

<b>TITLE</b>	<b>AUTHOR(s)</b>	<b>Journal</b>	<b>Year</b>
"Single-pixel infrared and visible microscope"	N. Radwell, K. J. Mitchell, G. M. Gibson, M. P. Edgar, R. W. Bowman and M. J. Padgett	Optica	<b>2014</b>
"A fast 3D reconstruction system with a low-cost camera accessory"	Y. Zhang, G. M. Gibson, R. Hay, R. W. Bowman, M. J. Padgett, M. P. Edgar	Scientific Reports	<b>2015</b>
"Amorphous molybdenum silicon superconducting thin films"	D. Bosworth, S.-L. Sahonta, R. H. Hadfield, Z. H. Barber	AIP Advances	<b>2015</b>
"Development of a 3D printer using scanning projection stereolithography"	M. P. Lee, G. J. T. Cooper, T. Hinkley, G. M. Gibson, M. J. Padgett, L. Cronin	Scientific Reports	<b>2015</b>
"Divergence of an orbital-angular-momentum-carrying beam upon propagation"	M. J. Padgett, F. M. Miatto, M. Lavery, A. Zeilinger, R. W. Boyd	New Journal of Physics	<b>2015</b>
"Generalized photon sieves: fine control of complex fields with simple pinhole arrays"	R. Liu, F. Li, M. J. Padgett, D. B. Phillips	Optica	<b>2015</b>
"High-dimensional quantum cryptography with twisted light"	M. Mirhosseini, O. S. Magaña-Loaiza, M. N. O'Sullivan, B. Rodenburg, M. Malik, M. P. J. Lavery, M. J. Padgett, D. J. Gauthier, R. W. Boyd	New Journal of Physics	<b>2015</b>
"Image retrodiction at low light levels"	M. Sonnleitner, J. Jeffers and S. M. Barnett	Optica	<b>2015</b>
"Imaging with a small number of photons"	P. A. Morris, R. S. Aspden, J. E. C. Bell, R. W. Boyd and M. J. Padgett	Nature Communications	<b>2015</b>
"More than meets the eye"	M. Edgar, M. J. Padgett, D. Faccio, J. Leach	Physics World	<b>2015</b>
"Nanoantenna enhancement for telecom-wavelength superconducting single photon detectors"	R. M. Heath, M. G. Tanner, T. D. Drysdale, S. Miki, V. Giannini, S. A. Maier, R. H. Hadfield	Nano Letters	<b>2015</b>
"Near video-rate linear Stokes imaging with single-pixel detectors"	S. S. Welsh, M. P. Edgar, R. Bowman, B. Sun and M. J. Padgett	Journal of Optics	<b>2015</b>
"Optical Metrology with Lights Orbital Angular Mometum"	M. P. Lavery, D. Robertson, F. Speirits, S. Barnett, M. J. Padgett	Frontiers in Optics	<b>2015</b>

"Photon-sparse microscopy: visible light imaging using infrared illumination"	R. S. Aspden, N. R. Gemmell, P. A. Morris, D. S. Tasca, L. Mertens, M. G. Tanner, R. A. Kirkwood, A. Ruggeri, A. Tosi, R. W. Boyd, G. S. Buller, R. H. Hadfield and M. J. Padgett	Optica	<b>2015</b>
"Precision Metrology Using Weak Measurements"	L. Zhang, A. Datta, and I. A. Walmsley	Physical Review Letters	<b>2015</b>
"Quantum-enhanced tomography of unitary processes"	X.-Q. Zhou, H. Cable, R. Whittaker, P. Shadbolt, J. L. O'Brien, and J. C. F. Matthews	Optica	<b>2015</b>
"Simultaneous real-time visible and infrared video with single-pixel detectors"	M. P. Edgar, G. M. Gibson, R. W. Bowman, B. Sun, N. Radwell, K. J. Mitchell, S. S. Welsh and M. J. Padgett	Scientific Reports	<b>2015</b>
"Single-photon sensitive light-in-flight imaging"	G. Gariepy, N. Krstajic, R. Henderson, C. Li, R. R. Thomson, G. S. Buller, B. Heshmat, R. Raskar, J. Leach and D. Faccio	Nature Communications	<b>2015</b>
"Spatially structured photons that travel in free space slower than the speed of light"	D. Giovannini, J. Romero, V. Potocek, G. Ferenczi, F. Speirits, S. M. Barnett, D. Faccio, M. J. Padgett	Science	<b>2015</b>
"Trans-spectral Ghost Microscopy"	R. Aspden, N. R. Gemmell, P. Morris, D. S. Tasca, L. Mertens, M. G. Tanner, R. A. Kirkwood, A. Ruggeri, A. Tosi, R. W. Boyd, G. S. Buller, R. H. Hadfield, and M. J. Padgett	Optical Society of America	<b>2015</b>
"Two-photon interference at telecom wavelengths for time-bin entangled single photons from quantum-dot spin qubits"	L. Yu, C. M. Natarajan, T. Horikiri, C. Langrock, J. S. Pelc, M. G. Tanner, E. Abe, S. Maier, C. Schneider, S. Höfling, M. Kamp, R. H. Hadfield, M. M. Fejer, Y. Yamamoto	Nature Communications	<b>2015</b>
"Underwater depth imaging using time-correlated single-photon counting"	A. Maccarone, A. McCarthy, X. Ren, R. E. Warburton, A. M. Wallace, J. Moffat, Y. Petillot, and G. S. Buller	Optics Express	<b>2015</b>
"256×256, 100kfps, 61% Fill-factor time-resolved SPAD image sensor for microscopy applications"	I. Gyongy, N. Calder, A. Davies, N. Dutton, P. A. Dalgarno, R. R. Duncan, C. Rickman, R. Henderson		<b>2016</b>

