ECIO 2018
20TH EUROPEAN CONFERENCE
ON INTEGRATED OPTICS

VALENCIA, SPAIN
30TH MAY - 1ST JUNE 2018

www.ecio-2018.org
Dear Colleagues,

The European Conference on Integrated Optics will celebrate its 20th anniversary in Valencia from the 30th May to the 1st June 2018. The conference focuses on leading edge research on integrated optics, optoelectronics and nanophotonics and gathers experts from academia and industry. The application scope is broad and it ranges from tele/datacom communications, optical interconnects, and (bio) optical sensing applications to more disruptive areas as quantum computing and mid-IR photonics. The industrial exhibitors will showcase their latest products and services, and will be sponsoring young researchers at an early stage of their careers, through best paper and poster awards.

The conference will have two technical tracks running in parallel and a poster session. A selected list of invited worldwide speakers from academia and industry have confirmed their presence. Furthermore, several singular events will be organized. The special session “Women in Integrated Optics” chaired by Prof. Laura Lechuga (ICN2, Spain) and Prof. Sonia García Blanco (Univ. Twente, The Netherlands), aims at bringing together the most relevant scientist and professional women in the field. A workshop on “Integrated Photonic Technologies and Applications from Visible to Mid-Infrared” will be also organized by the European Photonics Industry Consortium (EPIC), and chaired by Dr. José Pozo (EPIC).

The conference venue will be at the Universitat Politècnica de València campus, located at ten minutes walking distance from the coast line, with magnificent beaches, restaurants and nightlife clubs. Valencia is the third-largest city in Spain and is located on the east Mediterranean coast, which offers a combination of avant-garde style, culture and Mediterranean spirit, bound to captivate any visitor. There are thousands of things to discover, but we would like to suggest reasons why you just have to come and see it for yourself: 300 days of sunshine, Mediterranean cuisine, beaches, lifestyle, festivals and traditions, green spaces, 2000 years of history, cutting-edge architecture, unique nooks and crannies ... The city has a wonderful weather and an excellent gastronomy famous by its Valencian paella (rice with vegetables and meat) and horchata (popular soft drink made of water, sugar and tiger nut). Attendants will have the opportunity to taste this and more typical Spanish food during the conference luncheons and social events.

See you in Valencia.

Pascual Muñoz and Pablo Sanchis
Co-chairs of ECIO 2018
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Pablo Sanchis

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<th>Time</th>
<th>MAY 30th</th>
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<th>MAY 31st</th>
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<th>JUNE 1st</th>
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<tr>
<td>08:00</td>
<td>Welcome &amp; registration</td>
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<tr>
<td>09:00</td>
<td>ECIO 2018 Opening Ceremony</td>
<td>09:00</td>
<td>Th.1.A / From monolithic to heterogeneous and hybrid integration</td>
<td>09:00</td>
<td>Fr.1.A / Biophotonics &amp; lab on a chip</td>
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<td>11:00</td>
<td>Th.1.B / Subwavelength plasmonics &amp; metamaterials</td>
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<td>Fr.1.B / RF &amp; THz photonics</td>
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<td>09:30</td>
<td>Wel.1 / Plenary “The raise of photonic integration”</td>
<td>09:00</td>
<td>Wel.1.A.1 5-IP, Milan Mashanovitch (Freedom Photonics), “Novel high-performance lasers in InP”</td>
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<td>09:30</td>
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<td>Th.1.B.2</td>
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<td>11:00</td>
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<td>09:00</td>
<td>Wel.1.B.2 73-RP, Water-loaded plasmonic stripe integrated with Si3N4 waveguide using gold and CMOS compatible metals</td>
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<td>Th.1.B.3</td>
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<td>11:30</td>
<td>Wel.2 / Panel Session “How to increase the female presence in integrated optics”</td>
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<td>11:00</td>
<td>Wel.2.A / Quantum integrated photonics</td>
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<td>11:30</td>
<td>Wel.2.B / Spectroscopy</td>
<td>12:00</td>
<td>Wel.2.B / State of the art in materials for mid-infrared applications</td>
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<td>11:30</td>
<td>Th.2.A / Si photonics for tele/datacom</td>
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<td>Wel.2.C / Quantum integrated photonics</td>
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<td>13:00</td>
<td>Th.2.B / Technologies from visible to mid-infrared applications</td>
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<td>Wel.2.D / Quantum integrated photonics</td>
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<td>13:00</td>
<td>We.2.A.1 13-IP, Yasuhiro Arakawa (Univ. of Tokyo), “Quantum nanostructures and photonic devices”</td>
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**ECIO 2018**

