

Fiber Lasers and Glass Photonics: Materials through Applications

Sunday - Thursday 22 - 26 April 2018

Conference Sessions At A Glance

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1: From Glass to Applications I
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 Hot Topics I
 3: Materials and Components I
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 Hot Topics II
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 Mode-locked Fibre Lasers: Joint Session between Conferences 10683 and 10684
 11: Materials and Components
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 13: Special Session: Minerva Project and Mid-infrared Materials and Sources
 14: Special Session Dedicated to Early Stage Researchers and Woman Scientists

Important Dates

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Abstract Due:
25 October 2017

Author Notification:
26 January 2018

Manuscript Due Date:
26 March 2018

Conference Committee

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Conference Chairs

[Stefano Taccheo](#), Swansea Univ. (United Kingdom)
[Jacob I. Mackenzie](#), Univ. of Southampton (United Kingdom)
[Maurizio Ferrari](#), CNR-Istituto di Fotonica e Nanotecnologie (Italy)

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SUNDAY 22 APRIL[Show All Abstracts](#)

Opening Remarks

Sunday 22 April 2018
 1:10 PM - 1:25 PM
 Location: Salon 7

Session 1: From Glass to Applications I

Sunday 22 April 2018
 1:25 PM - 3:10 PM
 Location: Salon 7


Session Chair: [Stefano Taccheo](#), Swansea Univ. (United Kingdom)

A unified materials approach to mitigating optical nonlinearities in fiber lasers (*Keynote Presentation*)

Paper 10683-1

Time: 1:25 PM - 2:10 PM

Author(s): John M. Ballato, Maxime Cavillon, Clemson Univ. (United States); Peter Dragic, Univ. of Illinois (United States); Courtney Kucera, Thomas Hawkins, Clemson Univ. (United States)


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Monitoring and controlling fiber laser based machining processes

Paper 10683-2

Time: 2:10 PM - 2:25 PM

Author(s): Roberto Ocaña Pérez, Iker Garmendia, Carlos Soriano, IK4 Tekniker (Spain)


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Monolithic Er/Yb double-clad fibre laser with FBG inscribed using the direct-write plane-by-plane fs-laser inscription method

Paper 10683-3

Time: 2:25 PM - 2:40 PM

Author(s): Jan Aubrecht, Institute of Photonics and Electronics of the ASCR, v.v.i. (Czech Republic); Antreas Theodosiou, Cyprus Univ. of Technology (Cyprus); Pavel Peterka, Ivan Kašík, Filip Todorov, Ondřej Moravec, Pavel Honzátko, Institute of Photonics and Electronics of the ASCR, v.v.i. (Czech Republic); Kyriacos Kalli, Cyprus Univ. of Technology (Cyprus)


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Improvement of noise reduction in fiber Brillouin lasers due to multi-Stokes operation (*Conference Presentation*)

Paper 10683-4

Time: 2:40 PM - 2:55 PM

Author(s): Ananthu Sebastian, Schadrac Fresnel, Stéphane Trebaol, Frédéric Ginovart, Pascal Besnard, CNRS-Fonctions Optiques pour les Technologistes de l'information (France)


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Optimum parameters for high-repetition rate femtosecond laser glass welding using an optical head with long focal length (*Conference Presentation*)

Paper 10683-5

Time: 2:55 PM - 3:10 PM

Author(s): Marion Gstalter, ICube (France); Grégoire Chabrol, ICube (France); ECAM Strasbourg-Europe (France); Arnel Bahouka, IREPA LASER (France); Kokou-Dodzi Dorkenoo, Jean-Luc Rehspringer, Institut de Physique et Chimie des Matériaux de Strasbourg (France); Sylvain Lecler, ICube (France)

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Coffee Break 3:10 PM - 3:40 PM

**Session 2:
From Glass to Applications II**

Sunday 22 April 2018

3:40 PM - 5:50 PM

Location: Salon 7


Session Chair: [Jacob I. Mackenzie](#), Univ. of Southampton (United Kingdom)

The bright white emission from μ -diamonds (*Invited Paper*)

Paper 10683-6

Time: 3:40 PM - 4:05 PM

Author(s): Wiesław Strek, Adam Olejniczak, Robert Tomala, Bartłomiej Cichy, Anna Lukowiak, Institute of Low Temperature and Structure Research (Poland); Aliaksandr Zhaludkevich, Alexandra Konovalova, Oleg Ignatenko, Scientific-Practical Material Research Center of the National Academy of Sciences of Belarus (Belarus)


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Narrowband gain in chalcogenide waveguides for low-power RF delay lines

Paper 10683-7

Time: 4:05 PM - 4:20 PM

Author(s): Amol Choudhary, Yang Liu, The Univ. of Sydney (Australia); Khu Vu, Pan Ma, Stephen Madden, The Australian National Univ. (Australia); David A. I. Marpaung, Benjamin J. Eggleton, The Univ. of Sydney (Australia)


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Silica glass-based fiberoptic distributed meandering waveguides for integrated photonics

Paper 10683-8

Time: 4:20 PM - 4:35 PM

Author(s): Muhammad Zakwan, Koç Univ. (Turkey), Air Univ. (Pakistan); Ceren B. Dag, Univ. of Michigan (United States); Ali Serpengüzel, Koç Univ. (Turkey)


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Large (GeTe):(Sb₂Te₃) ratio phase change memory thin films

Paper 10683-9

Time: 4:35 PM - 4:50 PM

Author(s): Marek Bouska, Univ. Pardubice (Czech Republic); Stanislav Pechev, Quentin Simon, Institut de Chimie de la Matière Condensée de Bordeaux (France); Virginie Nazabal, Univ. de Rennes 1 (France); Jan Gutwirth, Petr Nemeč, Univ. Pardubice (Czech Republic)


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Temperature dependence of spectral characteristics of distributed feedback resonators

Paper 10683-10

Time: 4:50 PM - 5:05 PM

Author(s): Cristine C. Kores, Nur Ismail, Dimitri Gekus, KTH Royal Institute of Technology (Sweden); Meindert Dijkstra, Univ. Twente (Netherlands); Edward H. Bernhardt, KTH Royal Institute of Technology (Sweden); Markus Pollnau, Univ. of Surrey (United Kingdom)


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Vacuum-assisted precision molding of 3D thin microstructure glass optics

Paper 10683-11

Time: 5:05 PM - 5:20 PM

Author(s): Anh Tuan Vu, Paul-Alexander Vogel, Olaf Dambon, Fritz Klocke, Fraunhofer-Institut für Produktionstechnologie IPT (Germany)


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Impact of the reverse cross-relaxation process on pumping efficiency in Tm-doped glass lasers materials

Paper 10683-88

Time: 5:20 PM - 5:35 PM

Author(s): Ali Albalawi, Swansea Univ. (United Kingdom); Hrvoje Gebavi, Institut Ruder Bošković (Croatia); Alessandro Chiasera, CNR-Istituto di Fotonica e Nanotecnologie (Italy); Rolindes Balda, Univ. del País Vasco (Spain); Anna Lukowiak, Institute of Low Temperature and Structure Research (Poland); Wedad Albalawi, Swansea Univ. (United Kingdom); Wilfried Blanc, Univ. de Nice Sophia Antipolis (France); Maurizio Ferrari, CNR-Istituto di Fotonica e Nanotecnologie (Italy); Stefano Taccheo, Swansea Univ. (United Kingdom)

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Analysis of disordered nonlinear domain statistics via second harmonic diffraction

Paper 10683-134

Time: 5:35 PM - 5:50 PM

Author(s): Crina Cojocaru, B. Wang, Univ. Politècnica de Catalunya (Spain); Krzysztof Switkowski, Warsaw Univ. of Technology (Poland); Wiesław Z. Krolikowski, The Australian National Univ. (Australia); Michael Scalora, Charles M. Bowden Research Facility, AMRDEC-RDMR-WDS (United States); Jose F. Trull, Univ. Politècnica de Catalunya (Spain)

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MONDAY 23 APRIL

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Hot Topics I

Monday 23 April 2018

9:00 AM - 11:00 AM

Location: Schweitzer Auditorium

Photonics Europe 2018: Hot Topics Session I

From Einstein doubts to quantum bits: a second quantum revolution

Alain Aspect, Lab. Charles Fabry, Institut d'Optique, France

Pico-Photonics: watching and sensing single molecules by confining light to the atom scale

Jeremy J. Baumberg, NanoPhotonics Ctr., Univ. of Cambridge, United Kingdom

For additional details please visit <http://spie.org/x12297.xml>.

Coffee Break 11:00 AM - 11:30 AM

Session 3: Materials and Components I

Monday 23 April 2018

11:30 AM - 12:40 PM

Location: Salon 7


Session Chair: [Francesco Scotognella](#), Politecnico di Milano (Italy)

Glass based microresonators (Invited Paper)

Paper 10683-12

Time: 11:30 AM - 11:55 AM


Author(s): Simone Berneschi, Istituto di Fisica Applicata "Nello Carrara" (Italy); Franco Così, Istituto di Fisica Applicata (Italy); Daniele Farnesi, Gabriele Frigenti, Istituto di Fisica Applicata "Nello Carrara" (Italy); Giancarlo C. Righini, Museo Storico della Fisica e Ctr. Studi e Ricerche "Enrico Fermi" (Italy); Stefano Pelli, Istituto di Fisica Applicata "Nello Carrara" (Italy); Museo Storico della Fisica e Ctr. Studi e Ricerche "Enrico Fermi" (Italy); Silvia Soria, Francesco Baldini, Istituto di Fisica Applicata "Nello Carrara" (Italy); Francesco Prudenzano, Politecnico di Bari (Italy); Gianluca Persichetti, Romeo Bernini, Istituto per il Rilevamento Elettromagnetico dell'Ambiente (Italy); Yannick Dumeige, Patrice Féron, Ecole Nationale Supérieure des Sciences Appliquées et de Technologies (France); Davor Ristić, Mile Ivanda, Institut Ruder Bošković (Croatia); Gualtiero Nunzi Conti, Istituto di Fisica Applicata "Nello Carrara" (Italy); Museo Storico della Fisica e Ctr. Studi e Ricerche "Enrico Fermi" (Italy)