"A comparison of singlet oxygen explicit dosimetry (SOED) and singlet oxygen luminescence dosimetry (SOLD) for photofrin-mediated photodynamic therapy"	M. M. Kim, R. Penjweini, N. R. Gemmell, I. Veilleux, A. McCarthy, G.S Buller, R.H Hadfield, B.C Wilson, T.C Zhu		<b>2016</b>
"A Comparison of Singlet Oxygen Explicit Dosimetry (SOED) and Singlet Oxygen Luminescence Dosimetry (SOLD) for Photofrin-Mediated Photodynamic Therapy."	M. M. Kim, R. Penjweini, N. R. Gemmell, I. Veilleux, A. McCarthy, G. S. Buller, R. H. Hadfield, B. C. Wilson, T.C. Zhu	Cancers	<b>2016</b>
"Backside illuminated SPAD image sensor with 7.83 $\mu$ m pitch in 3D-stacked CMOS technology"	T. Al Abbas, N. Dutton, O. Almer, S. Pellegrini, Y Henrion, R. Henderson		<b>2016</b>
"Chiral rotational spectroscopy"	R. Cameron, J. Götte, S. Barnett	Physical Review A	<b>2016</b>
"Comparing the information capacity of Laguerre–Gaussian and Hermite–Gaussian modal sets in a finite-aperture system"	S. Restuccia, D. Giovannini, G. M. Gibson, M. J. Padgett	Optics Express	<b>2016</b>
"Computational imaging with adaptive spatially-variable resolution"	D.B. Phillips, M.J. Sun, M. Edgar, J. Taylor, G. Gibson, S. Barnett and M. J. Padgett	Proceedings from Frontiers in Optics, Optical Society of America	<b>2016</b>
"Detection and tracking of moving objects hidden from view"	G. Gariepy, F. Tonolini, R. Henderson, J. Leach and D. Faccio	Nature Photonics	<b>2016</b>
"Detection–dependent six–photon Holland–Burnett state interference"	R. B. Jin, M. Fujiwara, R. Shimizu, R.J. Collins, G.S. Buller, T. Yamashita, S. Miki, H. Terai, M. Takeoka and M. Sasaki	Scientific Reports	<b>2016</b>
"Development of InSb dry etch for mid-IR applications"	V. Pusino, C. Xie, A. Khalid, I. Thayne and D.R.S. Cumming	Microelectronic Engineering	<b>2016</b>
"Direct measurement of large-scale quantum states via expectation values of non-Hermitian matrices"	E. Bolduc, G. Gariepy, J. Leach	Nature Communications	<b>2016</b>

"First-Photon 3D Imaging with a Single-Pixel Camera"	M. Edgar, M.J. Sun, G. Spalding, G. Gibson and M. J. Padgett	Proceedings from Frontiers in Optics, Optical Society of America	<b>2016</b>
"Gaussian systems for quantum-enhanced multiple phase estimation"	C. Gagatsos, D. Branford, A. Datta	Physical Review A	<b>2016</b>
"Ghost Imaging"	M. J. Padgett, R. Aspden, G. Gibson, M. Edgar and G. Spalding	Optics and Photonics News	<b>2016</b>
"High-speed spatial control of the intensity, phase and polarisation of vector beams using a digital micro-mirror device"	K. J. Mitchell, S. Turtaev, M. J. Padgett, T. Cizmar, D. B. Phillips		<b>2016</b>
"High-speed spatial control of the intensity, phase and polarisation of vector beams using a digital micro-mirror device"	K. Mitchell, S. Turtaev, M. J. Padgett, T. Čížmár, D. Phillips	Optics Express	<b>2016</b>
"Holographic tracking and sizing of optically trapped microprobes in diamond anvil cells"	F. Saglimbeni, S. Bianchi, G. Gibson, R. Bowman, M. J. Padgett, R. Di Leonardo	Optics Express	<b>2016</b>
"Image processing applied to photon sparse data"	L. Mertens, M. Sonnleitner, J. Leach, M. Agnew and M. J. Padgett	Proceedings from Frontiers in Optics, Optical Society of America	<b>2016</b>
"Improving the signal-to-noise ratio of single-pixel imaging using digital microscanning"	M. Sun, M. P. Edgar, G. M. Gibson, M. J. Padgett	Optics Express	<b>2016</b>
"Long Distance Free-Space Propagation of Light Carrying Orbital Angular Momentum"	M. P. Lavery, C. Peuntinger, K. Guentner, T. Bauer, P. Banze, D. Elser, R. W. Boyd, M. J. Padgett, C. Marquardt and G. Leuchs	Proceedings from Applications of Lasers for Sensing and Free Space Communications, Optical Society of America	<b>2016</b>