**20th European Conference on Integrated Optics**

**Valencia, Spain - 30th May - 1st June 2018**
We.2.A.2 64-HRP, Quantum Photonic Processor based on Silicon Nitride Waveguides

We.2.A.3 47-HRP, Tilted potentials in Quantum Crystal Cavities for Integrated Quantum Photonic

We.2.A.4 27-IP, Carlos Abellán (Quadra), "Photonic integration of quantum random number generators".

Th.2.A.2 103-HRP, InAs/GaAs quantum dot 1.3 um DFB laser heterogeneously integrated on a silicon waveguide circuit

We.2.A.4 24-IP, Gonzalo Wangüemert (Univ. Málaga), "Mid-infrared suspended waveguide platform & building blocks"

We.2.B.3 4-IP, Alan Scott (Honeywell), "A Compressive Sensing Integrated Fourier Raman Spectrometer"

We.2.B.4 119-HRP, Integrated Silicon-on-Insulator AWG Spectrometer with Single-Pixel Readout for 23 cm Spectroscopy Applications

Th.2.B.3 39-RP, High-efficiency Si Grating Fiber-Chip Coupler with Bottom Reflector

We.2.B.5 74-RP, Integrated Al₂O₃:Yb³⁺ Microring Laser for On-Chip Active Sensing in an Aqueous Environment

We.3.A.1 11-IP, Wim Bogaerts (Univ. Gent), "Programmable photonic integrated circuits" 

We.3.A.2 86-RP, Ultra-low-power stress-based integrated photonic phase actuator

Th.3.1 2-IP, Gloria Hoefler (Infinera), "Large scale InP photonic integrated circuits (PICs)"

We.3.A.3 31-RP, Toward integrated Magnetophotonics using Cdraldigging with Perpendudular Magnetic Anisotropy

We.3.A.4 58-RP, Investigation of Unidirectionality in an Asymmetric Ring Mode Locked Laser with two Saturable Absorbers

We.3.B.1 31-RP, Towards integrated Magnetophotonics using Cdraldigging with Perpendudular Magnetic Anisotropy

We.3.A.5 68-RP, Integration Strategies of On-Chip Organometal Halide Perovskite Lasers

We.3.A.6 17-IP, Marc Saro (Glasgow University), "Integrated orbital angular momentum devices"

We.3.A.3 68-RP, Investigation of Unidirectionality in an Asymmetric Ring Mode Locked Laser with two Saturable Absorbers

We.3.B.2 17-IP, Marc Saro (Glasgow University), "Integrated orbital angular momentum devices"

Th.3.2 7-IP, Michelipon (Columbia Univ.), "Next-generation Silicon Photonics"

We.3.B.3 17-IP, Will Green (IBM), "Silicon photonics trace gas sensors for methane detection"

We.3.A.4 58-RP, Investigation of Unidirectionality in an Asymmetric Ring Mode Locked Laser with two Saturable Absorbers

Th.3.3 9-IP, Caterina Ciminelli (Polit. Bari), "Silicon photonics biosensors"

We.3.A.5 64-RP, Matrix Alkide using Silicon Photonics Phase Shifters using heater with integrated Diodes

We.3.A.6 105-RP, A tuning method for photonic integrated circuits in presence of thermal cross talk

Th.3.4 14-IP, Joyce Poon (Univ. Toronto), "Silicon photonics integration of VO2 photonics and neuromorphic"
SCIENTIFIC PROGRAM
WEDNESDAY, 30 MAY 2018