[Add To My Schedule](#) **Lasing properties of Er³⁺ activated SiO₂-HfO₂ coated microspheres**

Paper 10683-13

Time: 11:55 AM - 12:10 PM


Author(s): Davor Ristić, Institut Ruder Boškovic (Croatia); Andrea Chiappini, Maurizio Mazzola, CNR-Istituto di Fotonica e Nanotecnologie (Italy); Patrice Feron, Ecole Nationale Supérieure des Sciences Appliquées et de Technologie (France); Hrvoje Gebavi, Daniil Zhivotkov, Mile Ivanda, Maurizio Ferrari, Institut Ruder Boškovic (Croatia)

[Add To My Schedule](#) **Relative intensity noise in Er:ZBLALIP whispering gallery mode laser: theory and experiments (Conference Presentation)**

Paper 10683-14

Time: 12:10 PM - 12:25 PM


Author(s): Patrice Féron, Jean-Baptiste Ceppe, Ecole Nationale Supérieure des Sciences Appliquées et de Technologie (France); Michel Mortier, Ctr. National de la Recherche Scientifique (France); Yannick Dumeige, Ecole Nationale Supérieure des Sciences Appliquées et de Technologie (France)

[Add To My Schedule](#) **LiNbO₃ integrated microdisk resonator fabricated by optical grade dicing and precise robotic positioning**

Paper 10683-15

Time: 12:25 PM - 12:40 PM

Author(s): Alexis Caspar, Clément Eustache, Florent Behague, Miguel Suárez, Roland Salut, Olivier Lehman, Venancio Calero, FEMTO-ST (France); Bruno Robert, SATT GRAND EST (France); Cédric Clévy, Philippe Lutz, Maria-Pilar Bernal, Nadège Courjal, FEMTO-ST (France)

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Lunch Break 12:40 PM - 1:50 PM

**Session 4:
Fibers and Waveguide Sources**

Monday 23 April 2018

1:50 PM - 3:15 PM

Location: Salon 7

Session Chair: [Angela B. Seddon](#), The Univ. of Nottingham (United Kingdom)

Functionalised optical fibres: exploring embedded semiconductors, metals and electrodes (Invited Paper)

Paper 10683-16

Time: 1:50 PM - 2:15 PM


Author(s): Pier J. Sazio, Francesco De Lucia, Univ. of Southampton (United Kingdom); Costantino Corbari, Renishaw plc (United Kingdom); John Badding, Derek W. Keefer, The Pennsylvania State Univ. (United States); Muhammad Imran Mustafa Abdul Khudus, Univ. of Malaya (Malaysia); Yun Wang, Gilberto Brambilla, Univ. of Southampton (United Kingdom)

[Add To My Schedule](#) **Pr³⁺:Yb:ZBLAN glasses for applications in fiber lasers operating in VIS**

Paper 10683-17

Time: 2:15 PM - 2:30 PM


Author(s): Urszula Zdulska, Anna Jusza, Krzysztof Anders, Ryszard Piramidowicz, Warsaw Univ. of Technology (Poland)

[Add To My Schedule](#) **Global optimization via evolutionary approach of a Dy³⁺:ZBLAN fiber amplifier for MID-IR applications**

Paper 10683-18

Time: 2:30 PM - 2:45 PM


Author(s): Mario Falconi, Dario Laneve, Caterina Clemente, Dean Gurban, Politecnico di Bari (Italy); Toney Teddy Fernandez, Gianluca Galzerano, Politecnico di Milano (Italy); Francesco Prudeniano, Politecnico di Bari (Italy)

[Add To My Schedule](#) **Luminescent sol-gel-derived micro and nanoparticles**

Paper 10683-19

Time: 2:45 PM - 3:00 PM


Author(s): Anna Lukowiak, Yuriy Gerasymchuk, Wieslaw Strek, Institute of Low Temperature and Structure Research (Poland); Beata Borak, Wroclaw Univ. of Science and Technology (Poland); Andrea Chiappini, Fondazione Bruno Kessler (Italy), CNR-Istituto di Fotonica e Nanotecnologie (Italy); Alessandro Chiasera, CNR-Istituto di Fotonica e Nanotecnologie (Italy), Fondazione Bruno Kessler (Italy); Christina Armellini, CNR-Istituto di Fotonica e Nanotecnologie (Italy); Maurizio Ferrari, CNR-Istituto di Fotonica e Nanotecnologie (Italy), Fondazione Bruno Kessler (Italy), Museo Storico della Fisica e Ctr. Studi e Ricerche "Enrico Fermi" (Italy); Stefano Taccheo, Swansea Univ. (United Kingdom)

[Add To My Schedule](#) **Study of spectral variations in generation of random fiber laser based on set of fiber Bragg gratings**

Paper 10683-20

Time: 3:00 PM - 3:15 PM

Author(s): Elena Chaikina, Ctr. de Investigación Científica y de Educación Superior de Ensenada B.C. (Mexico); Ilya D. Vatnik, Institute of Automation and Electrometry of the Siberian Branch of RAS (Russian Federation), Novosibirsk State Univ. (Russian Federation); Dmitry V. Churkin, Novosibirsk State Univ. (Russian Federation)

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Coffee Break 3:15 PM - 3:45 PM

Session 5: Materials and Components II

Monday 23 April 2018

3:45 PM - 5:35 PM

Location: Salon 7


Session Chair: [Akira Shirakawa](#), The Univ. of Electro-Communications (Japan)

Structural color tuning in 1D photonic crystals with electric field and magnetic field *(Invited Paper)*

Paper 10683-21

Time: 3:45 PM - 4:10 PM

Author(s): Eduardo Aluicio-Sarduy, Istituto Italiano di Tecnologia (Italy); Simone Callegari, Politecnico di Milano (Italy); Diana Gisell Figueroa del Valle, Andrea Desii, Ilka Kriegel, Istituto Italiano di Tecnologia (Italy); Francesco Scotognella, Politecnico di Milano (Italy)


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Supersensitive luminescence thermometric binary films and coatings based on the emissions of rare earth and transition metal ions *(Conference Presentation)* *(Invited Paper)*

Paper 10683-22

Time: 4:10 PM - 4:35 PM

Author(s): Milica Sekulic, Sanja Kuzman, Vesna Djordjevic, Mina Medic, Miroslav Dramićanin, Univ. of Belgrade (Serbia)


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Fabrication by rf-sputtering and assessment of dielectric Er³⁺ doped monolithic 1-D microcavity for coherent emission at 1.5 μm

Paper 10683-23

Time: 4:35 PM - 4:50 PM

Author(s): Alessandro Chiasera, CNR-Istituto di Fotonica e Nanotecnologie (Italy), Fondazione Bruno Kessler (Italy); Francesco Scotognella, Politecnico di Milano (Italy), Istituto Italiano di Tecnologia (Italy); Yann G. Boucher, Ecole Nationale Supérieure des Sciences Appliquées et de Technologie (France); Anna Lukowiak, Institute of Low Temperature and Structure Research (Poland); Davor Ristić, Institut Ruder Boškovic (Croatia); Giorgio Speranza, Fondazione Bruno Kessler (Italy); Cesare Meroni, Univ. degli Studi di Trento (Italy); Stefano Varas, CNR-Istituto di Fotonica e Nanotecnologie (Italy); Lidia Zur, Museo Storico della Fisica e Ctr. Studi e Ricerche "Enrico Fermi" (Italy), Fondazione Bruno Kessler (Italy); Mile Ivanda, Institut Ruder Boškovic (Croatia); Stefano Taccheo, Swansea Univ. (United Kingdom); Roberta Ramponi, CNR-Istituto di Fotonica e Nanotecnologie (Italy), Politecnico di Milano (Italy); Giancarlo C. Righini, Museo Storico della Fisica e Ctr. Studi e Ricerche "Enrico Fermi" (Italy); Maurizio Ferrari, CNR-Istituto di Fotonica e Nanotecnologie (Italy), Museo Storico della Fisica e Ctr. Studi e Ricerche "Enrico Fermi" (Italy)


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Fabrication of ring-core waveguide in aluminosilicate glass by metal particle manipulation due to CW-laser irradiation

Paper 10683-24

Time: 4:50 PM - 5:05 PM

Author(s): Tetsuo Kishi, Yukihiko Yoshida, Tokyo Institute of Technology (Japan); Hirofumi Hidai, Chiba Univ. (Japan); Fumiya Noritake, Univ. of Yamanashi (Japan); Nobuhiro Matsushita, Tetsuji Yano, Tokyo Institute of Technology (Japan)


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Bi-functional Bi₂ZnO₆ single crystals doped with Nd³⁺ or Pr³⁺: luminescence and μ-Raman investigations

Paper 10683-25

Time: 5:05 PM - 5:20 PM

Author(s): Dobrosława Kasprowicz, Poznan Univ. of Technology (Poland); K. Jaroszewski, Poznan Univ. of Technology (Poland); P. Gluchowski, Institute of Low Temperature and Structure Research (Poland); A. Majchrowski, M. Chrunik, E. Michalski, Military Univ. of Technology (Poland)


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Investigation of the role of Ag multimers as broadband sensitizers in Tb³⁺/Yb³⁺ doped glasses and glass ceramics

Paper 10683-26

Time: 5:20 PM - 5:35 PM

Author(s): Francesco Enrichi, Luleå Univ. of Technology (Sweden), Museo Storico della Fisica e Ctr. Studi e Ricerche "Enrico Fermi" (Italy); Elti Cattaruzza, Università Ca' Foscari Venezia (Italy); Maurizio Ferrari, IFN-CNR CSMFO Lab. and FBK Photonics Unit (Italy), Museo Storico della Fisica e Ctr. Studi e Ricerche "Enrico Fermi" (Italy); Francesco Gonella, Università Ca' Foscari Venezia (Italy), Museo Storico della Fisica e Ctr. Studi e Ricerche "Enrico Fermi" (Italy); Alessandro Martucci, Università degli Studi di Padova (Italy); Riccardo Ottini, Pietro Riello, Università Ca' Foscari Venezia (Italy); Giancarlo C. Righini, Museo Storico della Fisica e Ctr. Studi e Ricerche "Enrico Fermi" (Italy), Istituto di Fisica Applicata Nello Carrara, CNR-IFAC (Italy); Enrico Trave, Università Ca' Foscari Venezia (Italy); Alberto Vomiero, Luleå Univ. of Technology (Sweden); Lidia Zur, Museo Storico della Fisica e Ctr. Studi e Ricerche "Enrico Fermi" (Italy), IFN-CNR CSMFO Lab. and FBK Photonics Unit (Italy)

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Session PSMon: Posters-Monday

Monday 23 April 2018

5:30 PM - 7:00 PM

Location: Hall Rhin

Conference attendees are invited to attend the Photonics Europe poster session on Monday 17.30 to 19.00. Posters will be on display after 10.00 Monday morning in the Hall Rhin. Come view the posters, enjoy light refreshments, ask questions, and network with colleagues in your field. Authors of poster papers


will be present to answer questions concerning their papers. Attendees are required to wear their conference registration badges to the poster sessions. Poster authors, view poster presentation guidelines and set-up instructions at <http://spie.org/x34963.xml>.

