

Authors	Title	Topic
Hamza Abudayyeh, Boaz Lubotzky, Somak Majumder, Niko Nikolay, Jennifer Hollingsworth, Oliver Benson and Ronen Rapaport	Quantum light manipulation: A path towards efficient pure room-temperature single photon sources	Sources
Kejin Wei, Nora Tischler, Si-Ran Zhao, Yu-Huai Li, Juan Miguel Arrazola, Yang Liu, Weijun Zhang, Hao Li, Lixing You, Zhen Wang, Yu-Ao Chen, Barry Sanders, Qiang Zhang, Geoff Pryde, Feihu Xu and Jian-Wei Pan	Experimental Quantum Switching for Exponentially Superior Quantum Communication Complexity	Applications
Sergey Polyakov, Ivan Burenkov, M.V. Jabir and Abdella Battou	First quantum-measurement-inspired, scalable communication protocol and its experimental demonstration	Metrology
Tina Müller, Matthew Anderson, Jan Huwer, Joanna Skiba-Szymanska, Andrey Krysa, Mark Stevenson, Jon Heffernan, David Ritchie and Andrew Shields	Quantum teleportation using highly coherent emission from telecom C-band quantum dots	Sources
Sebastian Ecker, Frédéric Bouchard, Lukas Bulla, Florian Brandt, Oskar Kohout, Fabian Steinlechner, Robert Fickler, Mehul Malik, Yelena Guryanova, Rupert Ursin and Marcus Huber	Overcoming noise in entanglement distribution through high-dimensional encoding	Sources
Joel Grim, Allan Bracker, Maxim Zalalutdinov, Samuel Carter, Alexander Kozen, Mijin Kim, Chul Soo Kim, Jerome Mlack, Michael Yakes, Bumsu Lee and Daniel Gammon	Three-Quantum-Dot Superradiance in a Photonic Crystal Waveguide Enabled by Scalable Strain Tuning	Sources
Gobinath Jegannathan, Hans Ingelbergs and Maarten Kuiken	Current-assisted single photon avalanche diode(CASPAD) in 350 nm CMOS	Detectors
Mohsen Falamarzi Askarani, Marcel.Li Grimau Puigibert, Jacob H. Davidson, Thomas Lutz, Gustavo C. Amaral, Daniel Oblak and Wolfgang Tittel	Entanglement and non-locality between disparate solid-state quantum memories mediated by photons	Applications
Timm Kupko, Lucas Rickert, Martin V. Helversen, Alexander Schlehahn, Sven Rodt, Christian Schneider, Sven Höfling, Markus Rau, Harald Weinfurter, Stephan Reitzenstein and Tobias Heindel	Single-Photon QKD using Engineered Solid-State Quantum-Light Sources	Sources
Carlos Anton Solanas, Juan Loredo, Guillaume Coppola, Niko Viggianiello, Hélène Ollivier, Abdelmounaim Harouri, Niccolo Somaschi, Andrea Crespi, Isabelle Sagnes, Aristide Lemaitre, Loïc Lanço, Roberto Osellame, Fabio Sciarrino and Pascale Senellart	Scalable interfacing of quantum photonic platforms: solid-state single-photon sources and reconfigurable photonic circuits	Sources
Saverio Francesconi, Florent Baboux, Arnault Raymond, Nicolas Fabre, Aristide Lemaitre, Perola Milman, Maria Amanti and Sara Ducci	Engineering two-photon wavefunction and exchange statistics in a semiconductor chip	Sources
Simon Grosser	Single-Photon Detectors based on CSPAD technology	Detectors
Dmitry Tabakaev, Geraldine Haack, Hugo Zbinden and Robert Thew	Entangled two-photon absorption and the quantum advantage in sensing	Applications
Leonardo Gasparini, Majid Zarghami, Matteo Perenzoni, Luca Parmesan, Manuel Moreno Garcia, Valentín Mitev, Laurent Baled, Nicolas Torcheboef, Dmitri Boiko, Manuel Unternährer, Bänz Bessire and André Stefanov	CMOS-SPAD arrays for Quantum Imaging Applications	Detectors
Rachael Tobin, Aongus McCarthy, Abderrahim Halimi, Julian Tachella, Yoann Altmann, Martin Laurenzis, Frank Christnacher, Philip Soan, Kenneth McEwan, Stephen McLaughlin and Gerald Buller	Depth imaging through obscurants using single photon detection in the short-wave infrared	Applications
Sviatoslav Ditalia Tchernij, Jacopo Forneris, Natko Skulan, Milko Jaksic, Giampiero Amato, Luca Boarino, Ivo Degiovanni, Emanuele Enrico, Ekaterina Moreva, Paolo Traina, Marco Genovese and Paolo Olivero	Electrical control of Nitrogen – Vacancy centers in diamond	Sources
