. Louis (United States)

Paper 10064-100: Possibility of transrectal photoacoustic imaging-guided biopsy for detection of prostate cancer. Miya Ishihara, Masayuki Shintchi, Akio Horiguchi, Hiroshi Shinmoto, Hitoshi Tsuda, National Defense Medical College (Japan); Kaku Irisawa, Takatsugu Wada, Medical Systems Research & Development Ctr., FUJIFILM Corp. (Japan); Tomohiko Asano, National Defense Medical College (Japan)

In the second tier, a committee of independent experts formed by Seno Medical Instruments, the sponsor of the award, will select the Best Paper from the

list of finalists by reviewing the corresponding SPIE Proceedings. The \$3,000 award will be announced by SPIE in next year's conference.

We would like to congratulate the finalists and thank all the contributors of this conference and the Organizing Committee for their hard work.

Alexander A. Oraevsky
Lihong V. Wang