08:00 to 09:00  WELCOME & REGISTRATION
09:00 to 09:30  ECIO 2018 OPENING CEREMONY
09:30 to 11:00  PLENARY “THE RAISE OF PHOTONIC INTEGRATION”
   8-IP  Delphine Marris-Morini (Univ. Paris-Sud), “Chip-scale integrated photonics for the mid-infrared”
   22-IP  Tin Komljenovic (UCSB), “Heterogeneous large-scale photonic integration for communications and beyond”
   30-IP  Michale Liehr (AIM Photonics) “Silicon photonics open access in US”
11:00 to 11:30  COFFEE BREAK
11:30 to 13:30  2.A / Quantum integrated photonics & 2.B / Spectroscopy
   2.A / Quantum integrated photonics
      13-IP  Yasuhiko Arakawa (Univ. of Tokyo), “Quantum nanostructures and photonic devices”
      61-HRP  Quantum Photonic Processor based on Silicon Nitride Waveguides
      47-HRP  Tilted-potential Photonic Crystal Cavities for Integrated Quantum Photonics
   2.B / Spectroscopy
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<td>Alan Scott (Honeywell), “A Compressive Sensing Integrated Fourier Raman Spectrometer”</td>
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<td>119-HRP</td>
<td>Integrated Silicon-on-Insulator AWG Spectrometer with Single Pixel Readout for 2.3 um Spectroscopy Applications</td>
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<td>Integrated Al2O3:Yb3+ Microring Laser for On-Chip Active Sensing in an Aqueous Environment</td>
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<td>1-IP</td>
<td>Will Green (IBM), “Silicon photonics trace gas sensors for methane detection”</td>
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**13:30 to 15:30 Lunch**

**15:30 to 17:30 3.A / Programmable and reconfigurable PICs & 3.B / Emerging technologies**

**3.A / Programmable and reconfigurable PICs**

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<td>11-IP</td>
<td>Wim Bogaerts (Univ. Gent), “Programmable photonic integrated circuits”</td>
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<tr>
<td>109-RP</td>
<td>Automatic Hitless Tuning of Third Order Micro-Ring Resonator Add-Drop Filters</td>
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<td>131-RP</td>
<td>On-chip full-field test engine for photonic integrated devices based on optical frequency domain reflectometry technique</td>
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<td>64-RP</td>
<td>Matrix Addressing Silicon Photonics Phase Shifters using Heaters with Integrated Diodes</td>
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<td>105-RP</td>
<td>A tuning method for photonic integrated circuits in presence of thermal cross talk</td>
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**3.B / Emerging technologies**

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<tr>
<td>31-RP</td>
<td>Towards Integrated MagnetoPhotonics using Claddings with Perpendicular Magnetic Anisotropy</td>
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<td>68-RP</td>
<td>Investigation of Unidirectionality in an Asymmetric Ring Mode Locked Laser with two Saturable Absorbers</td>
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<td>17-IP</td>
<td>Marc Sorel (Glasgow University), “Integrated orbital angular momentum devices”</td>
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<tr>
<td>58-RP</td>
<td>Fabrication of periodically poled low-loss rubidium exchanged ridge waveguides in z-cut KTP</td>
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Integration Strategies of On-Chip Organometal Halide Perovskite Lasers.

Daoxin Dan (Zhejiang University), “Mode division multiplexing”.

Development and experimental study of a highly sensitive porous silicon ring resonator

High sensitivity oligonucleotides photonic detection and optical characterization of molecular beacon conformational changes
Ángela Ruiz-Tórtila, Francisco Prats-Quílez, Daniel González-Lucas, María-José Bañuls, Ángel Maquieira, Guy Wheeler, Tamas Dalmay, Amadeu Griói, Juan Hurtado, Helge Bohlmann, Jaime García-Rupérez

Picosecond-response enhanced nonlinearity of a gold metasurface.
Leonardo de S. Menezes, Lúcio H. Acioli, Melissa Maldonado, Jake Fontana, Isabel C. S. Carvalho, Diego Rativa, Cid B. de Araújo, Anderson S. L. Gomes