Sacha Schwarz, Jean-Philippe MacLean and Kevin Resch	Reconstructing ultrafast energy-time entangled two-photon pulses	Metrology
Aurora Maccarone, Aongus McCarthy, Julián Tachella, Francesco Mattioli Della Rocca, Yoann Altmann, Stephen McLaughlin, Robert Henderson and Gerald Buller	Three dimensional imaging of dynamic underwater scenes using single photon detection	Applications
Fabrizio Piacentini, Alessio Avella, Enrico Rebufello, Salvatore Virzì, Muriel de Souza, Rudi Lussana, Federica Villa, Alberto Tosi, Marco Gramegna, Giorgio Brida, Matteo Paris, Eliahu Cohen, Jan Dziewior, Lev Vaidman, Ivo Pietro Degiovanni and Marco Genovese	New Frontiers in Quantum Measurement: Protective Measurement, Genetic Quantum Measurement and Robust Weak Measurement	Metrology
David Fuster, José M. Llorens, Yolanda González and Benito Alén	Development of a plug&play single photon source using electro-optical pumping schemes	Metrology
Anna Paterova, Hongzhi Yang, Chengwu An, Dmitry Kalashnikov and Leonid Krivitskiy	Infrared metrology with visible light	Metrology
Søren Wengerowsky, Siddarth Koduru Joshi, Fabian Steinlechner, Julien R. Zichi, Sergiy M. Dobrovolsky, Rene van der Molen, Johannes W. N. Los, Val Zwiller, Marijn A. M. Versteegh, Alberto Mura, Davide Calonico, Massimo Inguscio, Bo Liu, Thomas Scheidl, Hannes Hübel, Anton Zeilinger, André Xuereb and Rupert Ursin	Entanglement distribution via a submarine fiber in the Mediterranean	Applications
Soeren Wengerowsky, Siddarth Koduru Joshi, Fabian Steinlechner, Hannes Hübel and Rupert Ursin	An entanglement-based wavelength-multiplexed Quantum Communication Network	Applications
Andrew White	Realtime photon-number resolution & Imaging via photon counting	Applications
Francesco Ceccarelli, Simone Atzeni, Francesco Pellegatta, Andrea Crespi and Roberto Osellame	Low-power reconfigurable photonic integrated circuits fabricated by femtosecond laser micromachining	Applications
Alessia Scriminich, Mael Flament, Sonali Gera, Youngshin Kim, Mehdi Namazi, Steven Sagona-Stophei, Giuseppe Vallone, Paolo Villoresi and Eden Figueroa	Hong-Ou-Mandel interference of polarization qubits stored in independent room-temperature quantum memories	Applications
Francesco Graffitti, Peter Barro, Alexander Pickston, Massimiliano Proietti, Dmytro Kundys, Agata Branczyk and Alessandro Fedrizzi	Direct generation of tailored ultrafast entanglement	Sources
Majid Zarghami, Leonardo Gasparini, Matteo Perenzoni and Lucio Pancheri	A Novel Approach to High Dynamic Range Imaging with CMOS-SPADs	Detectors
Claire Marvinney, Matthew Feldman and Benjamin Lawrie	Toward control of the quantum state of hBN single-photon emitters	Sources
Atul Ingle, Andreas Velten and Mohit Gupta	Towards General-Purpose Passive Imaging with Single-Photon Sensors	Applications
Zheng-Da Li, Rui Zhang, Xu-Fei Yin, Li-Zheng Liu, Yi Hu, Yu-Qiang Fang, Yue-Yang Fei, Xiao Jiang, Jun Zhang, Feihu Xu, Yu-Ao Chen and Jian-Wei Pan	Experimental quantum repeater without quantum memory	Applications
Mikolaj Lasota, Marta Misiaszek and Piotr Kolenderski	Reliable estimation of the statistics of photons emitted from an unknown source of light	Metrology
Hui Wang, Chao-Yang Lu and Jian-Wei Pan	Single photons for quantum technologies	Sources
Chan-Yong Park, Soohyun Baek, Jung-Hyun Kim, Bora Jeon, Seung-Chul Yang, Chulwoo Park and Seok-Beom Cho	Room temperature operation of InP/InGaAs single photon avalanche diode	Detectors
Takahiro Takumi, Fumihiro China, Masahiro Yabuno, Shigehito Miki, Hirotaka Terai and Ryosuke Shimizu	Time-resolved measurement of a single-photon wave packet with an optical Kerr effect	Detectors