"Matter-wave grating distinguishing conservative and dissipative interactions"	R. Cameron, J. Götze, S. Barnett, J. Cotter	Physical Review A	<b>2016</b>
"Non-diffractive computational ghost imaging"	D. Phillips, R. He, Q. Chen, G. M. Gibson, M. J. Padgett	Optics Express	<b>2016</b>
"Noninvasive, near-field terahertz imaging of hidden objects using a single-pixel detector."	R. I. Stantchev, B. Sun, S. M. Hornett, P. A. Hobson, G. M. Gibson, M. J. Padgett, E. Hendry	New Journal of Physics	<b>2016</b>
"Observation of image pair creation and annihilation from superluminal scattering sources"	M. Clerici, G. C. Spalding, R. Warburton, A. Lyons, C. Aniculaesei, J. M. Richards, J. Leach, R. Henderson, D. Faccio	Science Advances	<b>2016</b>
"On the natures of the spin and orbital parts of optical angular momentum"	S. Barnett, L. Allen, R. Cameron, C. Gilson, M. J. Padgett, F. Speirits, A. Yao	Journal of Optics	<b>2016</b>
"Phase-contrast ghost imaging using an orbital angular momentum phase-filter"	P.A. Morris, R. Aspden, R. He, Q. Chen and M. J. Padgett	Proceedings from Laser Science, Optical Society of America,	<b>2016</b>
"Picosecond laser ranging at wavelengths up to 2.4 $\mu\text{m}$ using an InAs avalanche photodiode"	S. Butera, P. Vines, I. Sandall, C. H. Tan, and G. S. Buller	Electronics Letters	<b>2016</b>
"Quantum Enhanced Estimation of a Multidimensional Field"	T. Baumgratz, A. Datta	Physical Review Letters	<b>2016</b>
"Quantum Information with Structured Light"	M. Mirhosseini, O. S. Magana-Loaiza, M. N. O'Sullivan, B. Rodenburg, Z. Shi, M. Malik, M. P. Lavery, M. J. Padgett, D. J. Gauthier and R. W. Boyd	Proceedings from Laser Science, Optical Society of America,	<b>2016</b>

"Roadmap on structured light"	H. Rubinsztein-Dunlop, A. Forbes, M.V. Berry, M.R. Dennis, D. L. Andrews, M. Mansuripur, Cornelia Denz, C. Alpmann, P. Banzer, T. Bauer, E. Karimi, L. Marrucci, M. J. Padgett, M. Ritsch-Marte, N. M Litchinitser, N. P. Bigelow, C. R.-Guzmán, A. Belmonte, J.P. Torres, T. W. Neely, M. Baker, R. Gordon, A. B. Stilgoe, J. Romero, A. G. White, R. Fickler, A. E. Willner, G. Xie, B. McMorrán and A. M Weiner	Journal of Optics	<b>2016</b>
"Robust Bayesian Target Detection Algorithm for Depth Imaging From Sparse Single-Photon Data"	Y. Altmann, X. Ren, A. McCarthy, G.S. Buller, S. McLaughlin	IEEE Transactions on Computational Imaging	<b>2016</b>
"Security against jamming and noise exclusion in imaging"	W. Roga, J. Jeffers	Physical Review A	<b>2016</b>
"Single-pixel three-dimensional imaging with time-based depth resolution."	M. P. Edgar, G. M. Gibson, B. Sun, N. Radwell, R. Lamb, M. J. Padgett	Nature Communications	<b>2016</b>
"Smart-aggregation imaging for single molecule localisation with SPAD cameras"	I. Gyongy, A. Davies, N. Dutton, R. R. Duncan, C. Rickman, R. Henderson and P. A. Dalgarno	Scientific Reports	<b>2016</b>
"Superconducting nanowire single-photon detectors with non-periodic dielectric multilayers"	T. Yamashita, K. Waki, S. Miki, R. A. Kirkwood, R. H. Hadfield, H. Terai	Scientific Reports	<b>2016</b>
"The conditions for the preservation of duality symmetry in a linear medium"	K. van Kruining, J. Götte	Journal of Optics	<b>2016</b>
"The transition from a coherent optical vortex to a Rankine vortex: beam contrast dependence on topological charge"	E. Toninelli, R. Aspden, D. Phillips, G. M. Gibson, M. J. Padgett	Journal of Modern Optics	<b>2016</b>
"Video recording true single-photon double-slit interference"	R. Aspden, M. J. Padgett, G. Spalding	American Journal of Physics	<b>2016</b>
"3um Pitch, 1um Active Diameter SPAD Arrays in 130nm CMOS Imaging Technology"	Z. You, L. Parmesan, S. Pellegrini, R. Henderson		<b>2017</b>