Characteristics of oxide multilayers (IGZO/Al/IGZO) with different zinc ratio for low emissive glass coating

Paper 10683-87

Time: 5:30 PM - 7:00 PM

Author(s): Chang Liu, Yi Zhao, Hongbo Wang, Houyun Qin, Ying Sun, Jilin Univ (China)

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Influence of Kerr nonlinearity on PT-transition in coupled fibre lasers

Paper 10683-89

Time: 5:30 PM - 7:00 PM

Author(s): Sergey V. Smirnov, Maxim O. Makarenko, Novosibirsk State Univ. (Russian Federation); Andrey A. Sukhorukov, Novosibirsk State Univ. (Russian Federation), The Australian National Univ. (Australia); Ilya D. Vatnik, Dmitry V. Churkin, Novosibirsk State Univ. (Russian Federation)


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Optical characterization of photopolymer material using $\lambda=532\text{nm}$ and investigation into future use at $\lambda=850\text{nm}$ and $\lambda=1300\text{nm}$

Paper 10683-90

Time: 5:30 PM - 7:00 PM

Author(s): Derek Cassidy, Ra'ed Malallah, Min Wan, John J. Healy, John T. Sheridan, Univ. College Dublin (Ireland)


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Influence of interionic energy transfer mechanisms in Tm,Ho:YAG on the maximum extractable energy in regenerative amplifiers

Paper 10683-91

Time: 5:30 PM - 7:00 PM

Author(s): Ramon Springer, Friedrich-Alexander-Univ. Erlangen-Nürnberg (Germany); Tyndale Hannan, Massachusetts Institute of Technology (MIT) (United States); Christoph Pflaum, Friedrich-Alexander-Univ. Erlangen-Nürnberg (Germany)


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Silica- and germanate-based rare earth doped glasses for fiber lasers

Paper 10683-92

Time: 5:30 PM - 7:00 PM

Author(s): Michal Kamrádek, Ivan Kašík, Pavel Peterka, Jan Aubrecht, Ondřej Podrazký, Pavel Honzátko, Jan Mrázek, Institute of Photonics and Electronics of the ASCR, v.v.i. (Czech Republic); Václav Kubeček, Czech Technical Univ. in Prague (Czech Republic)


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One-dimensional disordered photonic structures with two or more materials

Paper 10683-93

Time: 5:30 PM - 7:00 PM

Author(s): Alessandro Chiasera, CNR-Istituto di Fotonica e Nanotecnologie (Italy); Luigino Criante, Istituto Italiano di Tecnologia (Italy); Stefano Varas, CNR-Istituto di Fotonica e Nanotecnologie (Italy); Giuseppe Della Valle, Politecnico di Milano (Italy); Roberta Ramponi, Maurizio Ferrari, Lidia Zur, CNR-Istituto di Fotonica e Nanotecnologie (Italy); Anna Lukowiak, Institute of Low Temperature and Structure Research (Poland); Ilka Kriegel, Istituto Italiano di Tecnologia (Italy); Michele Bellingeri, Davide Cassi, Univ. degli Studi di Parma (Italy); Francesco Scotognella, Politecnico di Milano (Italy)


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Near-infrared emission in barium gallo-germanate glasses co-doped with Ce^{3+} and Pr^{3+} for broadband optical amplifiers

Paper 10683-94

Time: 5:30 PM - 7:00 PM

Author(s): Marta Soltys, Agata Górný, Univ. of Silesia (Poland); Lidia Zur, Museo Storico della Fisica e Ctr. Studi e Ricerche "Enrico Fermi" (Italy), Fondazione Bruno Kessler (Italy); Maurizio Ferrari, Fondazione Bruno Kessler (Italy), Museo Storico della Fisica e Ctr. Studi e Ricerche "Enrico Fermi" (Italy); Giancarlo C. Righini, Museo Storico della Fisica e Ctr. Studi e Ricerche "Enrico Fermi" (Italy), Istituto di Fisica Applicata "Nello Carrara" (Italy); Dominik Dorosz, AGH Univ. of Science and Technology (Poland); Wojciech A. Pisarski, Joanna Pisarska, Univ. of Silesia (Poland)


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Dynamic mode analysis with arbitrary rate equations

Paper 10683-95

Time: 5:30 PM - 7:00 PM

Author(s): Christoph Pflaum, Erlangen Graduate School in Advanced Optical Technologies (Germany); Ramon Springer, Friedrich-Alexander-Univ. Erlangen-Nürnberg (Germany)


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Glass photonic structures fabricated by sol-gel route

Paper 10683-96

Time: 5:30 PM - 7:00 PM

Author(s): Robert Tomala, Anna Lukowiak, Institute of Low Temperature and Structure Research (Poland); Beata Borak, Wroclaw Univ. of Science and Technology (Poland); Andrea Chiappini, CNR-Istituto di Fotonica e Nanotecnologie (Italy), Fondazione Bruno Kessler (Italy); Wilfried Blanc, Univ. Côte d'Azur (France); Maurizio Ferrari, CNR-Istituto di Fotonica e Nanotecnologie (Italy), Museo Storico della Fisica e Ctr. Studi e Ricerche "Enrico Fermi" (Italy), Fondazione Bruno Kessler (Italy); Adel Bouajaj, Univ. Abdelmalek Essaadi (Morocco); Davor Ristić, Institut Ruder Bošković (Croatia); Stefano Taccheo, Swansea Univ. (United Kingdom); Wiesław Strek, Polish Academy of Sciences (Poland)


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Development of thulium-doped fibre amplifiers for the $2\mu\text{m}$ waveband

Paper 10683-97

Time: 5:30 PM - 7:00 PM

Author(s): Eoin Russell, Niamh Kavanagh, Kevin Shortiss, Fatima Gunning, Tyndall National Institute (Ireland)

[Add To My Schedule](#) **Dynamics and trajectories of multiwavelengths solitons in a Tm-doped fiber laser**

Paper 10683-98

Time: 5:30 PM - 7:00 PM


Author(s): Said Hamdi, Aurélien Coillet, Philippe Grelu, Lab. Interdisciplinaire Carnot de Bourgogne (France)

[Add To My Schedule](#) **Modeling with the progressive wave model passively Q-switched and gain-switched dual-cavity fiber laser doped Yb:Yb**

Paper 10683-99

Time: 5:30 PM - 7:00 PM


Author(s): Djillali Djellout, Hocine Djellout, Zaina Sidi Ahmed, Ouiza Arar, Univ. Mouloud Mammeri de Tizi-Ouzou (Algeria); Pierre Pfeiffer, Télécom Physique Strasbourg, Univ. de Strasbourg (France), ICube, Univ. de Strasbourg (France); Rabah Mokdad, Univ. Mouloud Mammeri de Tizi-Ouzou (Algeria)

[Add To My Schedule](#) **Exploiting silicon oxycarbides for integrated photonic applications**

Paper 10683-100

Time: 5:30 PM - 7:00 PM


Author(s): Faisal Ahmed Memon, Politecnico di Milano (Italy), Mehran Univ. of Engineering & Technology (Pakistan); Francesco Morichetti, Andrea Melloni, Politecnico di Milano (Italy)

[Add To My Schedule](#) **Fabrication of microstructures by rear-side picosecond laser irradiation of two-layer PMMA**

Paper 10683-101

Time: 5:30 PM - 7:00 PM


Author(s): Jiang Li, Wenjun Wang, Xuesong Mei, Aifei Pan, Xi'an Jiaotong Univ. (China)

[Add To My Schedule](#) **Pump wavelength dependence of ASE and SBS in Er:Yb co-doped fiber amplifiers**

Paper 10683-102

Time: 5:30 PM - 7:00 PM


Author(s): Phillip Booker, Fabian Kranert, Michael Steinke, Jörg Neumann, Dietmar Kracht, Laser Zentrum Hannover e.V. (Germany)

[Add To My Schedule](#) **Molecular dynamics study of rare-earth doped Mg-silicate nanoparticles in vitreous silica: from the preform to the fiber**

Paper 10683-103

Time: 5:30 PM - 7:00 PM


Author(s): Jérémy Turlier, Stéphane Chaussedent, Xavier Bidault, Natalie Gaumer, Dominique Guichaoua, Patrice Raso, Univ. d'Angers (France); Hussein Fneich, Ahmad Mehdi, Université de Montpellier, Institut Charles Gerhardt (France); Daniel Neuville, Géomatériaux, CNRS-IPGP (France); Manuel Vermillac, Université Côte d'Azur, INPHYNI (France); Wilfried Blanc, Univ. de Nice Sophia Antipolis (France)

[Add To My Schedule](#) **Energy transfer and multicolor emission in germanate glasses containing Ce³⁺ and Pr³⁺ for white light-emitting diodes**