Zi-Heng Xiang, Jan Huwer, Mark Stevenson, Joanna Skiba-Szymanska, Martin B. Ward, Ian Farrer, David Ritchie and Andrew Shields	Network Integration of Quantum Dot Device and Entanglement in Cambridge Fiber Network	Applications
Gerald Buller	Planar Geometry Ge-on-Si Single-Photon Avalanche Diode Detectors for the Short-Wave Infrared	Detectors
Jelmer Renema	Imperfect Gaussian Boson Sampling is Classically Simulable	Applications
Kaisa Laiho, Marco Schmidt, Holger Suchomel, Martin Kamp, Sven Höfling, Christian Schneider, Joern Beyer, Gregor Weihs and Stephan Reitzenstein	Characterizing heralded single photons from a Bragg-reflection waveguide loss-tolerantly via moment generating function	Metrology
Fabio Acerbi, Massimo Capasso, Alberto Mazzi, Giovanni Paternoster, Nicola Zorzi and Alberto Gola	Silicon photomultipliers optimized for cryogenic temperatures	Detectors
Samuele Grandi, Jelena Rakonjac, Dario Lago-Rivera, Alessandro Seri and Hugues de Riedmatten	Towards long distance entanglement between a photon and a solid-state quantum memory	Applications
Daniele Cozzolino, Emanuele Polino, Mauro Valeri, Gonzalo Carvacho, Davide Bacco, Nicolò Spagnolo, Leif Katsuo Oxenløwe and Fabio Sciarrino	Hybrid entanglement distribution through an air-core fiber	Applications
Gabriella Musarra, Alex Turpin, Illya Starshynov, Ashley Lyons, Enrico Conca, Federica Villa and Daniele Faccio	Single-photon, single-pixel intelligent Lidar	Applications
Matteo Salomon, Etienne Auffray, Paul Lecoq, Stefan Enoch, Alberto Gola, Stefan Gundacker, Marco Toliman Lucchini, Alberto Mazzi and Marco Paganoni	Future perspective of SiPM technology	Detectors

Ross Schofield, Sébastien Boissier, Lin Jin, Anna Ovyan, Salahuddin Nur, Kyle Major, Frank Koppens, Costanza Toninelli, Wolfram Pernice, Ed Hinds and Alex Clark	Nanophotonic waveguide coupling to organic molecules in micro-capillaries	Sources
Dakota Starkey, Jiaju Ma, Abhiram Gnanasambandam, Omar Elgendy, Stanley Chan and Saleh Masoodian	Room Temperature Photon-number-resolving Color Imaging without Avalanche Gain	Detectors
Mariella Minder, Mirko Pittaluga, George Roberts, Marco Lucamarini, James Dynes, Zhiqiang Yuan and Andrew Shields	Experimental quantum key distribution beyond the repeaterless secret key capacity	Applications
Varun Verma, Emma Wollman, Adriana Lita, Boris Korzh, Matthew Shaw, Richard Mirin and Sae Woo Nam	Kilopixel arrays of superconducting nanowire single-photon detectors	Detectors
Colin P. Lualdi, Fumihiro Kaneda, Joseph C. Chapman and Paul G. Kwiat	High-Efficiency Time-Multiplexed Single-Photon Source	Sources
Hélène Ollivier, Ilse Maillette, Guillaume Coppola, Stephen Wein, Paul Hilaire, Abdelmouain Harouri, Aristide Lemaitre, Isabelle Sagnes, Loïc Lanco, Sarah Thomas, Juan Loredo, Carlos Anton, Niccolò Somaschi and Pascale Senellart	Quantum dot based single photon sources: performance reproducibility	Metrology
Eric Fossum, Jiaju Ma and Stanley Chan	Quanta Image Sensor Progress Review	Detectors
Martin Laurenzis, Stephane Schertzer, Emmanuel Bacher and Frank Christnacher	Computational imaging with SPADs at SWIR wavelengths	Applications
Ya-Li Mao, Qi-Chao Sun, Qiang Zhang, Jingyun Fan and Jian-Wei Pan	Error-Disturbance Trade-off in Sequential Quantum Measurements	Metrology
Marco Avesani, Davide G. Marangon, Hamid Tebyanian, Giuseppe Vallone and Paolo Villoresi	Practical Source-Device-Independent Quantum random number generators	Applications
Peter Connolly, Gerald Buller, Yash Shah and David Cumming	Multispectral single-photon imaging using high efficiency plasmonic metasurface filters	Applications