Low-loss Silicon Photonics Platform for Optical Mode Engineering.
Niklas Hoppe, Wolfgang Vogel, Lotte Rathgeber, Thomas Föhn, María Felix Rosa, Mathias Kaschel, Manfred Berroth

Bistable Operation of a Monolithic Ring Laser due to Hole-Burning-Induced Inversion Grating
Lenstra Daan, Bente Erwin

All-Optical Flip-Flop Operation in Phase States Using Single SOA and Feedback Loop
Kenta Takada, Hiroki Kishikawa, Nobuo Goto

Liquid crystals waveguide devices for electro-optical beam switching
Michal Kwasny, Magda Urbanowicz, Urszula Laudyn

A Voltage Driven Dynamic Traveling-Wave Model for Active Integrated Photonic Devices
Antonio Perez-Serrano, Maria Fernanda Vilera, Jose Manuel G. Tijero, Salvador Balle, Ignacio Esquivias

KTP waveguides: Variation of penetration depth with waveguide width
Laura Padberg, Christof Eigner, Matteo Santandrea, Christine Silberhorn
ID 63. Feasibility study of integrated photonic oscillators with 5 fs timing jitter
Peter Tønning, Martijn J. R. Heck

ID 65. Highly Cconfining Lithium Tantalate Waveguide Fabricatedion by Soft Proton Exchange: towards Non-linear Integrated Optics Applications in the UV
Ayenew Getachew, Tronche Hervé, Doutre Florent, Lunghi Tommaso, Kianirad Hoda, Baldi Pascal, Micheli Marc, Laurell Fredik

ID 69. Ultra-high efficiency Non-uniform Dual-Band Grating Coupler in SiN Platform
Shankar Kumar Selvaraja, Siddharth Nambiar, Hemalatha M, Praveen Ranganath

ID 71. Design of an integrated Vernier laser for the InP membrane on silicon platform
Vadim Pogoretskiy

ID 77. Grating Fiber-Chip Coupler in Silicon/Silicon Nitride hybrid Waveguide
Shankar Kumar Selvaraja, Hemalatha Muthuganesan

ID 81. Nonlinear optical properties of silicon waveguides at low temperatures
Gary Sinclair, Nicola Tyler, Döndü Sahin, Gerardo Villareal, Jorge Barreto

ID 85. Spatial light modulator based flexible coupling platform for applications in SDM and PIC
Catia Pinho, Berta Neto, Tiago Morgado, Artur Sousa, André Albuquerque, Mário Lima, Antonio Teixeira

ID 87. Broadband beam splitting using Spatial Adiabatic Passage
Tommaso Lunghi, Florent Doutre, Alicia Petronela Rambu, Matthieu Bellec, Marc De Micheli, Alin Marian Apetrei, Olivier Alibart, Nadia Belabas, Sorin Tascu, Sébastien Tanzilli

ID 111. Steady state spectral model of lasers and its experimental validation for a multi-section DBR laser
Stefanos Andreou, Dan Zhao, Kevin Williams, Erwin Bente

ID 113. Towards a Generic Nanophotonic Platform based on InP Membrane
Yuqing Jiao, Jos van der Tol, Vadim Pogoretskii, Jorn van Engelen, Amir Abbas Kashi, Meint Smit, Kevin Williams

ID 115. A Waveguide Mach–Zehnder Interferometer Based on Liquid Crystal Evanescent Field Modulation
Manuel Caño-García, David Poudereux, Morten Andreas Geday, José Manuel Otón, Xabier Quintana
ID 123. Investigating the origin of second order nonlinearities in silicon waveguides strained by silicon nitride
Claudio Castellan, Alessandro Trento, Chiara Vecchi, Pierre Guilleme, Mher Ghulinyan, Georg Pucker, Lorenzo Pavesi

ID 137. Heterodyne Generation of Ultra-Narrow Millimeter-Wave Carriers with Er-doped glass integrated DFB lasers
Jean-Emmanuel Broquin, Nisrine Arab, Lionel Astard, Julien Poëte

ID 139. Silicon Nitride Tunable Directional Coupler for programmable waveguide meshes
Daniel Pérez, Erica Sánchez, D. Doménech, P. Muñoz, José Capmany

20:00 WELCOME RECEPTION
08:00 to 09:00  WELCOME & REGISTRATION

09:00 to 11:00  1.A / From monolithic to heterogeneous and hybrid integration & 1.B / Subwavelength, plasmonics & metamaterials.