Paper 10683-104

Time: 5:30 PM - 7:00 PM


Author(s): Agata Górny, Marta Soltys, Univ. of Silesia (Poland); Lidia Zur, Museo Storico della Fisica e Ctr. Studi e Ricerche "Enrico Fermi" (Italy), Fondazione Bruno Kessler (Italy), CNR-Istituto di Fotonica e Nanotecnologie (Italy); Maurizio Ferrari, CNR-Istituto di Fotonica e Nanotecnologie (Italy), Museo Storico della Fisica e Ctr. Studi e Ricerche "Enrico Fermi" (Italy), Fondazione Bruno Kessler (Italy); Giancarlo C. Righini, Museo Storico della Fisica e Ctr. Studi e Ricerche "Enrico Fermi" (Italy), Istituto di Fisica Applicata "Nello Carrara" (Italy); Wojciech A. Pisarski, Joanna Pisarska, Univ. of Silesia (Poland)

[Add To My Schedule](#) **Producing high quality chalcogenide spherical microresonators and investigating their nonlinear properties**

Paper 10683-105

Time: 5:30 PM - 7:00 PM


Author(s): Daniil Zhivotkov, Davor Ristić, Mile Ivanda, Institut Ruder Bošković (Croatia); Elena Romanova, Saratov State Univ. (Russian Federation); Vladimir Shiryaev, G. G. Devyatkh Institute of Chemistry of High-Purity Substances of the Russian Academy of Sciences (Russian Federation); Silvia Soria, Gualtiero Nunzi Conti, Istituto di Fisica Applicata "Nello Carrara" (Italy)

[Add To My Schedule](#) **Photonic jet submicron laser ablation: from fiber core diameter to working distance and required energies**

Paper 10683-107

Time: 5:30 PM - 7:00 PM


Author(s): Sylvain Lecler, Robin Pierron, Julien Zeligowski, Pierre Pfeiffer, ICube (France)

[Add To My Schedule](#) **Effect of gamma irradiation over erbium-doped fibers into a fiber ring laser configuration**

Paper 10683-108

Time: 5:30 PM - 7:00 PM


Author(s): Andrei Stăncălie, Dan Sporea, National Institute for Laser, Plasma and Radiation Physics (Romania); Rosa Ana Pérez Herrera, Manuel Lopez-Amo, David Erro, Univ. Pública de Navarra (Spain); Daniel Neguț, Horia Hulubei National Institute of Physics and Nuclear Engineering (Romania)

[Add To My Schedule](#) **Span optimization for transmission based on ultralong Raman fiber laser amplifier**

Paper 10683-109

Time: 5:30 PM - 7:00 PM

Author(s): Giuseppe Rizzelli Martella, Consejo Superior de Investigaciones Científicas (Spain); Pawel Rosa, National Institute of Telecommunications (Poland); Pedro Corredera, Juan Diego Ania-Castañón, Consejo Superior de Investigaciones Científicas (Spain)


[Add To My Schedule](#) 

Functional oxide waveguides for linear and nonlinear optics

Paper 10683-110

Time: 5:30 PM - 7:00 PM

Author(s): Guillaume Marcaud, Institut d'Electronique du Sud (France); Samuel Serna, Sylvia Matzen, Carlos Alonso-Ramos, Xavier Le Roux, Mathias Berciano, Valérie Pillard, Pedro Damas, Thomas Maroutian, Guillaume Agnus, Ludovic Largeau, Eric Cassan, Delphine Marris-Morini, Philippe Lecoeur, Ctr. de Nanosciences et de Nanotechnologies (France)


[Add To My Schedule](#) 

Transverse mode selection in diode-pumped multimode fiber Raman lasers

Paper 10683-111

Time: 5:30 PM - 7:00 PM

Author(s): Ekaterina A. Zlobina, Sergey I. Kablukov, Alexey A. Wolf, Ilya N. Nemov, Alexandr V. Dostovalov, Sergey A. Babin, Institute of Automation and Electrometry of the Siberian Branch of RAS (Russian Federation)


[Add To My Schedule](#) 

Revealing spectral cross-correlations in radiation of multiwavelength fiber laser with randomly distributed feedback

Paper 10683-112

Time: 5:30 PM - 7:00 PM

Author(s): Ilya D. Vatrik, Oleg Gorbunov, Institute of Automation and Electrometry of the Siberian Branch of RAS (Russian Federation); Srikanth Sugavanam, Aston Univ. (United Kingdom); Dmitry V. Churkin, Novosibirsk State Univ. (Russian Federation)


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Modelling of standard and specialty fibre-based systems using finite element methods

Paper 10683-113

Time: 5:30 PM - 7:00 PM

Author(s): Natascia Castagna, Jacques Morel, Federal Office of Metrology METAS (Switzerland); Luc Testa, Ecole Polytechnique Fédérale de Lausanne (Switzerland); Sven Burger, JCMwave GmbH (Germany)


[Add To My Schedule](#) 

Development of a comprehensive 3D model for transversal mode instability investigations

Paper 10683-114

Time: 5:30 PM - 7:00 PM

Author(s): Sergii O. Iakushev, Michael Steinke, Dietmar Kracht, Jörg Neumann, Peter Wessels, Laser Zentrum Hannover e.V. (Germany)


[Add To My Schedule](#) 

High-power picosecond fiber-based laser operating at 515 nm

Paper 10683-115

Time: 5:30 PM - 7:00 PM

Author(s): Jean-Bernard Lecourt, Sébastien Guillemet, Julien Dupuy, Alexandre Gognau, Yves Hernandez, Multitel A.S.B.L. (Belgium)


[Add To My Schedule](#) 

Pump modulated suppression of self pulsing in a pulsed fibre amplifier

Paper 10683-116

Time: 5:30 PM - 7:00 PM

Author(s): Ikram Khan, Balaji Srinivasan, Anil Prabhakar, Indian Institute of Technology Madras (India)


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Benefits of visible light communication in car-to-car communication

Paper 10683-117

Time: 5:30 PM - 7:00 PM

Author(s): Pasha Bekhrad, Erich Leitgeb, Hristo Ivanov, Technische Univ. Graz (Austria)

[Add To My Schedule](#) 

Femtosecond laser-induced CNT heterojunction as visible light photodetector

Paper 10683-118

Time: 5:30 PM - 7:00 PM

Author(s): Aleksei Emelianov, Ivan Bobrinetskiy, National Research Univ. of Electronic Technology (Russian Federation); Nerea Otero, Pablo Romero, Laser Applications Centre, AIMEN (Spain)


[Add To My Schedule](#) 

Optimization of upconversion excitation conditions in Er³⁺Yb doped ZBLAN glasses for application in fiber lasers and amplifiers

Paper 10683-119

Time: 5:30 PM - 7:00 PM

Author(s): Krzysztof Anders, Pawel Komorowski, Urszula Zdulska, Anna Jusza, Ryszard Piramidowicz, Warsaw Univ. of Technology (Poland)

[Add To My Schedule](#) 


Alpha particle irradiation on various properties of Er³⁺, Yb³⁺ doped phosphate glasses

Paper 10683-120

Time: 5:30 PM - 7:00 PM

Author(s): Rajannya Sen, Tampere Univ. of Technology (Finland); Ofelia Mureşan, National Institute of Physics and Nuclear Engineering (Romania); Nadia G.

Boetti, Istituto Superiore Mario Boella (Italy); Dan Sporea, Laura Mihai, National Institute for Laser, Plasma and Radiation Physics (Romania); Ion Rusen, National Institute of Physics and Nuclear Engineering (Romania); Laetitia Petit, Tampere Univ. of Technology (Finland)


[Add To My Schedule](#) 

Upconversion in low rare earth concentrated phosphate glasses prepared using direct doping method

Paper 10683-121

Time: 5:30 PM - 7:00 PM

Author(s): Nirajan Ojha, Tampere Univ. of Technology (Finland); Minnea Tuomisto, Univ. of Turku (Finland); Turkka Salminen, Tampere Univ. of Technology (Finland); Mika Lastusaari, Univ. of Turku (Finland); Laetitia Petit, Tampere Univ. of Technology (Finland)


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Raman-based cw supercontinuum generation in a fiber ring laser with low-output coupling

Paper 10683-122

Time: 5:30 PM - 7:00 PM

Author(s): Muhammad Assad Arshad, Leibniz-Institut für Photonische Technologien e.V. (Germany), Friedrich-Schiller-Univ. Jena (Germany); Alexander Hartung, Leibniz-Institut für Photonische Technologien e.V. (Germany); Mikael Leduc, Nicolas Godbout, Ecole Polytechnique de Montréal (Canada); Hartmut Bartelt, Matthias Jäger, Leibniz-Institut für Photonische Technologien e.V. (Germany)


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Multicolor emission in silica sol-gel materials co-doped with Tb³⁺ and Eu³⁺ for near-UV photonic devices

Paper 10683-123

Time: 5:30 PM - 7:00 PM

Author(s): Natalia Pawlik, Barbara Szpikowska-Sroka, Maria Bańczyk, Wojciech A. Pisarski, Univ. of Silesia (Poland)


[Add To My Schedule](#) 

Energy conversion from 3.3 μm to 660 nm in rare earth-doped materials for all optical gas sensing

Paper 10683-124

Time: 5:30 PM - 7:00 PM

Author(s): Imen Haffienne, Ctr. de Recherche sur les Ions, les Matériaux et la Photonique (France); F. Starecki, Lab. CIMAP, CNRS, CEA, ENSI-Caen, Univ. de Caen (France); G. Louvet, Institut des Sciences Chimiques de Rennes, CNRS, Univ. de Rennes 1 (France); Alain Braud, Ctr. de Recherche sur les Ions, les Matériaux et la Photonique (France); J.-L. Doualan, Lab. CIMAP, CNRS, CEA, ENSI-Caen, Univ. de Caen (France); V. Nazabal, Institut des Sciences Chimiques de Rennes, CNRS, Univ. de Rennes 1 (France); P. Camy, Lab. CIMAP, CNRS, CEA, ENSI-Caen, Univ. de Caen (France)


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Integrated photonic devices with silicon oxycarbide

