

Monday August 28, 2017

08:00 – 09:00	Registration	
09:00 – 09:15	Opening Session <i>Petr PÁTA</i>	
09:15 – 10:45	Plenary Session	Chair: <i>Petr PÁTA</i>
09:15 – 10:00	From advanced methods of preform fabrication to specialty coated fibers – Material and Technology <i>Kay SCHUSTER</i>	
10:00 – 10:45	Forces of light: from solar sails to nanoparticle cooling <i>Pavel ZEMÁNEK</i>	
10:45 – 11:15	Coffee Break	
11:15 – 12:00	Laser in Industry	Chair: <i>Steve SMITH</i>
11:15 – 11:30	A Practical Model of Thin Disk Regenerative Amplifier Based on Analytical Expression of ASE Lifetime <i>Huang ZHOU, Michal Chyla, Siva Sankar Nagisetty, Liyuan Chen, Akira Endo, Martin Smrž, Tomáš Mocek</i>	
11:30 – 11:45	A novel method for fabrication of size controlled metallic nanoparticles by laser ablation <i>Kaushik Choudhury, R. K. Singh, Mukesh Ranjan, Ajai Kumar, Atul Srivastava</i>	
11:45 – 12:00	Advanced Injection Seeder for Various Applications - from LIDARs to Supercontinuum Sources <i>Pawel GRZES, Maria Michalska, Jacek Swiderski</i>	
12:00 – 12:15	Organic Photonic Materials and Devices	Chair: <i>Pavel PETERKA</i>
12:00 – 12:15	Single-mode distributed feedback laser operation from gain media with arbitrary morphologies <i>Kyungtaek MIN, Muhammad Umar, and Sunghwan Kim</i>	
12:15 – 14:00	Lunch Break	
14:00 – 14:45	Plenary Session	Chair: <i>Petr PÁTA</i>
14:00 – 14:45	Latest advances in Biophotonics <i>Alžběta MARČEK CHORVÁTOVÁ</i>	
14:45 – 15:30	Life Science and Biophotonics	Chair: <i>Petr PÁTA</i>
14:45 – 15:00	Optical propagation analysis in photobioreactor measurements on cyanobacteria <i>Félix FANJUL-VÉLEZ, José Luis Arce-Diego</i>	
15:00 – 15:15	Assessing resolution in live cell structured illumination microscopy <i>Jakub POSPÍŠIL, Karel Fliegel, Miloš Klíma</i>	

15:15 – 15:30	Correlated Fluorescence-Atomic Force Microscopy Studies of the Clathrin Mediated Endocytosis in SKMEL Cells <i>Amy Hor, Anh Luu, Lin Kang, Brandon Scott, Elizabeth Bailey, Adam Hoppe, Steve SMITH</i>
15:30 – 16:00	Coffee Break
16.00 – 17.00	Metrology and Sensors Chair: Ivan KAŠÍK
16:00 – 16:15	Fibre optic gyroscope with single-mode fibre and loop-back phase shift compensation <i>Michal SKALSKÝ, Zdenek Havránek, Jiří Fialka</i>
16:15 – 16:30	Resolution enhancement of digital holographic microscopy using angular-polarization multiplexing <i>Chau-Jern CHENG, Varvara Semenova, Xin-Ji Lai, Yu-Chih Lin, Han-Yen Tu</i>
16:30 – 16:45	Large displacement and deformation measurement by frequency scanning digital holography <i>Pavel PSOTA, Vít Lédl, František Kaván</i>
16:45 – 17:00	Camera-based micro interferometer for distance sensing <i>Matthias WILL, Martin Schädel, Thomas Ortlepp</i>
18.15	Optional Meeting Point by the Registration Desk
19.00	Welcome Dinner & Brewery Excursion at Staroprament Restaurant



Tuesday August 29, 2017

09:00 – 10:15	Solar Cells, Solid State Lighting & LED, LD, OLED Chair: Václav KUBEČEK
09:00 – 09:15	Energy-Efficient, Color-Saturated Green Light Emitting Diodes Based on Quantum Confined Perovskites <i>Sudhir KUMAR, Jakub Jagielski, Chih-Jen Shih</i>
09:15 – 09:30	Efficient conceptual design of an LED-based pixel light vehicle headlamp <i>M. P. HELD, R. Lachmayer</i>
09:30 – 09:45	Survey of on-road image projection with pixel light systems <i>Sadiq RIZVI, Roland Lachmayer</i>
09:45 – 10:00	Optical properties of bulk heterojunctions based on TiO₂ and MoS₂ <i>Łukasz JAROSIŃSKI, Kamila Kollbek, Marek Przybylski</i>