"8.25 $\mu$ m Pitch 66% Fill Factor Global Shared Well SPAD Image Sensor in 40nm CMOS FSI Technology"	T. Al Abbas, N. Dutton, O. Almer, F. Mattioli Della Rocca, S. Pellegrini, B. R. Rae, D. Golanski, R. Henderson		<b>2017</b>
"A 16.5 Giga Events/s 1024 $\times$ 8 SPAD Line Sensor with per-pixel Zoomable 50ps-6.4ns/bin Histogramming TDC"	A. Erdogan, R. Walker, N. Finlayson, N. Krstajic, G. O. S. Williams, R. Henderson		<b>2017</b>
"A 7Gbps integrated multiple input multiple output visible light communication demonstrator"	S. Rajbhandari, A.V.N. Jalajakumari, H. Chun, G. Faulkner, K. Cameron, R. Henderson, D. Tsonev, H. Haas, E. Xie, J.J.D. McKendry, J. Herrnsdorf, R. Ferreira, E. Gu, M.D. Dawson, D. O'Brien	Journal of Lightwave Technology	<b>2017</b>
"A Bayesian approach to denoising of single-photon binary images"	Y. Altmann, R. Aspden, M. J. Padgett, S. McLaughlin	IEEE Transactions on Computational Imaging	<b>2017</b>
"A compact fiber-optic probe-based singlet oxygen luminescence detection system."	N. R. Gemmell, A. McCarthy, M. M. Kim, I. Veilleux, T. C. Zhu, G. S. Buller, B. C. Wilson, R. H. Hadfield	Journal of biophotonics	<b>2017</b>
"A High Stability Optical Shadow Sensor with Applications for Precision Accelerometers"	S.G. Bramsiepe, D. Loomes, R.P. Middlemiss, D. J. Paul, G.D. Hammond	arXiv	<b>2017</b>
"A miniaturized 4 K platform for superconducting infrared photon counting detectors"	N.R Gemmell, M. Hills, T. Bradshaw, T. Rawlings, B. Green, R.M Heath, K. Tsimvradikis, S. Dobrovolskiy, V. Zwiller, S.N Dorenbos, M. Crook, R.H Hadfield	Superconductor Science and Technology	<b>2017</b>
"A Multigigabit per Second Integrated Multiple-Input Multiple-Output VLC Demonstrator"	S. Rajbhandari, A.V.N. Jalajakumari, H. Chun, G. Faulkner, K. Cameron, R. Henderson, D. Tsonev, H. Haas, E. Xie, J.J.D. McKendry, J. Herrnsdorf, R. Ferreira, E. Gu, M.D. Dawson, D. O'Brien	Journal of Lightwave Technology	<b>2017</b>
"A Russian Dolls ordering of the Hadamard basis for compressive single-pixel imaging"	M. J. Sun, L. T. Meng, M. P. Edgar, M. J. Padgett, N. Radwell	Scientific Reports	<b>2017</b>
"Absorption spectroscopy at the ultimate quantum limit from single-photon states"	R. Whittaker, C. Erven, A. Neville, M. Berry, J. L. O'Brien, H. Cable, J. C. F. Matthews	New Journal of Physics	<b>2017</b>