Paper 10683-125

Time: 5:30 PM - 7:00 PM

Author(s): Faisal Ahmed Memon, Francesco Morichetti, Andrea Melloni, Politecnico di Milano (Italy)

[Add To My Schedule](#) 

Structure and optical properties of PECVD-prepared As-Se-Te chalcogenide films designed for the IR optical applications

Paper 10683-127

Time: 5:30 PM - 7:00 PM

Author(s): Aleksey Nezhdanov, Leonid Mochalov, Dmitry Usanov, Mikhail Kudryashov, Alexandr Logunov, N.I. Lobachevsky State Univ. of Nizhni Novgorod (Russian Federation); Andrey Stepanov, Aleksey Murzanev, Alexey Korytin, Alexander Romashkin, Institute of Applied Physics of the Russian Academy of Sciences (Russian Federation); Dominik Dorosz, AGH Univ. of Science and Technology (Poland); Aleksandr Mashin, N.I. Lobachevsky State Univ. of Nizhni Novgorod (Russian Federation)


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Mode analysis in phase-locked multicore fiber laser by interference method

Paper 10683-129

Time: 5:30 PM - 7:00 PM

Author(s): Akira Shirakawa, Yuta Kurosu, Henrik Tünnermann, The Univ. of Electro-Communications (Japan)


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Effect of ZnO-HfO₂ hybrid nanocrystals on amplified spontaneous emission in Eu-doped ternary glass-ceramic waveguides

Paper 10683-130

Time: 5:30 PM - 7:00 PM

Author(s): Subhabrata Ghosh, Shivakiran N. B. Bhaktha, Indian Institute of Technology Kharagpur (India)

[Add To My Schedule](#) 

Design and research of bidirectional surface acoustic wave delay line fabricated using laser ablation method

Paper 10683-131

Time: 5:30 PM - 7:00 PM

Author(s): Dmitry Lukyanov, Alexander Kukaev, Daniil Safronov, Saint Petersburg Electrotechnical Univ (Russian Federation); Galina Yakubovskaya, Saint Petersburg Electrotechnical Univ "LETI" (Russian Federation)


[Add To My Schedule](#) 

Solid-state laser medium temperature distribution control under lasing condition

Paper 10683-132

Time: 5:30 PM - 7:00 PM

Author(s): Andrei Korolkov, Moscow Institute of Physics and Technology (Russian Federation), Kotelnikov Institute of Radio-engineering and Electronics (Russian Federation); Dmitrii Belogolovskii, Moscow Institute of Physics and Technology (Russian Federation); Alexei Konyashkin, Oleg Ryabushkin, Moscow Institute of Physics and Technology (Russian Federation), Kotelnikov Institute of Radio-engineering and Electronics (Russian Federation)

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TUESDAY 24 APRIL[Show All Abstracts](#)

Session 6: Applications and Metrology

Tuesday 24 April 2018

8:30 AM - 10:35 AM


Location: Salon 7

Session Chair: [Amol Choudhary](#), The Univ. of Sydney (Australia)**Fiber frequency combs for remote sensing (Invited Paper)**

Paper 10683-27

Time: 8:30 AM - 8:55 AM

Author(s): Ian Coddington, National Institute of Standards and Technology (United States); Caroline Alden, Univ. of Colorado Boulder (United States); Esther Baumann, National Institute of Standards and Technology (United States); Sean Coburn, Univ. of Colorado Boulder (United States); Kevin Cossel, Fabrizio Giorgetta, Daniel Herman, Prasad Kuldeep, Nathan Newbury, National Institute of Standards and Technology (United States); Greg Rieker, Univ. of Colorado Boulder (United States); Eleanor Waxman, National Institute of Standards and Technology (United States); Robert Wright, Univ. of Colorado Boulder (United States); Gabe Ycas, National Institute of Standards and Technology (United States)

[Add To My Schedule](#) **Nanocarbon integrated compact ultrafast solid state lasers (Invited Paper)**

Paper 10683-28

Time: 8:55 AM - 9:20 AM


Author(s): Fabian Rotermund, KAIST (Korea, Republic of)

[Add To My Schedule](#) **Towards high-power on-chip GHz frequency combs**

Paper 10683-29

Time: 9:20 AM - 9:35 AM

Author(s): Amol Choudhary, The Univ. of Sydney (Australia); Alexander A. Lagatsky, Fraunhofer Ctr. for Applied Photonics (United Kingdom); Pradeesh Kannan, Government Victoria College, Palakkad (India); Christian T. A. Brown, Univ. of St. Andrews (United Kingdom); David P. Shepherd, Optoelectronics Research Ctr., Univ. of Southampton (United Kingdom)

[Add To My Schedule](#) **Characterisation metrology for THz communications devices (Conference Presentation)**

Paper 10683-30

Time: 9:35 AM - 9:50 AM


Author(s): Mira Naftaly, National Physical Lab. (United Kingdom)

[Add To My Schedule](#) **Subwavelength engineered ultrabroadband mode multiplexer (Conference Presentation)**

Paper 10683-31

Time: 9:50 AM - 10:05 AM

Author(s): David González-Andrade, Instituto de Óptica "Daza de Valdés" (Spain); Juan Gonzalo Wangüemert-Pérez, Univ. de Málaga (Spain); Aitor V. Velasco, Consejo Superior de Investigaciones Científicas (Spain); Alejandro Ortega-Moñux, Univ. de Málaga (Spain); Alaine Herrero-Bermello, Instituto de Óptica "Daza de Valdés" (Spain); Robert Halir, Univ. de Málaga (Spain); Pavel Cheben, National Research Council Canada (Canada)

[Add To My Schedule](#) **Carbon nanotube planar absorber cryogenic bolometer as a novel primary absolute standard detector for optical power measurements for fibre optics and photonics (Conference Presentation)**

Paper 10683-32

Time: 10:05 AM - 10:20 AM

Author(s): Marek Šmíd, Geiland Porrovecchio, Czech Metrology Institute (Czech Republic); Malcolm G. White, Nathan A. Tomlin, Igor Vayshenker, Christopher S. Yung, John H. Lehman, National Institute of Standards and Technology (United States)

[Add To My Schedule](#) **High efficiency polarization beam splitter based on anisotropy-engineered MMI (Conference Presentation)**

Paper 10683-33

Time: 10:20 AM - 10:35 AM

Author(s): Alaine Herrero-Bermello, Consejo Superior de Investigaciones Científicas (Spain); José Manuel Luque-González, Univ. de Málaga (Spain); Aitor V. Velasco, Consejo Superior de Investigaciones Científicas (Spain); Alejandro Ortega Moñux, Univ. de Málaga (Spain); Pavel Cheben, National Research Council Canada (Canada); Robert Halir, Univ. de Málaga (Spain)

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Coffee Break 10:35 AM - 11:00 AM

Session 7: Applications and Sources

Tuesday 24 April 2018

11:00 AM - 1:00 PM

Location: Salon 7


Session Chair: [Cosimo D'Andrea](#), Politecnico di Milano (Italy)

Multimodal imaging utilizing novel fiber laser concepts (Invited Paper)

Paper 10683-34

Time: 11:00 AM - 11:25 AM

Author(s): Thomas Gottschall, Friedrich-Schiller-Univ. Jena (Germany); Tobias Meyer, Leibniz-Institut für Photonische Technologien e.V. (Germany); Michael Schmitt, Jens Limpert, Friedrich-Schiller-Univ. Jena (Germany); Andreas Tünnermann, Fraunhofer-Institut für Angewandte Optik und Feinmechanik (Germany); Jürgen Popp, Leibniz-Institut für Photonische Technologien e.V. (Germany)


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Fiber-based front ends for extreme light applications (Invited Paper)

Paper 10683-35

Time: 11:25 AM - 11:50 AM

Author(s): Jonathan Tyler Green, Jack Alexander Naylor, Lukaš Indra, František Batysta, Martin Horáček, Bogusław Tykalewicz, Roman Antipenkov, Jakub Novák, Zbyněk Hubka, Robert Boge, Pavel Bakule, Bedřich Rus, ELI Beamlines (Czech Republic)


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FLIM of a novel intracellular magnesium probe with an excitation source-based supercontinuum laser (Conference Presentation)

Paper 10683-36

Time: 11:50 AM - 12:05 PM

Author(s): Alessia Candeo, Politecnico di Milano (Italy); Azzurra Sargenti, Emil Malucelli, Univ. degli Studi di Bologna (Italy); Cosimo D'Andrea, Politecnico di Milano (Italy); Stefano Iotti, Univ. degli Studi di Bologna (Italy); Paola Taroni, Gianluca Valentini, Politecnico di Milano (Italy)


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High-energy subpicosecond 2 μm fiber laser

Paper 10683-38

Time: 12:20 PM - 12:35 PM

Author(s): Jitka Černohorská, Michael Písařík, HiLASE Ctr. (Czech Republic); Pavel Peterka, Institute of Photonics and Electronics of the ASCR, v.vi. (Czech Republic); Jan Aubrecht, Institute of Photonics and Electronics of the CAS, v.vi. (Czech Republic); Reza Amani, Ondřej Novák, Martin Smrž, HiLASE Ctr. (Czech Republic); Michal Jelínek, Czech Technical Univ. in Prague (Czech Republic); Antonio Lucianetti, Akira Endo, Tomáš Mocek, HiLASE Ctr. (Czech Republic)


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Spectroscopic properties of rare earth doped germanate glasses (Invited Paper)

Paper 10683-133

Time: 12:35 PM - 1:00 PM

Author(s): Renata Jadach, AGH Univ. of Science and Technology (Poland); Jacek Zmojda, Marcin Kochanowicz, Piotr Miluski, Bialystok Univ. of Technology (Poland); Magdalena Lesniak, AGH Univ. of Science and Technology (Poland); Marta Soltys, Joanna Pisarska, Wojciech A. Pisarski, Univ. of Silesia (Poland); Anna Lukowiak, Institute of Low Temperature and Structure Research (Poland); Maciej Sitarz, Dominik Dorosz, AGH Univ. of Science and Technology (Poland); Maurizio Ferrari, CNR-Istituto di Fotonica e Nanotecnologie (Italy); Giancarlo C. Righini, Istituto di Fisica Applicata "Nello Carrara" (Italy)