10:00 – 10:15	Solar-pumped passively mode-locked Nd:Cr:YAG laser for laser ablation applications <i>Birger SEIFERT, R. Rojas-Aedo, R. A. Wheatley, S. Wallentowitz, U. Volkmann</i>
10:15 – 10:45	Coffee Break
10.45 – 12.15	Poster Session I.
	Laser in Industry
1	Laser beam distribution system for the HiLASE center <i>Karolina MACÚCHOVÁ, Jan Hermánek, Jan Kaufmann, Tomáš Mocek, Mihai-George Muresan, Jan Růžička, Martina Reháková, Luděk Švandrlík</i>
2	Cryogenic cooled Tm:SBN tunable laser <i>Richard ŠVEJKAR, Jan Šulc, Michal Němec, Helena Jelínková, Maxim E. Doroshenko, Alexander G. Papashvili, Sergei H. Batygov, Vyacheslav V. Osiko</i>
3	High-efficient Nd:YAG microchip laser for optical surface scanning <i>Jan ŠULC, Helena Jelínková, Karel Nejezchleb, Václav Škoda</i>
4	Q-switched Nd:YAG/V:YAG microchip 1338 nm laser for laser-induced breakdown spectroscopy <i>Jan ŠULC, Helena Jelínková, Karel Nejezchleb, Václav Škoda</i>
	Metrology and Sensors
5	Optical fiber strain sensor using active mode locking FBG laser cavity <i>Gyeong Hun KIM, Chang Hyun Park, Chang-Seok Kim, Hwi Don Lee, Youngjoo Chung</i>
6	Point distinguish using multiple partial reflector <i>Chang Hyun PARK, Gyeong Hun Kim, Chang-Seok Kim, Hwi Don Lee, Youngjoo Chung</i>
7	Synthetic aperture common-path spiral digital holographic microscopy <i>Varvara SEMENOVA, Xian-Ru Wu, Chau-Jern Cheng</i>
8	Investigation of refractive index increment of different proteins by Kretschmann Ellipsometry <i>Benjamin KALAS, Judit Nádor, Miklós Fried, Péter Petrik</i>
9	Steps towards Analytical Reconstruction of two different Pulses from double Spectrograms alone <i>Ricardo ROJAS-AEDO, B. Seifert, R. A. Wheatley, S. Wallentowitz, U. Volkmann, K. Sperlich, H. Stolz</i>

10	The ZnO nanowire-based gas sensor with Ultraviolet-LEDs <i>Nam-Woo KANG, Soae Jeong, Hee-Jung Choi, Kyoung-Kook Kim</i>
11	Some possibilities in digital holographic vibrometry for non-harmonic vibration measurement <i>Pavel PSOTA, Vít Lédl, Pavel Mokrý, Jan Václavík</i>
12	Quality assessment of glass jewellery stones <i>Maria NASYROVA, Stanislav Vítek</i>
	Solar Cells, Solid State Lighting & LED, LD, OLED
13	Thermal stability of gallium arsenide solar cells <i>Nikola PAPEŽ, Lubomír Škvarenina, Pavel Tofel, Ondřej Šik, Dinara Sobola</i>
14	High Flexible Transparent Conducting Film of amorphous structure <i>Gyu-Jae YOHN, Ji-Yeon Jo, Eung-Hyuk Lee, Kyoung-Kook Kim</i>
15	A study on the growth of high quality phosphorus doped p-type ZnO <i>Soae JEONG, Joon-Sung Kwon, Si-Won Kim, Kyoung-Kook Kim, Eung-Hyuk Lee</i>
16	Fabrication of quantum-dot light-emitting diodes using an RF-sputtered transparent-metal-oxide electron-transporting layer <i>Lee HO-NYEON, Dong-Jin Kim</i>
17	Modeling of photoluminescence in laser-based lighting systems <i>Elisavet CHATZIZYRLI, Nadine Tinne, Roland Lachmayer, Jörg Neumann, Dietmar Kracht</i>
18	Microscale localization and isolation of light emitting imperfections in monocrystalline silicon solar cells <i>Adam GAJDOŠ, Lubomír Škvarenina, Pavel Škarvada, Robert Macků</i>
19	High Efficiency UV-LEDs based on One-Dimensional Nitride Semiconductor using Nanoparticles <i>Gyu-Jae YOHN, Soo-Hyun Kang, Changil Park, Beom-Rae Noh, Kyoung-Kook Kim</i>
20	Fabrication of 365nm UV-polarized LEDs using metallic nano-grating structure <i>Nam Woo KANG, Soo-Hyun KANG, Changil Park, Eun Kyung Chu, Kyoung-Kook Kim</i>
21	Microstructural defects detection in chalcopyrite Cu(In,Ga)Se₂ solar cells by spectrally-filtered electroluminescence mapping <i>Lubomír Škvarenina, Adam GAJDOŠ, Robert Macků, Pavel Škarvada</i>