"Adaptive foveated single-pixel imaging with dynamic supersampling"	D. B. Phillips, M. Sun, J. M. Taylor, M. P. Edgar, S. M. Barnett, G. M. Gibson, M. J. Padgett	Science Advances	<b>2017</b>
"An introduction to ghost imaging: quantum and classical"	M. J. Padgett, R. W. Boyd	Philosophical Transactions of the Royal Society,	<b>2017</b>
"Atmospheric CO2 Sensing with a Random Modulation Continuous Wave Integrated Path Differential Absorption Lidar"	M. Quatrevalet, X. Ai, A. Pérez-Serrano, P. Adamiec, J. Barbero, A. Fix, J. Manuel G Tijero, I. Esquivias, J.G Rarity, G. Ehret	IEEE Journal of Selected Topics in Quantum Electronics	<b>2017</b>
"Ballistic and snake photon imaging for accurate location of optical endomicroscopy fibres"	M. S. Tanner, T. R. Choudhary, T. Craven, B. Mills, M. Bradley, R. Henderson, K. Dhaliwal, R. R. Thomson	Biomedical Optics Express	<b>2017</b>
"Bounding the quantum limits of precision for phase estimation with loss and thermal noise"	C. N. Gagatsos, B. A. Bash, S. Guha, A. Datta	Physical Review A	<b>2017</b>
"Characterization of amorphous molybdenum silicide (MoSi) superconducting thin films and nanowires"	A. Banerjee, L. J. Baker, A. Doye, M. Nord, R. M. Heath, K. Erotokritou, D. Bosworth, Z. H. Barber, I. MacLaren, R. H. Hadfield	Superconductor Science and Technology	<b>2017</b>
"Chip-based quantum key distribution"	P Sibson, C Erven, M Godfrey, S Miki, T Yamashita, M Fujiwara, M Sasaki, H Terai, M.G Tanner, C.M Natarajan, R.H Hadfield, J.L O'Brien, M.G Thompson	Nature Communications	<b>2017</b>
"Chirality and the angular momentum of light"	R. P. Cameron, J. B. Götte, S. M. Barnett, A. M. Yao	Philosophical Transactions of the Royal Society,	<b>2017</b>
"Comparative study of sampling strategies for sparse photon multispectral Lidar imaging: towards mosaic filter arrays"	R. Tobin, Y. Altmann, X. Ren, A. McCarthy, R.A. Lamb, S. McLaughlin, and G.S. Buller	Journal of Optics	<b>2017</b>
"Comparison of nematic liquid-crystal and DMD based spatial light modulation in complex photonics"	S. Turtaev, I. T. Leite, K. J. Mitchell, M. J. Padgett, D. B. Phillips, T Čižmár	Optics Express	<b>2017</b>

"Compressed sensing with near-field THz radiation"	R. I. Stantchev, D. B. Phillips, P. Hobson, S. M. Hornett, M. J. Padgett, E. Hendry	Optica 4	<b>2017</b>
"Demonstrating an absolute quantum advantage in direct absorption measurement"	P.-A. Moreau, J. Sabines-Chesterking, R. Whittaker, S. K. Joshi, P. M. Birchall, A. McMillan, J. G. Rarity & J. C. F. Matthews	Scientific Reports	<b>2017</b>
"Design, fabrication and application of GaN-based micro-LED arrays with individual addressing by N-electrodes"	E. Xie, M. Stonehouse, R. Ferreira, J.J.D McKendry, J. Herrnsdorf, X. He, S. Rajbhandari ,H. Chun, A.V.N Jalajakumari, O. Almer, G. Faulkner, I. M. Watson, E. Gu, R. Henderson, D. O'Brien, M.D. Dawson	IEEE Photonics Journal	<b>2017</b>
"Extending the Dynamic Range of Oversampled Binary SPAD Image Sensors"	N. Dutton, T. Al Abbas, I. Gyongy, R. Henderson		<b>2017</b>
"Fast and accurate positioning system enabled by structured illumination with light-emitting diodes"	J. Herrnsdorf, M. Strain, E. Gu, R. Henderson, M. D. Dawson	Journal of Lightwave Technology	<b>2017</b>
"Fast Hyperspectral Unmixing in Presence of Nonlinearity or Mismodelling effects"	A. Halimi, J.M. Bioucas–Dias, N. Dobigeon, G.S. Buller, and S. McLaughlin	IEEE Transactions on Computational Imaging	<b>2017</b>
"Fast tracking of hidden objects with single-pixel detectors"	S. Chan, R.E. Warburton, G. Gariepy, Y. Altmann, S. McLaughlin, J. Leach and D. Faccio	Electronics Letters	<b>2017</b>
"Field tests of a portable MEMS gravimeter"	R. P. Middlemiss, S. G. Bramsiepe, R. Douglas, J. Hough, D. J. Paul, S. Rowan, G.D. Hammond	Sensors	<b>2017</b>
"Free-space propagation of high-dimensional structured optical fields in an urban environment"	M. P. J. Lavery, C. Peuntinger, K. Günthner, P. Banzer, D. Elser, R. W. Boyd	Science Advances	<b>2017</b>
"From retrodiction to Bayesian quantum imaging"	F. C. Speirits, M. Sonnleitner, S. M. Barnett	Journal of Optics	<b>2017</b>
"Fundamental limits of quantum-secure covert optical sensing"	B. A. Bash, C. N. Gagatsos, A. Datta, S. Guha	arXiv	<b>2017</b>
"Gb/s data communications with colloidal quantum dot colour converters"	M. Leitao, J.M.M. Santos, B. Guilhabert, S. Watson, A.E. Kelly, M.S. Islam, H. Haas, M.D. Dawson, and N. Laurand		<b>2017</b>