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Lunch/Exhibition Break 1:00 PM - 2:00 PM

Session 8: Special Session: PHOTIND EMPIR European Project

Tuesday 24 April 2018

2:00 PM - 4:00 PM

Location: Salon 7


Session Chair: [Antti Lassila](#), MIKES Mittatekniikan keskus (Finland)

Single-mode fiber dispersion characterization from ultrabroadband white light spatial-spectral interferogram (Conference Presentation)

Paper 10683-39

Time: 2:00 PM - 2:15 PM

Author(s): Sandhra-Mirella Valdma, Heili Vaitna-Lukner, Univ. of Tartu (Estonia)

[Add To My Schedule](#) 

Online measurement of optical fibre geometry during manufacturing

Paper 10683-40

Time: 2:15 PM - 2:30 PM

Author(s): Maksim Shpak, VTT Technical Research Ctr. of Finland Ltd. (Finland); Sven Burger, JCMwave GmbH (Germany); Ville Byman, VTT Technical Research Ctr. of Finland Ltd. (Finland); Kimmo Saastamoinen, Univ. of Eastern Finland (Finland); Mertsi Haapalainen, Oplatek Group Oy (Finland); Antti Lassila, VTT Technical Research Ctr. of Finland Ltd. (Finland)

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Spectral retrieval techniques for high-resolution Fourier-transform micro-spectrometers

Paper 10683-41

Time: 2:30 PM - 2:45 PM


Author(s): Alaine Herrero-Bermello, Aitor V. Velasco, Consejo Superior de Investigaciones Científicas (Spain); Hugh Podmore, York Univ. (Canada); Pavel Cheben, Jens H. Schmid, Siegfried Janz, National Research Council Canada (Canada); María L. Calvo, Univ. Complutense de Madrid (Spain); Dan-Xia Xu, National Research Council Canada (Canada); Alan Scott, Honeywell Aerospace (Canada); Regina Lee, York Univ. (Canada)

[Add To My Schedule](#) **Characterization of fibers used in high-power amplifiers**

Paper 10683-42

Time: 2:45 PM - 3:00 PM


Author(s): Till Walbaum, Andreas Liem, Franz Beier, Thomas Schreiber, Ramona Eberhardt, Fraunhofer-Institut für Angewandte Optik und Feinmechanik (Germany)

[Add To My Schedule](#) **Traceable instruments for encircled angular flux measurements**

Paper 10683-43

Time: 3:00 PM - 3:15 PM


Author(s): Natascia Castagna, Jacques Morel, Federal Office of Metrology METAS (Switzerland); Edward Robinson, Hui Yang, Arden Photonics Ltd. (United Kingdom)

[Add To My Schedule](#) **Detecting single photon signals with mirror-enhanced grating couplers (Conference Presentation)**

Paper 10683-44

Time: 3:15 PM - 3:30 PM


Author(s): Anna P. Owyang, Westfälische Wilhelms-Univ. Münster (Germany); Pietro E. Lombardi, Univ. degli Studi di Firenze (Italy); Sofia Pazzagli, Istituto Nazionale di Ottica (Italy); Giacomo Mazzamuto, LENS - Lab. Europeo di Spettroscopie Non-Lineari (Italy); Günter Kewes, Oliver Neitzke, Humboldt-Univ. zu Berlin (Germany); Nico Gruhler, Westfälische Wilhelms-Univ. Münster (Germany); Oliver Benson, Humboldt-Univ. zu Berlin (Germany); Wolfram H. P. Pernice, Westfälische Wilhelms-Univ. Münster (Germany); Francesco S. Cataliotti, Costanza Toninelli, LENS - Lab. Europeo di Spettroscopie Non-Lineari (Italy)

[Add To My Schedule](#) **Characterization of fiber connections for high power operation**

Paper 10683-45

Time: 3:30 PM - 3:45 PM

Author(s): Till Walbaum, Johannes Nold, Marco Plötner, Thomas Schreiber, Ramona Eberhardt, Andreas Tünnemann, Fraunhofer-Institut für Angewandte Optik und Feinmechanik (Germany)

[Add To My Schedule](#) **Coffee Break 4:00 PM - 4:30 PM****Hot Topics II**

Tuesday 24 April 2018

4:30 PM - 6:05 PM

Location: Schweitzer Auditorium

Photonics Europe 2018: Hot Topics Session II**Coherent combination of fiber amplified ultrafast laser pulses**

Jens Limpert, Institute of Applied Physics, Friedrich Schiller Univ. Jena, Germany

2D materials and their heterostructures: fundamentals, applications and prototypes

Frank Koppens, ICFO-The Institute of Photonic Sciences, Spain

For additional details, please visit <http://spie.org/x12297.xml>**WEDNESDAY 25 APRIL**[Show All Abstracts](#)**Session 9:
Materials and Components III**

Wednesday 25 April 2018

8:30 AM - 10:25 AM


Location: Salon 7

Session Chair: [Dragana Jovanovic](#), Vinca Institute of Nuclear Sciences (Serbia)**Thalium-doped nanoparticles and their properties in silica-based optical fibers (Invited Paper)**

Paper 10683-47

Time: 8:30 AM - 8:55 AM

Author(s): Manuel Vermillac, J.-F. Lupi, Univ. Côte d'Azur (France); Hussein Fneich, Univ. Montpellier (France); Jérémy Turlier, Univ. d'Angers (France); Martiane Cabié, Aix-Marseille Univ. (France); Courtney Kucera, Clemson Univ. (United States); Daniel Borschneck, Aix-Marseille Univ. (France); François Peters, Univ. Côte d'Azur (France); Stéphane Chaussédent, Univ. d'Angers (France); Philippe Vennéguès, Univ. Côte d'Azur (France); Daniel R. Neuville, Institut de Physique du Globe de Paris (France); Ahmad Mehdi, Univ. Montpellier (France); John M. Ballato, Clemson Univ. (United States); Wilfried Blanc, Univ. Côte d'Azur (France)


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Synthesis, multifunctional properties and applications of bivo4 nanoparticles (Conference Presentation)

Paper 10683-48

Time: 8:55 AM - 9:10 AM


Author(s): Slobodan Dolic, Dragana Jovanovic, Vinca Institute of Nuclear Sciences (Serbia); Lidia Zur, Museo Storico della Fisica e Ctr. Studi e Ricerche "Enrico Fermi" (Italy); Milena Cincović, Vinca Institute of Nuclear Sciences (Serbia); Maurizio Ferrari, CNR-Istituto di Fotonica e Nanotecnologie (Italy), Fondazione Bruno Kessler (Italy); Miroslav Dramićanin, Vinca Institute of Nuclear Sciences (Serbia)

[Add To My Schedule](#) **MWIR emissions from 3.1 to 8 μm of Tb³⁺ doped seleno-telluride fibers (Conference Presentation)**

Paper 10683-50

Time: 9:25 AM - 9:40 AM


Author(s): Nora Abdellaoui, Univ. de Rennes 1 (France); Florent Starecki, Ctr. de Recherche sur les Ions, les Matériaux et la Photonique (France); Catherine Boussard-Plédel, Univ. de Rennes 1 (France); Jean-Louis Doualan, Alain Braud, Ctr. de Recherche sur les Ions, les Matériaux et la Photonique (France); Petr Nemeč, Univ. Pardubice (Czech Republic); Bureau Bruno, Univ. de Rennes 1 (France); Patrice Camy, Ctr. de Recherche sur les Ions, les Matériaux et la Photonique (France); Virginie Nazabal, Univ. de Rennes 1 (France)

[Add To My Schedule](#) **Femtosecond and dual-wavelength mode-locked operation in Nd,Lu:CaF₂**

Paper 10683-51

Time: 9:40 AM - 9:55 AM


Author(s): Rémi Soulard, Simone Normani, Jean-Louis Doualan, Alain Braud, ENSICAEN (France); Diane Stoffel, Sébastien Montant, Jean-Paul Goossens, Commissariat à l'Énergie Atomique (France); Patrice Camy, ENSICAEN (France)

[Add To My Schedule](#) **UV-VIS upconversion emission properties of Tm³⁺+Yb³⁺:ZBLAN glasses (Conference Presentation)**

Paper 10683-52

Time: 9:55 AM - 10:10 AM


Author(s): Anna Jusza, Michal Poplawski, Krzysztof Anders, Ryszard Piramidowicz, Warsaw Univ. of Technology (Poland)

[Add To My Schedule](#) **Development of a reliable fabrication process of evanescent field coupled fused fiber couplers (Conference Presentation)**

Paper 10683-53

Time: 10:10 AM - 10:25 AM

Author(s): Sebastian Böhm, Katharina Hausmann, Mateusz Wyszomolek, Felix Wellmann, Gabriel Pelegrina Bonilla, Laser Zentrum Hannover e.V. (Germany); Sebastian Schlangen, Kort Bremer, Bernhard Roth, Ludger Overmeyer, Hannoversches Zentrum für Optische Technologien (Germany); Michael Steinke, Jörg Neumann, Dietmar Kracht, Laser Zentrum Hannover e.V. (Germany)

[Add To My Schedule](#) 

Coffee Break 10:25 AM - 10:55 AM

**Session 10:
Industrial Session**

Wednesday 25 April 2018

10:55 AM - 12:30 PM

Location: Salon 7


Session Chair: [Stefano Taccheo](#), Swansea Univ. (United Kingdom)

Amplified spontaneous emission (ASE) and laser effect in β-NaYF₄: Ce,Tb nanocrystals (Conference Presentation) (Invited Paper)

Paper 10683-54

Time: 10:55 AM - 11:20 AM


Author(s): Eugen Pavel, Storex Technologies Inc. (Romania)

[Add To My Schedule](#) **Compact fiber-based mid-IR ultrafast lasers and frequency combs (Conference Presentation) (Invited Paper)**