Life Science and Biophotonics	
22	<p>The study on In-VIVO biomedical applications of fluorescence lifetime signal detection</p> <p><i>Sang-Kyeong PARK, Byungyeon Kim, Byungjun Park, Seungrag Lee, Youngjae Won, Taegeon Kang</i></p>
23	<p>Real-time photoacoustic imaging using high-speed red region laser</p> <p><i>Soon-Woo CHO, Sang Min Park, Heesung Kang, Sang-Won Lee, Chang-Seok Kim</i></p>
24	<p>Wavelength-Comb-Swept Laser based on AOTF</p> <p><i>Soo Kyung CHUN, Nam Su Park, Chang-Seok Kim</i></p>
25	<p>A study of photothermal effect and multi-photon fluorescence for a cancer cell targeting agent</p> <p><i>Soo Kyung CHUN, Hyun Soo Jung , Junyoung Kwon, Hyun Ah Lee, Jaebeom Lee, Dae Youn Hwang, Chang-Seok Kim</i></p>
26	<p>Near-infrared intensity-modulated wavelength-swept laser for diffuse optical spectroscopy</p> <p><i>Gyeong Hun KIM, Chang-Seok Kim</i></p>
27	<p>Dual-wavelength laser using stimulated Raman scattering for photoacoustic effect</p> <p><i>Sang Min PARK, Soon-Woo Cho, Sang-Won Lee, Chang-Seok Kim</i></p>
12:15 – 14:00	Lunch break
14:00 – 15:15	Nanophotonics and Nanooptics Chair: František UHEREK
14:00 – 14:15	<p>Reflectance analysis of porosity gradient in nanostructured silicon layers</p> <p><i>Stanislav JUREČKA, Kentaro Imamura, Taketoshi Matsumoto, Hikaru Kobayashi</i></p>
14:15 – 14:30	<p>Performance of light-emitting Si nanostructures - almost perfect near-infrared emitters</p> <p><i>Jan VALENTA, M. Greben, S. Gutsch, J. Laube, D. Hiller, M. Zacharias, S. Dyakov</i></p>
14:30 – 14:45	<p>Photonic crystal patterning of LED surfaces</p> <p><i>František UHEREK, Pavol Hronec, Dušan Pudiš, Jaroslava Škriniarová, Jozef Kováč, Luboš Šušlik, Jozef Kováč jr., Ivana Lettrichová</i></p>
14:45 – 15:00	<p>Experimental vizualization of 2D PC equi-frequency surfaces</p> <p><i>Dagmar SENDERAKOVÁ, Milan Drzik, Matej Písarčík</i></p>
15:00 – 15:15	<p>Formation of Au and Au/Ag nanostructures in surfaces of silicate glasses by ArF excimer laser irradiation</p> <p><i>Manfred DUBIEL, Maximilian Heinz, Joerg Meinertz, Juergen Ihlemann, Armin Hoell</i></p>