"Ghost Imaging Using Optical Correlations"	P. A. Moreau, E. Toninelli, T. Gregory, M. J. Padgett	Laser Photonics	<b>2017</b>
"High extinction ratio integrated photonic filters for silicon quantum photonics"	M. Piekarek, D. Bonneau, S. Miki, T. Yamashita, M. Fujiwara, H. Terai, M.G Tanner, C.M Natarajan, R.H Hadfield, J.L O'Brien, M.G Thompson,	Optics Letters,	<b>2017</b>
"High-speed Polarisation Shaping of Arbitrary Vector Beams Using a Digital Micro-mirror Device"	K. J. Mitchell, S. Turtaev, M. J. Padgett, T. Cizmar, D. B. Phillips		<b>2017</b>
"Holographic quantum imaging: reconstructing spatial properties via two-particle interference"	N. Trautmann, G. Ferenczi, S. Croke, S. M. Barnett	Journal of Optics	<b>2017</b>
"Hypervelocity Time-of-Flight Characterisation of a 14GS/s Histogramming CMOS SPAD Sensor"	N. Finlayson, T. Al Abbas, F. Mattioli Della Rocca, O. Almer, S. Gnechi, N. Dutton, R. Henderson		<b>2017</b>
"Image reconstruction from photon sparse data"	L. Mertens, M. Sonnleitner, J. Leach, M. Agnew, M. J. Padgett	Scientific Reports	<b>2017</b>
"InGaN micro-LEDs integrated onto ultra-thin colloidal quantum dot functionalised glass"	K.J. Rae, C. Foucher, B. Guilhabert, M.S. Islim, D. Zhu, R.A. Oliver, D.J. Wallis, H. Haas, N. Laurand, and M.D. Dawson	Optics Express	<b>2017</b>
"Long-range depth profiling of camouflaged targets using single-photon detection"	R. Tobin, A. Halimi, A. McCarthy, X. Ren, K.J. McEwan, S. McLaughlin, and G.S. Buller	Optical Engineering	<b>2017</b>
"Machine Learning Assisted Identification of People Hidden Behind a Corner"	P. Caramazza, A. Boccolini, G. Musarra, M. Hullin, R. Murray-Smith, D. Faccio	Computational Optical Sensing and Imaging	<b>2017</b>
"Measuring the orbital angular momentum spectrum of an electron beam"	V. Grillo, A.H Tavabi, F. Venturi, H. Larocque, R. Balboni, G.C Gazzadi	Nature Communications	<b>2017</b>
"MEMS gravimeters as a new tool for gravity imaging"	R. P. Middlemiss, S. G. Bramsiepe, R. Douglas, S. Hild, J. Hough, D. J. Paul, A. Samarelli, S. Rowan, G. D. Hammond	Philosophical Transactions of the Royal Society A	<b>2017</b>
"Multiplexed Single-Mode Wavelength-to-Time Mapping of Multimode Light"	H. Chandrasekharan, F. Idzebski, I. Gris-Sanchez, N. Krstajic, R. Walker, H. Bridle, P. A. Dalgarno, W. Macpherson, R. Henderson, T. Birks, R. Thomson	Nature Communications	<b>2017</b>

"Multispectral Mid-infrared Light Emitting Diodes on a GaAs Substrate"	M. Aziz, C. Xie, V. Pusino, A. Khalid, M. Steer, I.G. Thayne and D.R.S. Cumming	Applied Physics Letters	<b>2017</b>
"Neural network identification of people hidden from view with a single-pixel, single-photon detector"	P. Caramazza, A. Boccolini, D. Buschek, M. Hullin, C. Higham, R. Henderson, R. Murray-Smith, D. Faccio	arXiv	<b>2017</b>
"Non-line-of-sight tracking of people at long range"	S. Chan, R. E. Warburton, G. Gariepy, J. Leach, D. Faccio	Optics Express	<b>2017</b>
"Object Depth Profile and Reflectivity Restoration from Sparse Single-Photon Data Acquired in Underwater Environments"	A. Halimi, A. Maccarone, A. McCarthy, S. McLaughlin and G.S. Buller		<b>2017</b>
"Object Tracking and Reconstruction with a Quanta Image Sensor"	I. Gyongy, T. Al Abbas, N. Dutton, R. Henderson		<b>2017</b>
"Observation of laser pulse propagation in optical fibers with a SPAD camera"	R. Warburton, C. Aniculaesei, M. Clerici, Y. Altmann, G. Gariepy, R. McCracken, D. Reid, S. McLaughlin, M. Petrovich, J. Hayes, R. Henderson, D. Faccio, J. Leach	Scientific Reports	<b>2017</b>
"Octave-Spanning Broadband Absorption of Terahertz Light using Metasurface Fractal-Cross Absorbers"	M. Kenney, J. Grant, Y. D. Shah, I. Escorcia-Carranza, M. Humphreys, D.R.S. Cumming	ACS Photonics	<b>2017</b>
"Optical implementation of spin squeezing"	T. Ono, J. Sabines-Chesterking, H. Cable, J. L. O'Brien, J. C. F. Matthews	New Journal of Physics	<b>2017</b>
"Orbital angular momentum 25 years on"	M. J. Padgett	Optics Express	<b>2017</b>
"pH sensing through a single optical fibre using SERS and CMOS SPAD line arrays"	K. Ehrlich, A. Kufcsak, S.L. Mcaughtrie, H. Fleming, N. Krstajic, C. Campbell, R. Henderson, K. Dhaliwal, R.R. Thomson & M.G. Tanner	Optics Express	<b>2017</b>
"Polarisation structuring of broadband light"	K. J. Mitchell, N. Radwell, S. Franke-Arnold, M. J. Padgett, D. B. Phillips	Optics Express	<b>2017</b>
"Positioning and space-division multiple access enabled by structured illumination with light-emitting diodes"	J. Herrnsdorf, M. J. Strain, E. Gu, R. Henderson, M. D. Dawson	Journal of Lightwave Technology	<b>2017</b>