Paper 10683-55

Time: 11:20 AM - 11:45 AM


Author(s): Nikolai Tolstik, Atla Lasers AS (Norway), Norwegian Univ. of Science and Technology (Norway); Evgeni Sorokin, Atla Lasers AS (Norway), Technische Univ. Wien (Austria); Irina T. Sorokina, Atla Lasers AS (Norway), Norwegian Univ. of Science and Technology (Norway)

[Add To My Schedule](#) **High power picosecond MOPA with anisotropic ytterbium-doped tapered double clad fiber**

Paper 10683-56

Time: 11:45 AM - 12:00 PM


Author(s): Andrei Fedotov, Ampliconix Oy (Finland), ITMO Univ. (Russian Federation); Teppo Noronen, Ampliconix Oy (Finland); Joonas Rissanen, Tampere Univ. of Technology (Finland); Regina Gumenyuk, Tampere Univ. of Technology (Finland), Ampliconix Oy (Finland); Andrey Petrov, ITMO Univ. (Russian Federation); Yuri Chamorovskii, Konstantin Golant, Kotelnikov Institute of Radio Engineering and Electronics of Russian Academy of Sciences (Russian Federation); Maxim Odnoblyudov, ITMO Univ. (Russian Federation), Saint-Petersburg State Polytechnical Univ. (Russian Federation); Valery Filippov, Ampliconix Oy (Finland), Saint-Petersburg State Polytechnical Univ. (Russian Federation), ITMO Univ. (Russian Federation)

[Add To My Schedule](#) **All-fiber pulse shaper for adaptive dispersion compensation in industrial lasers**

Paper 10683-57

Time: 12:00 PM - 12:15 PM

Author(s): Alexander Yusim, Dmitry Pestov, Anton Ryabtsev, Anton Drozhzhin, Armen Sevan, IPG Photonics Corp. (United States); Bruce Jenket, IPG Photonics Corp (United States); George Venus, Justin M. Barsalou, Joe Antas, Nikolai Platonov, Igor Samartsev, Valentin Gapontsev, IPG Photonics Corp. (United States)


[Add To My Schedule](#) 

Two photon microscopy with a 1064 nm femtosecond fiber laser

Paper 10683-58

Time: 12:15 PM - 12:30 PM

Author(s): Jean-Bernard Lecourt, Alexandre Gognau, Yves Hernandez, Multitel A.S.B.L. (Belgium)

[Add To My Schedule](#) 

Lunch/Exhibition Break 12:30 PM - 1:40 PM

Session JS: Mode-locked Fibre Lasers: Joint Session between Conferences 10683 and 10684

Wednesday 25 April 2018

1:40 PM - 3:35 PM

Location: Salon 7

Session Chair: Neil G. R. Broderick, The Univ. of Auckland (New Zealand)


Please note the room change

Propagation of infrared ultrashort pulses in the air (Invited Paper)

Paper 10684-40

Time: 1:40 PM - 2:05 PM

Author(s): Thomas J. Karr, Defense Advanced Research Projects Agency (United States); Larry Stotts, Stotts, Inc (United States); Jason D. Schmidt, Jason A. Tellez, Justin D. Mansell, MZA Corp. (United States)


[Add To My Schedule](#) 

High power ultrafast mode-locked ring fibre laser with InN SESAM (Conference Presentation)

Paper 10683-59

Time: 2:05 PM - 2:20 PM

Author(s): Francesca Gallazzi, Instituto de Óptica "Daza de Valdés" (Spain); Marco Jimenez-Rodríguez, Univ. de Alcalá (Spain); Eva Monroy, Univ. Grenoble Alpes (France), CEA Grenoble (France); Pedro Corredera, Instituto de Óptica "Daza de Valdés" (Spain); Miguel González-Herráez, Fernando B. Naranjo, Univ. de Alcalá (Spain); Juan Diego Ania-Castañón, Instituto de Óptica "Daza de Valdés" (Spain)


[Add To My Schedule](#) 

Dissipative soliton resonance in the Er:Yb-doped double-clad fiber laser

Paper 10684-41

Time: 2:20 PM - 2:35 PM

Author(s): Mohamed Salhi, Georges Semaan, Fatma Ben Braham, Meriem Kemel, Alioune Niang, Univ. d'Angers (France); Yichang Meng, Hebei Univ. of Science and Technology (China); Andrey Komarov, Institute of Automation and Electrometry, Russian Academy of Sciences (Russian Federation); Konstantin Komarov, Institute of Automation and Electrometry, Russian Academy of Sciences (Russian Federation); François Sanchez, Univ. d'Angers (France)


[Add To My Schedule](#) 

Ytterbium-doped mode-locked fibre laser with three gain media for micromachining (Conference Presentation)

Paper 10683-60

Time: 2:35 PM - 2:50 PM

Author(s): Neil G. R. Broderick, Stanley Tang, Richard Provo, Miro Erkintalo, Claude Ageuray, The Univ. of Auckland (New Zealand)


[Add To My Schedule](#) 

Graphene-based saturable absorber for high average-power fiber lasers

Paper 10684-42

Time: 2:50 PM - 3:05 PM

Author(s): Paul Mouchel, Univ. d'Angers (France), Keopsys SA (France); Georges Semaan, Univ. d'Angers (France); Yichang Meng, Hebei Univ. of Science and Technology (China); Mohamed Salhi, Meriem Kemel, François Sanchez, Univ. d'Angers (France)


[Add To My Schedule](#) 

High energy, femtosecond fiber laser source at 1750 nm for 3-photon microscopy (Conference Presentation)

Paper 10683-61

Time: 3:05 PM - 3:20 PM

Author(s): Andreas Wienke, Dieter Wandt, Laser Zentrum Hannover e.V. (Germany); Jean-Bernard Lecourt, Didier Lekime, Yves Hernandez, Multitel A.S.B.L. (Belgium); Jörg Neumann, Dietmar Kracht, Laser Zentrum Hannover e.V. (Germany)


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Intracavity pulse dynamics in all-normal dispersion all-fiber oscillator

Paper 10684-43

Time: 3:20 PM - 3:35 PM

Author(s): Jan Szczepanek, Univ. of Warsaw (Poland); Tomasz M. Kardaś, Institute of Physical Chemistry of the Polish Academy of Sciences (Poland); Czesław Radzewicz, Univ. of Warsaw (Poland); Yuriy Stepanenko, Institute of Physical Chemistry of the Polish Academy of Sciences (Poland), Univ. of Warsaw (Poland)

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Coffee Break 3:35 PM - 4:05 PM

Session 11: Materials and Components

Wednesday 25 April 2018

4:05 PM - 5:45 PM

Location: Salon 7


Session Chair: [Maurizio Ferrari](#), CNR-Istituto di Fotonica e Nanotecnologie (Italy)

UV written integrated waveguides for quantum photonics (*Invited Paper*)

Paper 10683-62

Time: 4:05 PM - 4:30 PM

Author(s): James C. Gates, Univ. of Southampton (United Kingdom)

[Add To My Schedule](#) **Nd:Lu:CaF₂ fluoride crystals for inertial confinement fusion laser drivers**
(**Canceled**)

Paper 10683-63

Time: 4:30 PM - 4:45 PM


Author(s):

Laser material Nd:Lu:CaF₂ characterization for high-energy and high-repetition rate amplification at 1053 nm (**Conference Presentation**)

Paper 10683-64

Time: 4:45 PM - 5:00 PM


Author(s): Diane Stoffel, Sébastien Montant, Jean-Paul Goossens, Commissariat à l'Énergie Atomique (France); Simone Normani, Alain Braud, Patrice Camy, Ctr. de Recherche sur les Ions, les Matériaux et la Photonique (France)

[Add To My Schedule](#) **Stochastic model of energy transfer processes among rare earth ions**

Paper 10683-65

Time: 5:00 PM - 5:15 PM


Author(s): Pavel Loiko, KTH Royal Institute of Technology (Sweden); Markus Pollnau, Univ. of Surrey (United Kingdom)

[Add To My Schedule](#) **Synthesis, structure and spectroscopic assessment of luminescent GdVO₄:Dy³⁺ and DyVO₄ nanoparticles**

Paper 10683-66

Time: 5:15 PM - 5:30 PM


Author(s): Dragana Jovanovic, Vinca Institute of Nuclear Sciences (Serbia); Andrea Chiappini, Fondazione Bruno Kessler (Italy); Lidia Zur, Museo Storico della Fisica e Ctr. Studi e Ricerche "Enrico Fermi" (Italy), Fondazione Bruno Kessler (Italy); Tamara Gavrilovic, Vinca Institute of Nuclear Sciences (Serbia); Lam Thi Ngoc Tran, Univ. degli Studi di Trento (Italy), Fondazione Bruno Kessler (Italy), Ho Chi Minh City Univ. of Technology (Viet Nam); Alessandro Chiasera, Fondazione Bruno Kessler (Italy); Anna Lukowiak, Institute of Low Temperature and Structure Research (Poland); Miroslav Dramićanin, Vinca Institute of Nuclear Sciences (Serbia); Maurizio Ferrari, Fondazione Bruno Kessler (Italy), Museo Storico della Fisica e Ctr. Studi e Ricerche "Enrico Fermi" (Italy)

[Add To My Schedule](#) **Future solar energy devices**

Paper 10683-68

Time: 5:30 PM - 5:45 PM

Author(s): Mihaela Girtan, Univ. d'Angers (France)

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THURSDAY 26 APRIL[Show All Abstracts](#)

Hot Topics III

Thursday 26 April 2018

9:00 AM - 10:35 AM

Location: Schweitzer Auditorium

Photonics Europe 2018: Hot Topics Session III**From extreme nonlinear optics to ultrafast atomic physics****Anne L'Huillier**, Lund Univ., Sweden**Quantum computations and quantum simulations with trapped ions****Rainer Blatt**, Institute for Experimental Physics, Univ. of Innsbruck, AustriaFor additional details, please visit <http://spie.org/x12297.xml>

Coffee Break 10:35 AM - 11:00 AM

Session 12: High-Power Fiber Lasers

Thursday 26 April 2018

11:00 AM - 12:25 PM

Location: Salon 7


Session Chair: [Patrice Camy](#), Ctr. de Recherche sur les Ions, les Matériaux et la Photonique (France)