Jeremy Adcock, Caterina Vigliar, Samuel Morley-Short, Raffaele Santagati, Josh Silverstone and Mark Thompson	Programmable multi-photon graph states on a silicon chip	Applications
Giorgio Tortarolo, Marco Castello, Sami Koho, Mauro Buttafava, Eli Slenders, Alessandro Rossetta, Paolo Bianchini, Federica Villa, Alberto Diaspro, Alberto Tosi and Giuseppe Vicidomini	Towards Single-Photon Microscopy: Exploiting Extra Spatio-Temporal Information Provided by SPAD Array Detectors in Laser Scanning Microscopy	Applications
Sofiane Haffouz	InAsP quantum dot nanowires for telecom single photon emission	Sources
Matthieu Perrenoud, Misael Caloz, Claire Autebert, Christian Schonenberger, Hugo Zbinden and Félix Bussières	High detection rate and high efficiency with parallel SNSPDs	Detectors
Christopher Chunniall, Elizabeth Laier-English, Anthony Vaquero-Stainer and Adrian Wonfor	Investigations towards transmitting time and QKD signals over the same optical fibre	Metrology
Glenn Solomon, Tobias Huber, Markus Müller, Yichen Shuai and Marcelo Davanco	Filter-free single-photon emission in an integrated cavity-waveguide device	Sources
Sonia Buckley, Jeffrey T. Chiles, Adam N. McCaughan, Alex N. Tait, Richard P. Mirin, Sae Woo Nam and Jeffrey M. Shainline	Progress in superconducting optoelectronic networks for neuromorphic computing	Detectors
Alessandro Gaggero, Francesco Martini, Francesco Mattioli, Fabio Chiarello, Robert Cernansky, Alberto Politi and Roberto Leoni	SNSPD readout using the amplitude multiplexing approach	Detectors
Caterina Vigliar, Daniel Llewellyn, Benjamin Slater, Beatrice Da Lio, Stefano Paesani, Jorge Barreto, Dondu Sahin, John Rarity, Leif Katsuo Oxenløwe, Karsten Rottwitt, Jianwei Wang, Yunhong Ding, Mark Thompson, Davide Bacco and Massimo Borghi	High-Dimensional Chip-to-Chip Entanglement Distribution through Multicore Fibres	Applications
Asimina Arvanitaki, Masha Baryakhtar, Karl Berggren, Ilya Charaev, Jeff Chiles, Marco Colangelo, Andrew Dane, Junwu Huang, Robert Lasenby, Sae Woo Nam, Ken Van Tillburg and Varun Verma	Nanowire Detection of Photons from the Dark Side	Applications
Enrico Conca, Vincenzo Sesta, Federica Villa, Mauro Buttafava, Simone Tisa, Alberto Dalla Mora, Davide Contini, Alessandro Torricelli, Antonio Pifferi, Laura Di Sieno, Paola Taroni, Franco Zappa and Alberto Tosi	Wide-area fast-gated single-photon detector with integrated TDC for near-infrared spectroscopy applications	Detectors
Lynden Shalm, Yanbao Zhang, Mohammad Alhejji, Michael Mazurek, Martin Stevens, Carlos Abellán, Morgan Mitchell, Sae Woo Nam and Emanuel Knill	Certified Randomness Expansion using a Loophole-Free Bell Test	Metrology
Gautam Kavuri, Martin Stevens, Paul Kwiat, Saewoo Nam and Lynden Shalm	Towards a loophole-free Bell experiment on a tabletop	Applications
Segolene Olivier, Corrado Sciancalepore, El Dirani Houssein, Karim Hassan, Raouia Rhazi, Costantino Agnesi, Giuseppe Vallone, Davide Bacco, Yunhong Ding, Karsten Rottwitt, Frederico Sabattoli, Matteo Galli and Daniele Bajoni	Towards an integrated quantum photonics platform on silicon for secured communications	Applications
Giulia Acconcia, Angelo Gulinatti, Massimo Ghioni and Ivan Rech	Fully integrated electronics for high-performance and high-speed acquisition with Single Photon Avalanche Diodes	Detectors
Devin Hugh Smith, David S. Phillips, Paolo Mennea, Varun B. Verma, Adriana Lita, Thomas Gerrits, Richard P. Mirin, Rex H.S. Bannerman, Paul C. Gow, Jelmer Renema, Robert J.A. Francis-Jones, Raj B. Patel, Santiago Sempere-Llagostena, Peter G.R. Smith, Sae Woo Nam, Ian A. Walmsley and James C. Gates	Multiplexed Superconducting Nanowire Single-Photon Detectors on UV-Written Silica Waveguides	Detectors