"Programmable holographic technique for implementing unitary and nonunitary transformations"	Y. Wang, V. Potoček, S. M. Barnett, X. Feng	Physical Review	<b>2017</b>
"Quantum position measurement of a shadow: beating the classical limit"	E. Toninelli, M. P. Edgar, P. A. Moreau, G. M. Gibson, G.D. Hammond	Frontiers in Optics	<b>2017</b>
"Reaching for the quantum limits in the simultaneous estimation of phase and phase diffusion"	M. Szczykulska, T. Baumgratz, A. Datta	Quantum Sci. Technol.	<b>2017</b>
"Real-time computational photon-counting LiDAR"	M. Edgar, S. Johnson, D. B. Phillips, M. J. Padgett	Optical Engineering	<b>2017</b>
"Real-time imaging of methane gas leaks using a single-pixel camera"	G.M Gibson, B. Sun, M. P. Edgar, D. B. Phillips, N. Hempler, G. T. Maker	Optics Express	<b>2017</b>
"Roadmap on structured light"	H. Rubinsztein-Dunlop, A. Forbes et al	Journal of Optics	<b>2017</b>
"Robust Spectral Unmixing of Sparse Multispectral Lidar Waveforms using Gamma Markov Random Fields"	Y. Altmann, A. Maccarone, A. McCarthy, G. Newstadt, G.S. Buller, S. McLaughlin, A. Hero	IEEE Transactions on Computational Imaging	<b>2017</b>
"Single-chip, Mid-infrared Array for Room Temperature Video Rate Imaging"	C. Xie, M. Aziz, V. Pusino, A. Khalid, M. Steer, I.G. Thayne, M. Sorel, and D. R.S. Cumming	OSA Optica	<b>2017</b>
"Single-photon three-dimensional imaging at up to 10 kilometers range"	A. Pawlikowska, A. Halimi, R.A. Lamb, and G.S. Buller	Optics Express	<b>2017</b>
"Slow light in flight imaging"	K. Wilson, B. Little, G. Gariepy, R. Henderson, J. Howell, D. Faccio	Physical Review A	<b>2017</b>
"Stratified, computational interaction via machine learning"	R. Murray-Smith	The Eighteenth Yale Workshop on Adaptive and Learning Systems	<b>2017</b>
"Sub-shot-noise shadow sensing with quantum correlations"	E. Toninelli, M. P. Edgar, P. A. Moreau, G. M. Gibson, G.D. Hammond, M. J. Padgett	Optics Express	<b>2017</b>