15:15 – 15:45	Coffee Break
15.45 – 17.30	Poster Session II.
	Organic Photonic Materials and Devices
28	Infrared wire-grid polarizer with sol-gel antireflection films on both sides <i>Itsunari YAMADA, Yoshiro Ishihara</i>
29	Properties of new designed thermo- and photo- reacting materials having fluorans and porphirins <i>Younga SON, Kyeongsu Min, Myeongjin Kim, Ramalingam Manivannan, Rangaraju Satish Kumar</i>
	Nanophotonics and Nanooptics
30	The electromagnetic centroid, the problem of focus in the microscopy of real thick samples and superresolution <i>Renata RYCHTÁRIKOVÁ, Dalibor Štys</i>
	Waveguide Photonics
31	The behavior of the geometrical parameters of optical beam of optical passive components under the long time temperature loading <i>František PERECAR, Jan Látal, Lukáš Bednarek, Lukáš Hájek, David Hrubý, Vladimír Vašínek, Jan Nedoma, Jakub Jaroš</i>
32	Formation of 2D bright spatial solitons in Lithium Niobate with photovoltaic response and incoherent background <i>A. Pustozerov, Vladimir SHANDAROV</i>
33	Optical properties of Na₂O-TiO₂-SiO₂ glass films prepared by the sol-gel method <i>Ivo BARTOŇ, Vlastimil Matějec, Jan Mrázek, Luminita Predoana, Maria Zaharescu</i>
34	Measurement of attenuation coefficient of core and cladding modes in Bragg fiber <i>Milan FRANK, Michal Jelínek, Václav Kubeček, Vlastimil Matějec, Ondřej Podrazký, Ivan Kašík</i>
35	Gain Determination of Optical Active Doped Planar Waveguides <i>Jiří ŠMEJCKÝ, Vítězslav Jeřábek, P. Nekvindová, David Mareš</i>
	Simulation of Photonic Devices
36	Analysis and Observers Survey for Reduction of Sea Glint Reflection <i>Roy AVRAHAMY, M. Zohar, S. Hava, B. Milgrom</i>
37	Optical RRH working in an all-optical fronthaul network <i>Zbigniew ZAKRZEWSKI</i>

38	Design and optimization of the silver nanograting structure utilizing surface plasmon-polariton for increase of SERS sensor response <i>David MAREŠ, Vítězslav Jeřábek, Jiří Šmejcký, Yevgeniya Kalachyova, Oleksiy Lyutakov</i>
39	Evaluation of energy transfer coefficients in Tm-doped fibers for fiber lasers <i>Jakub CAJZL, Pavel Peterka, Pavel Honzátko, Ondřej Podrazký, Michal Kamrádek, Jan Aubrecht, J. Proboštová, Ivan Kašík</i>
Non-linear Materials, Devices and Applications	
40	Efficiency enhancement of the MIR DFG laser source based on periodically poled KTP crystal by optimal focusing conditions <i>Yauhen BARAVETS, P. Koska, Pavel Honzátko</i>
41	Optical self-action of bright soliton beams in photorefractive lithium niobate samples with pyroelectric mechanism of nonlinear response <i>A.S. Perin, B.M. Budaev B.M., T.L. Grigoryan, V.M. SHANDAROV</i>
42	Analyses of resource reservation schemes for optical burst switching networks <i>Lubomír SCHOLTZ, Libor Ladanyi, Jarmila Mullerová</i>
43	Power requirements reducing of FBG based all-optical switching <i>Lubomir Scholtz, Michaela SOLANSKA, Libor Ladanyi, Jarmila Mullerová</i>
44	Generation of 120 ps, 1168 nm anti-Stokes pulses from the all-solid-state, self-mode-locked, parametric Raman CaCO₃ laser with intracavity pumping by 1338 nm Nd:YAG laser <i>Michal JELÍNEK, Václav Kubeček, Sergei Smetanin</i>
45	All-solid-state, synchronously pumped, ultrafast BaWO₄ Raman laser with long and short Raman shifts generating at 1180, 1225, and 1323 nm <i>Milan FRANK, Michal Jelínek, Václav Kubeček, L.I. Ivleva, Sergei Smetanin</i>
46	Formation of Photonic Structures in Photorefractive Lithium Niobate by 1D and 2D Bessel-like Optical Fields <i>A.V. Inyushov, P.K. Safronova, A.A. Sarkyt, V.M. SHANDAROV</i>
47	Diode-pumped Cr-doped ZnMnSe and ZnMgSe lasers <i>Adam ŘÍHA, M. Němec, H. Jelínková, M. E. Doroshenko, V. K. Komar, A. S. Gerasimenko</i>