1.A / From monolithic to heterogeneous and hybrid integration

5-IP  Milan Mashanovitch (Freedom Photonics), “Novel high-performance lasers in InP”.

96-RP  Gain characteristics of 1.3µm GaInNAs/GaAs quantum wells monolithically integrated on Ge.

79-HRP  100 Gb/s Duobinary Electro-Absorption Modulation of a Heterogeneously Integrated InP-on-Si DFB Laser Diode.

21-IP  Tomohiro Amemiya (Tokyo Institute of Technology), “Semiconductor membrane lasers”.

15-IP  Brian Corbett (Tyndall Institute), “Micro-transfer printing for advanced scalable hybrid photonic integration”

1.B / Subwavelength, plasmonics & metamaterials

73-RP  Water-loaded plasmonic stripe integrated with Si3N4 waveguide using gold and CMOS compatible metals.

80-RP  Surface enhanced Raman spectroscopy via isolated plasmonic nanoantennas integrated on silicon nitride waveguides.

12-IP  Jens Schmid (National Research Council, Canada), “Silicon photonics and subwavelength photonic structures/metamaterials”.

53-RP  High performance and small footprint spot size converters based on SWG metamaterial lenses.

121-RP  Coherent control of the absorption and scattering of an isolated plasmonic nanoantenna integrated in a silicon waveguide.


11:00 to 11:30  COFFEE BREAK
11:30 to 13:30 2.A / Si photonics for tele/datacom & 2.B / Technologies from visible to mid-infrared applications

**2.A / Si photonics for tele/datacom**

3-IP Charles Baudot (STMicroelectronics), “High-speed Si transceiver for datacom applications”.

84-HRP Low-threshold and High-speed Quantum-dot Microring Lasers on Silicon

103-HRP InAs/GaAs quantum dot 1.3 um DFB laser heterogeneously integrated on a silicon waveguide circuit.

6-IP Mark Wade (Ayar Labs), “Zero-change photonic integration for co-integration with CMOS electronics”.

44-RP O-Band QPSK modulation based on a silicon dual-drive Mach-Zehnder.

39-HRP Dual-polarization O-band silicon nitride Bragg filters with high extinction ration

**2.B / Technologies from visible to mid-infrared applications**

141-RP Synchronization of Modelocked Coupled Microresonator Combs.

110-RP Low-loss inverted taper edge coupler in silicon nitride.

24-IP Gonzalo Wangüemert (Univ. Málaga), “Mid-infrared suspended waveguide platform & building blocks”.

94-RP A new platform for integrated quantum optics: the short-wave infrared.

59-RP High-efficiency SiN Grating Fiber-Chip Coupler with Bottom Reflector.

25-IP David Domenech (VLC), “PIX4life developments: the path towards a visible light photonic foundry”.

13:30 to 15:30 LUNCH

15:30 to 17:30 Plenary “Women on integrated optics“

2-IP Gloria Hoefler (Infinera), “Large scale InP photonic integrated circuits (PICs)”
Michal Lipson (Columbia Univ.), “Next generation Silicon Photonics”.

Caterina Ciminelli (Polit. Bari), “Silicon photonics biosensors”.

