

Optics + Photonics

2018

TECHNICAL PROGRAM

Your complete guide to conferences, courses, and special events.

Conferences and Courses

19-23 August 2018

Exhibition

21-23 August 2018

San Diego Convention Center
San Diego, California, USA

SESSION 3

LOCATION: CONV. CTR. ROOM 28A .. THU 11:40 AM TO 12:30 PM

Semiconductor Nanowire Photodetectors

Session Chair: **José Luis Pau Vizcaíno**, Univ. Autónoma de Madrid (Spain)

11:40 am: **Engineering semiconductor nanowires for photodetection: from visible to terahertz** (*Invited Paper*), Hannah J. Joyce, Jack A. Alexander-Webber, Univ. of Cambridge (United Kingdom); Kun Peng, Univ. of Oxford (United Kingdom); Patrick Parkinson, The Univ. of Manchester (United Kingdom); Hoe Tan, Chennupati Jagadish, The Australian National Univ. (Australia); Michael B. Johnston, Univ. of Oxford (United Kingdom) [10729-7]

12:10 pm: **III-nitride nanowire photodetectors**, Akhil Ajay, Maria Spies, CEA-INAC (France); Jonas Lähnemann, Paul-Drude-Institut für Festkörperelektronik (Germany); Jakub Polaczynski, Martien den-Hertog, Institut NÉEL, CNRS (France); Eva Monroy, CEA-INAC (France) [10729-8]

Exhibition/Lunch Break Thu 12:30 pm to 1:50 pm

SESSION 4

LOCATION: CONV. CTR. ROOM 28A THU 1:50 PM TO 3:40 PM

Avalanche Photodiodes and Single Photon Counters

Session Chair: **Chee Hing Tan**, The Univ. of Sheffield (United Kingdom)

1:50 pm: **Large-format image sensors based on custom Geiger-mode avalanche photodiode arrays** (*Invited Paper*), Brian F. Aull, Erik K. Duerr, Jonathan P. Frechette, Alexander McIntosh, Daniel R. Schuette, Richard D. Younger, MIT Lincoln Lab. (USA) [10729-9]

2:20 pm: **InGaAsP/InP Geiger-mode APD-based lidar** (*Invited Paper*), Xudong Jiang, Mark A. Itzler, Mark Entwistle, Sam Wilton, Igor Kudryashov, Jack Kotelnikov, Brian Piccione, Mark Owens, Krys Slomkowski, Argo AI, LLC (USA) . . . [10729-10]

2:50 pm: **Analysis of negative differential conductance in a GaN/AlN multi-quantum-well avalanche photodiode**, Wangping Wang, Microsystem & Terahertz Research Ctr. (China) and China Academy of Engineering Physics (China); Lai Wang, Tsinghua Univ. (China); Mo Li, Qian Li, Jianbin Kang, Microsystem & Terahertz Research Ctr. (China); Yi Luo, Tsinghua Univ. (China); Jian Zhang, Microsystem & Terahertz Research Ctr. (China) [10729-11]

3:10 pm: **Quantum light manipulation: a path towards efficient pure room-temperature single photon sources** (*Invited Paper*), Hamza Abudayyeh, Ronen Rapaport, The Hebrew Univ. of Jerusalem (Israel) [10729-12]

Coffee Break Thu 3:40 pm to 4:00 pm

SESSION 5

LOCATION: CONV. CTR. ROOM 28A . . . THU 4:00 PM TO 5:40 PM

Light Detection Integrated Systems

Session Chair: **Hannah J. Joyce**, Univ. of Cambridge (United Kingdom)

4:00 pm: **Al_{0.85}Ga_{0.15}As_{0.56}Sb_{0.44} avalanche photodiodes with high immunity to temperature fluctuation**, Salman Abdullah, Chee Hing Tan, Lucas L. G. Pinel, Jo Shien Ng, The Univ. of Sheffield (United Kingdom) [10729-22]

4:20 pm: **On-chip and remote sensing with quantum cascade laser and detector systems** (*Invited Paper*), Gottfried Strasser, Benedikt Schwarz, Borislav Hinkov, Rolf Szedlak, Hermann Detz, Aaron M. Andrews, Werner Schrenk, Technische Univ. Wien (Austria) [10729-13]

4:50 pm: **Liquid crystal based tunable PIN-photodiodes for detection around 1.55- μ m** (*Invited Paper*), Christophe Levallois, Cyril Paranthoën, Institut National des Sciences Appliquées de Rennes (France); Benattou Sadani, Thierry Camps, Benjamin Boisnard, Lab. d'Analyse et d'Architecture des Systèmes du CNRS (France); Salvatore Pes, Institut National des Sciences Appliquées de Rennes (France); Sophie Bouchoule, Ctr. de Nanosciences et de Nanotechnologies, CNRS (France); Laurent Dupont, IMT Atlantique Bretagne-Pays de la Loire (France); Jean-Baptiste Doucet, Veronique Bardinal, Lab. d'Analyse et d'Architecture des Systèmes du CNRS (France) [10729-14]

5:20 pm: **Multi-color and multi-angle anti-reflection coating with silicon micro lens photodiode for image sensor**, Han Li, Stan Micinski, Nirav Dharia, Ulrich Boettiger, ON Semiconductor (USA) [10729-15]



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