	Diffractive Optical Devices
48	Theoretical model of a polarization diffractive elements for the light beams conversion holographic formation in PDLCs <i>Sergey N. SHARANGOVICH, A.O. Semkin</i>
	Education and Multimedia in Photonics
49	A new generation of real-time weather monitoring cameras <i>Petr JANOUT, Martin Blažek, Petr Páta</i>
50	Considerations of education in the field of biophotonics in engineering: the experience of the subject Fundamentals of Biophotonics <i>Félix FANJUL-VÉLEZ, José Luis Arce-Diego</i>

Wednesday August 30, 2017

09:00 – 10:30	Waveguide Photonics	Chair: Dagmar SENDEKOVÁ
09:00 – 09:15	Phase noise measurements of single-frequency widely tunable ytterbium fiber laser <i>Yauhen BARAVETS, Ashwin Kumar MYAKALWAR, Pavel Honzátko</i>	
09:15 – 09:30	Multimode Optical Polymer Planar Waveguides for Optical Interconnections <i>Václav PRAJZLER, Miloš Neruda, Ivana Beshajova Pelikanová, Marian Knietel, Pavla Nekvindová</i>	
09:30 – 09:45	Channel waveguides and phase difraction gratings optically formed in photorefractive surface layers of lithium niobate <i>A. Bezpaly, A. Verkhoturov, V. SHANDAROV</i>	
09:45 – 10:00	Arsenic sulfide layers for dielectric reflection mirrors prepared from solutions <i>Vlastimil MATĚJEC, Jitka Pedlíková, Ivo Bartoň, Ondřej Podrazký</i>	
10:00 – 10:15	Design, fabrication and characterization of SiO_x/SiON/SiO₂/Si structures for passive optical waveguides realization <i>Jozef CHOVAN, Daniel Figura, Juraj Chlpík, Dušan Lorenc, Vlastimil Řeháček, František Uherek</i>	
10:15 – 10:30	Monolithic thulium-doped fiber lasers <i>Jan Aubrecht, Pavel Peterka, Pavel Honzátko, Ondřej Podrazký, Michal Kamrádek, Jana Proboštová, Ivan Kašík</i>	
10:30 – 11:00	Coffee Break	

11:00 – 11:15	Simulation of Photonic Devices	Chair: Dagmar SENDERAKOVÁ
11:00 – 10:15	Thin films structural properties: results of the full-atomistic supercomputer simulation <i>Fedor V. GRIGORIEV, V. B. Sulimov, A. V. Tikhonravov</i>	
11:15 – 11:30	Diffraction Optical Devices	Chair: Dagmar SENDERAKOVÁ
11:15 – 11:30	Fiber facet gratings for high power fiber lasers <i>Martin VANĚK, Jan Vaniš, Yauhen Baravets, Fedor Todorov, Jiří Čtyroký, Pavel Honzátko</i>	
11:30 – 12:30	Non-linear Materials, Devices and Applications	Chair: Pavel HONZÁTKO
11:30 – 11:45	Mode-locking peculiarities in an all-fiber erbium-doped ring ultrashort pulse laser with a highly-nonlinear resonator <i>Dmitriy A. DVORETSKIY, Stanislav G. Sazonkin, Igor S. Kudelin, Ilya O. Orekhov, Alexey B. Pnev, Valeriy E. Karasik, Lev Denisov</i>	
11:45 – 12:00	Thulium-doped optical fibers for fiber lasers <i>Jan Aubrecht, Pavel PETERKA, Ondřej Podrazký, Pavel Honzátko, Jakub Cajzl, Jan Mrázek, Václav Kubeček, Ivan Kašík</i>	
12:00 – 12:15	Analyses of electronic and optical properties of new TTF-based azine derivatives <i>Lucia MYDLOVA, Awatef Ayadi, Abdelkirm El-Ghyoury, Bouchta Sahaoui, Malgorzata Makowska-Janusik</i>	
12:15 – 12:30	Laser fabrication of mechanical traps for sensitive atomic force microscopy investigation of the local nanomechanical properties of living cells <i>Inam Mirza, Jan Pokorný, Yoann Levy, Radek Machulka, Ondřej Haderka, Nadezhda M. Bulgakova, Tomáš Mocek</i>	
12:30 – 12:45	Closing Session <i>Petr PÁTA</i>	