Joyce Poon (Univ. Toronto), “Silicon photonics integration, VO2 photonics and neurophotonics”

17:30 to 19:30 HORCHATA & POSTERS

ID 26. Thermal stability improvement for Y-branching splitters in proton-exchanged LiNbO3 with the aid of fs-laser writing technique
Sergey Kostritskii, Yuri Korkishko, Vyacheslav Fedorov, Mikhail Bukharin, Nikolay Skryabin

ID 28. Impact of manufacturing processes on the optical amplitude, phase and polarization properties of silicon nitride waveguides
Gloria Micó Cabanes, Luis Alberto Bru Orgiles, Daniel Pastor Abellán, José David Domenech, Ana Sánchez, Carlos Domínguez, Pascual Muñoz

ID 32. Broadband SiN Asymmetric Directional Coupler for 850 nm Wavelength Region”
Stefan Nevlacsil, Moritz Eggeling, Paul Muellner, Guenther Koppitsch, Martin Sagmeister, Jochen Kraft, Rainer Hainberger

ID 34. Toward a hybrid integration of a 4-wavelength InGaAsP laser array on the slotted silicon waveguide
Xing Dai, Weixi Chen, Jiaoqing Pan, Hua Yang, Frank Peters

ID 38. Equivalent circuit modelling of electrical crosstalk in photonic integrated circuits
Giordano Mariani, Weiming Yao, Antonio d’Alessandro, Kevin Williams

ID 46. Waveguide amplifiers based on metalorganic halide perovskites
Isaac Suárez, Emilio J. Juárez-Pérez, Iván Mora-Seró, Juan P. Martínez-Pastor

ID 48. Low-to-High Refractive Index Contrast InP Transition for Light Coupling into a Wider Cross-Section Polymer Waveguide
Ripalta Stabile, Nicola Calabretta, Isis A. Cooman

ID 54. Bias and Doping Optimisation of Lumped Silicon–Photonic PAM4/ PAM8 Mach–Zehnder Modulators
Brian Murray, Cleitus Antony, Shane Duggan, Giuseppe Talli, Paul Townsend

ID 60. Voltage Driven 1x2 Multimode Interference Optical Switch in InP/ InGaAsP
Simone Cardarelli, Nicola Calabretta, Ripalta Stabile, Kevin Williams
ID 62. cAlN-on-Sapphire Grating Couplers for Photons Integrated Circuits
Prometheus DasMahapatra, Shankar Kumar Selvaraja

ID 70. Efficient and Optimized 25 Gb/s Slow-Light SOI Modulator in the O-Band
with Slow-wave Electrodes for Low Power Optical Interconnects
Andrea Zanzi, Alvaro Rosa, Amadeu Griol, Pablo Sanchis, Javier Marti,
Antoine Brimont

ID 76. Novel type of waveguide structure for an efficient optical
amplification and lasing of perylenediimide organic compounds
Juan Martínez Pastor, Mattia Signoretto, Nathalie Zink-Lorre, Enrique Font-
Sanchis, Ángela Sastre-Santos, Vladimir S. Chirvony, Fernando Fernández-
Lázaro, Isaac Suárez

ID 78. Fabrication and characterization of KLu(WO4)2/SiO2 tapper
waveguide platform for sensing applications
Maria Cinta Pujol, Marc Medina, Christian E Rüter, Detlef Kip, Jaume
Massons, AiranRodenas, Magdalena Aguiló, Frances Díaz

ID 82. Integrated Optical Edge Filter using Apodized Sub-Wavelength
Grating Waveguide in SOI
Sumi R., Nandita DasGupta, Bijoy Krishna Das

ID 90. Photonic Integrated Circuits for ammonia sensing with 100 ppb
detection levels
Andreas Hänsel, Martijn Heck

ID 98. Indium tin oxide heaters for thermo-optic tuning of silicon
photonic circuits
Jorge Parra, Irene Olivares, Juan Hurtado, Pablo Sanchis

ID 102. Polarization Diversity Detection Using Waveguide Integrated
Multiquantum-Well Photodiodes for Coherent Receivers
Shaharam Keyvaninia

ID 108. Monolithically Integrated Multi-wavelength DBR Laser with
Filtered Optical Feedback
Dan Zhao, Stefanos Andreou, Weiming Yao, Kevin Williams, Zaveer Leijtens

ID 112. Design of a Compact Ultrahigh-resolution Fourier-Transform
Spectrometer
B. Imran Akca

ID 114. Array of integrated plasmonic antennas for directivity improvement
in on-chip optical wireless communications
Giovanna Calo Gaetano Bellanca, Ali Emre Kaplan, Michele Bozzi, Paolo
Bassim, Vincenzo Petruzzelli.
ID 116. Using Optical Amplifiers Materials to Design Bio-activators at Nanoscale
Sara Núñez-Sánchez, Mª Jose Cordero-Ferradans, Sergio Rodal-Cedeira, Isabel Pastoriza-Santos, Jorge Pérez-Juste.