Monolithic fiber amplifiers for the next generation of gravitational wave detectors *(Invited Paper)*

Paper 10683-69

Time: 11:00 AM - 11:25 AM

Author(s): Sven Hochheim, Felix Wellmann, Thomas Theeg, Omar de Varona Ortega, Phillip Booker, Peter Wessels, Michael Steinke, Jörg Neumann, Dietmar Kracht, Laser Zentrum Hannover e.V. (Germany)


[Add To My Schedule](#) 

Internal second harmonic generation at 450 nm of a CW Nd-doped fiber laser

Paper 10683-70

Time: 11:25 AM - 11:40 AM

Author(s): Baptiste Leconte, Hervé Gilles, Ctr. de Recherche sur les Ions, les Matériaux et la Photonique (France); Benoit Cadier, Thierry Robin, iXBlue SAS (France); Mathieu Laroche, Ctr. de Recherche sur les Ions, les Matériaux et la Photonique (France)

[Add To My Schedule](#) 

110 W all-fiber picosecond MOPA laser at 1016 nm

(Canceled)

Paper 10683-71

Time: 11:40 AM - 11:55 AM


Author(s):

KW-class clad-pumped Raman all-fiber laser with brightness enhancement

Paper 10683-72

Time: 11:55 AM - 12:10 PM

Author(s): Yaakov Glick, Yariv Shamir, Matitya Aviel, Shaul Pearl, Soreq Nuclear Research Ctr. (Israel)


[Add To My Schedule](#) 

Linearly polarized all-fiber Raman laser operating near 1680 nm

Paper 10683-73

Time: 12:10 PM - 12:25 PM

Author(s): Romain Thouroude, Hervé Gilles, ENSICAEN (France); Benoit Cadier, Thierry Robin, iXBlue SAS (France); Aleksey Tyazhev, Ammar Hideur, CORIA (France); Rémi Soulard, Patrice Camy, Jean-Louis Doualan, Mathieu Laroche, ENSICAEN (France)

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Lunch Break 12:25 PM - 1:35 PM

Session 13: Special Session: Minerva Project and Mid-infrared Materials and Sources

Thursday 26 April 2018

1:35 PM - 3:30 PM

Location: Salon 7


Session Chair: Bruce Napier, Vivid Components Ltd. (Germany)

Breakthroughs in mid-infrared fibre technology *(Invited Paper)*

Paper 10683-74

Time: 1:35 PM - 2:00 PM

Author(s): Angela B. Seddon, Zhuoqi Tang, David Furniss, The Univ. of Nottingham (United Kingdom); Lukasz Sojka, Univ. of Wroclaw (Poland); Hesham Sakr, Harriet Pamell, Dinuka Jayasuriya, Trevor Benson, Slawomir Sujecki, The Univ. of Nottingham (United Kingdom)

[Add To My Schedule](#) 

Supercontinuum for microscopy and sensing in the 2-4.5 μm region

Paper 10683-75

Time: 2:00 PM - 2:15 PM

Author(s): Peter Morten Moselund, Patrick Bowen, NKT Photonics A/S (Denmark); Laurent Huot, NKT Photonics A/S (Denmark), Technical Univ. of Denmark (Denmark); Joanna Carthy, Ross Powell, Lucy Hooper, NKT Photonics (United Kingdom)


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Acousto-optic devices for operation in the infrared

Paper 10683-76

Time: 2:15 PM - 2:30 PM


Author(s): Jon D. Ward, Gooch & Housego (UK) Ltd. (United Kingdom); Stefano Valle, Optoelectronics Research Ctr., Univ. of Southampton (United Kingdom)

[Add To My Schedule](#) **Mid-IR supercontinuum between 1 and 5 μm in step index tellurite fibres for greenhouse or pollutant gases detection (Conference Presentation)**

Paper 10683-77

Time: 2:30 PM - 2:45 PM


Author(s): Arnaud Lemière, Paul Froidevaux, Bertrand Kibler, Frédéric Désévéday, Jean-Charles Jules, Grégory Gadret, Pierre Mathey, Frédéric Smektala, Univ. de Bourgogne Franche-Comté (France)

[Add To My Schedule](#) **Dy³⁺ doped CaF₂ crystals spectroscopy for the development of Mid-infrared lasers around 3 μm**

Paper 10683-78

Time: 2:45 PM - 3:00 PM


Author(s): Gurban Brasse, Jean-Louis Doualan, Abdelmjid Benayad, Alain Braud, Patrice Camy, Ctr. de Recherche sur les Ions, les Matériaux et la Photonique (France)

[Add To My Schedule](#) **Comparative study of infrared fiber laser models**

Paper 10683-79

Time: 3:00 PM - 3:15 PM

Author(s): Slawomir Sujecki, The Univ. of Nottingham (United Kingdom); Lukasz Sojka, Wroclaw Univ. of Science and Technology (Poland); Angela B. Seddon, Trevor Benson, The Univ. of Nottingham (United Kingdom); Mario Christian Falconi, Francesco Prudeniano, Politecnico di Bari (Italy); Marian Marciniak, National Institute of Telecommunications (Poland); Hovik Baghdasary, National Polytechnic Univ. of Armenia (Armenia); Pavel Peterka, Institute of Photonics and Electronics of the ASCR, v.vi. (Czech Republic); Stefano Taccheo, Swansea Univ. (United Kingdom)

[Add To My Schedule](#) **2-6 μm mid-infrared supercontinuum generation in cascaded ZBLAN and As₂Se₃ step-index fiber (Canceled)**

Paper 10683-80

Time: 3:15 PM - 3:30 PM

Author(s):

Coffee Break 3:30 PM - 4:00 PM**Session 14:
Special Session Dedicated to Early Stage Researchers and Woman Scientists**

Thursday 26 April 2018

4:00 PM - 5:25 PM

Location: Salon 7


Session Chair: Anna Lukowiak, Institute of Low Temperature and Structure Research (Poland)

SiO₂-SnO₂:Er³⁺ transparent glass-ceramics: fabrication and photonic assessment (Invited Paper)

Paper 10683-81

Time: 4:00 PM - 4:25 PM


Author(s): Lam Thi Ngoc Tran, CNR-Istituto di Fotonica e Nanotecnologie and Univ. degli Studi di Trento (Italy), Ho Chi Minh City Univ. of Technology (Viet Nam), Fondazione Bruno Kessler (Italy); Lidia Zur, Museo Storico della Fisica e Ctr. Studi e Ricerche "Enrico Fermi" (Italy), Fondazione Bruno Kessler (Italy), CNR-Istituto di Fotonica e Nanotecnologie (Italy); Damiano Massella, Univ. degli Studi di Trento (Italy), CNR-Istituto di Fotonica e Nanotecnologie (Italy), Fondazione Bruno Kessler (Italy); Beata Derkowska-Zielinska, Nicolaus Copernicus Univ. (Poland); Alessandro Chiasera, Stefano Varas, Cristina Armellini, CNR-Istituto di Fotonica e Nanotecnologie (Italy), Fondazione Bruno Kessler (Italy); Alessandro Martucci, Dipartimento di Ingegneria Industriale, Università di Padova (Italy); Daniele Zonta, Univ. degli Studi di Trento (Italy), Univ. of Strathclyde (United Kingdom), CNR-Istituto di Fotonica e Nanotecnologie (Italy); Thi Thanh Van Tran, Univ. of Science Ho Chi Minh City (Viet Nam); Anna Lukowiak, Institute of Low Temperature and Structure Research (Poland); Stefano Taccheo, Swansea Univ. (United Kingdom); Dominik Dorosz, AGH Univ. of Science and Technology (Poland); Giancarlo C. Righini, Museo Storico della Fisica e Ctr. Studi e Ricerche "Enrico Fermi" (Italy), Istituto di Fisica Applicata "Nello Carrara" (Italy); Yann G. Boucher, Ecole Nationale Supérieure des Sciences Appliquées et de Technologie (France); Maurizio Ferrari, CNR-Istituto di Fotonica e Nanotecnologie (Italy), Museo Storico della Fisica e Ctr. Studi e Ricerche "Enrico Fermi" (Italy), Fondazione Bruno Kessler (Italy)

[Add To My Schedule](#) **Studies on carbon dots embedded Tamm plasmon polariton structures**

Paper 10683-82

Time: 4:25 PM - 4:40 PM


Author(s): Pratyusha Das, Subhrajit Mukherjee, Meher Wan, Indian Institute of Technology Kharagpur (India); Samit K. Ray, S.N. Bose National Ctr. for Basic Sciences (India); Shivakiran N. B. Bhaktha, Indian Institute of Technology Kharagpur (India)

[Add To My Schedule](#) **Optical data transmission with plastic scintillating fibers**

Paper 10683-83

Time: 4:40 PM - 4:55 PM

Author(s): Ramona M. Galatus, Paul Farago, Technical Univ. of Cluj Napoca (Romania); Juan Vallés, Univ. de Zaragoza (Spain)


[Add To My Schedule](#) 

Role of gap states in chalcogenide glass response to photo-excitation by the high-intensity femtosecond laser pulses

Paper 10683-85

Time: 4:55 PM - 5:10 PM

Author(s): Elena Romanova, Saratov State Univ. (Russian Federation); Andrei Afanasiev, Institute of Applied Physics of RAS (Russian Federation); Alexander Velmuzhov, Maxim Sukhanov, Vladimir Shiryayev, G. G. Devyatikh Institute of Chemistry of High-Purity Substances of the Russian Academy of Sciences (Russian Federation)

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Dual-polarization DFB fiber lasers as optical phase-locked microwave sources in the 1-10 GHz range

Paper 10683-86

Time: 5:10 PM - 5:25 PM

Author(s): Marie Guionie, Ludovic Frein, François Bondu, Anthony Carré, Goulc'hen Loas, Institut de Physique de Rennes (France); Emmanuel Pinsard, Benoit Cadier, iXBlue Photonics (France); Mehdi Alouini, Marco Romanelli, Marc Vallet, Marc Brunel, Institut de Physique de Rennes (France)

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