ID 120. Thermal Chirp in Distributed-feedback Resonators
Markus Pollnau, Cristine Kores, Nur Ismail, Dimitri Geskus.

ID 122. Enhanced Four-wave Mixing by Hybrid Integration of MoS2 on Silicon Waveguide
Yaojing Zhang, Li Tao, Jian-Bin Xu, Hon Ki Tsanak.

ID 126. Molecular Excitonic Materials for a Fully Plastic Nanophotonics
Samuel Holderm Martin Lopez-García, Sara Núñez-Sánchez.

ID 130. Heralded single photon source of 2 micron photons in silicon waveguides
Stefano Signorini, Sara Piccione, Mher Ghulinyan, Georg Pucker, Lorenzo Pavesi.

ID 132. Superconducting nanowire single–photon detectors in a racetrack cavity
Döndü Sahin, M. H. Johnson, B. Slater, JG. Barreto, N.A Tyler, M.G Thompson.

ID 136. Optofluidic Integrated Sensor on Glass for Harsh Environment Measurements: Case of Plutonium (VI) in Nitric Acid

ID 140. Multiplexed photonic nanointerferometric biosensors in silicon nitride platform for ultrasensitive analysis
Laura M. Lechuga, Adrián Fernández-Gavela, Daniel Grajales, Roger Guiu, Carlos Dominguez.

21:00  GALA DINNER
SCIENTIFIC PROGRAM
FRIDAY, 1 JUNE 2018

08:00 to 09:00  WELCOME & REGISTRATION

09:00 to 10:00  1.A / Biophotonics & lab on a chip & 1.B / RF & THz photonics.

1.A / Biophotonics & lab on a chip

26-IP  Jaime García (Nanophotonics Technology Center), “High sensitivity photonic configurations for biochemical detection”.

138-RP  Towards Photonic Biosensing using a Three-Port Mach-Zehnder Interferometer in a Silicon Nitride Platform

125-RP  Ultra-compact label-free silicon-nanoantenna-based optofluidic microflow cytometer with a high signal-to-noise ratio

28-IP  Balpreet S. Ahluwalia (University of Norway), “Optical Functions and Lab-on-a-Chip for Microparticles and Biomedicine”

Panel Session “How to increase the female presence in integrated optics”

1.B / RF & THz photonics

66-RP  Analysis of the Operation of an Integrated Unidirectional Phase Modulator.

67-RP  Low loss transmission lines in COBRA generic photonic integration platform.

29-IP  Guillermo Carpintero (Universidad Carlos III), “The future of THz integrated photonics”

91-RP  Integrated Passband Optical Filter with High-Order Phase-Shifted Bragg Grating in Silicon-on-Insulator Technology

101-RP  Silicon Micro-ring Resonator Integrated in an Optoelectronic Oscillator System

23-IP  Jie Sun (Intel Corporation), “Silicon photonics phased arrays”

11:00 to 11:30  COFFEE BREAK
11:30 to 13:00  Plenary “Science & research highlights”


16-IP  Weidong Zhou (Univ. Texas Arlington), “Printed active hybrid photonic crystal devices for 3D integrated photonics”

31-IP  J. Capmany, (Universitat Politècnica de València), “European research programmes on integrated microwave photonics”

16-IP  Weidong Zhou (Univ. Texas Arlington), “Printed active hybrid photonic crystal devices for 3D integrated photonics”.

31-IP  J. Capmany, (Universitat Politècnica de València), “European research programmes on integrated microwave photonics”

13:00 to 13:30  ECIO 2018 CLOSING CEREMONY

13:30 to 15:00  LUNCH
ECIO 2018 EXHIBITION

5 stands of 6 sqm (3 x 2) and 10 stands of 4 sqm (2 x 2).
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