"Sub-Shot-Noise Transmission Measurement Enabled by Active Feed-Forward of Heralded Single Photons"	J. Sabines-Chesterking, R. Whittaker, S.K. Joshi, P.A. Moreau, A. McMillan, H.V. Cable, J.L. O'Brien, J.G. Rarity and J. C. F. Matthews	Physical Review Applied	<b>2017</b>
"Time-resolved spectroscopy at 19,000 lines per second using a CMOS SPAD line array enables advanced biophotonics applications"	A. Ufcsak, A. Erdogan, R. Walker, E. Katjana, M. G. Tanner, A. Megia-Fernandez, E. Scholefield, P. Emanuel, K. Dhaliwal, M. Bradley, R. Henderson, N. Krstajic	Optics Express	<b>2017</b>
"Ultra-narrow linewidth polarization-insensitive filter using a symmetry-breaking selective plasmonic metasurface"	Y.D. Shah, J. Grant, D. Hao, M. Kenney, V. Pusino, and D.R.S. Cumming	ACS Photonics	<b>2017</b>
"Video-rate photometric stereo imaging with general lighting luminaires"	J. Herrnsdorf, L. Broadbent, G.C. Wright, M.D. Dawson, and M.J. Strain		<b>2017</b>
"Will a decaying atom feel a friction force?"	M. Sonnleitner, N. Trautmann, S. M. Barnett	Physical Review Letters	<b>2017</b>
"Designing quantum experiments with a genetic algorithm"	R. Nichols, L. Mineh, J. Rubio, J.C.F. Matthews, and P.A. Knott	arXiv	<b>2018</b>
"1000 fps computational ghost imaging using LED-based structured illumination"	Z. H Xu, W. Chen, J. Penuelas, M. J. Padgett & M.J Sun	Optics Express	<b>2018</b>
"A 192 x 128 Time Correlated Single Photon Counting Imager in 40nm CMOS Technology"	R. Henderson, N. Johnston, H. Chen, D.D-U. Li, G. Hungerford, R. Hirsch, D. McLoskey, P. Yip, and D. Birch	ESSCIRC 2018	<b>2018</b>
"A 256x256, 100kFPS, 61% Fill-factor SPAD Image Sensor for Time-resolved Microscopy Applications"	I. Gyongy, N. Calder, A. Davies, N. Dutton, R.R. Duncan, C. Rickman, P.A. Dalgarno & R. Henderson	IEEE Transactions on Electron Devices	<b>2018</b>
"A CMOS SPAD Sensor with a Multi-Event Folded Flash Time-to-Digital Converter for Ultra-fast Optical Transient Capture"	T. Al Abbas, N. Dutton, O. Almer, N. Finlayson, F. Mattioli Della Rocca, & R. Henderson	IEEE Sensors Journal	<b>2018</b>
"A high stability optical shadow sensor with applications for precise accelerometers"	S. G. Bramsiepe, D. Loomes, R. P. Middlemiss, D. J. Paul and G. D. Hammond	IEEE Sensors Journal	<b>2018</b>

"A trillion frames per second: the techniques and applications of light-in-flight photography"	D. Faccio, A. Velten	Rep. Prog. Phys	<b>2018</b>
"A versatile quantum walk resonator with bright classical light"	B. Sephton, A. Dudley, G. Ruffato, F. Romanato, L. Marrucci, M. J. Padgett	arXiv:1810	<b>2018</b>
"AsSb-based nBnBn Heterostructure for Dual-color Infrared Detection and Monolithically Integrated on GaAs"	C. Xie, V. Pusino, A. Khalid, A. P. Craig, A. R. Marshall, and D.R.S. Cumming	IEEE Journal of Selected Topics in Quantum Electronics (JSTQE)	<b>2018</b>
"Attosecond-Resolution Hong-Ou-Mandel Interferometry"	A. Lyons, G.C. Knee, E. Bolduc, T. Roger, J. Leach, E.M. Gauger, D. Faccio	Science. Advances	<b>2018</b>
"Characterization of Electronic Displays using CMOS-Compatible Single Photon Avalanche Diode Image Sensors"	H. Mai, I. Gyongy, N. Dutton, R. Henderson & I. Underwood	Journal of the Society for Information Display	<b>2018</b>
"CMOS compatible metamaterial absorbers for hyperspectral medium wave infrared imaging and sensing applications"	J. Grant, M. G. Kenney, Y. D. Shah, I. Escorcía Carranza, and D.R.S. Cumming	OSA journal Optics Express	<b>2018</b>
"Computational time-of-flight diffuse optical tomography"	A. Lyons, A. Bocolini, F. Tonolini, A. Repetti, Z. Chen, R. Henderson, Y. Wiaux and D. Faccio	arXiv:1808	<b>2018</b>
"Cylindrical microlensing for enhanced collection efficiency of small pixel SPAD arrays in single-molecule localisation microscopy"	I. Gyongy, A. Davies, B. Gallinet, N. Dutton, R.R. Duncan, C. Rickman, R. Henderson & P. Dalgarno	Optics Express	<b>2018</b>
"Deep learning for real-time single-pixel video"	C. F. Higham, R. Murray-Smith, M. J. Padgett & M.P. Edgar	Scientific Reports	<b>2018</b>
"Deep Learning: An Introduction for Applied Mathematicians"	C. F. Higham and D. J. Higham	Siam Review	<b>2018</b>
"Deep, complex, invertible networks for inversion of transmission effects in multimode optical fibres"	O. Moran, P. Caramazza, D. Faccio and R. Murray-Smith	Conference on Neural Information Processing Systems	<b>2018</b>

"Design, fabrication and application of GaN-based micro-LED arrays with individual addressing by N-electrodes"	E. Xie, M. Stonehouse, R. Ferreira, J.J.D McKendry, J. Herrnsdorf, X. He, S. Rajbhandari, H. Chun, A.V.N Jalajakumari, O. Almer, G. Faulkner, I.M. Watson, E. Gu, R. Henderson, D. O'Brien & M.D Dawson	IEEE photonics journal	<b>2018</b>
"Efficient location, imaging and recognition of faces by single-pixel camera"	W. Roga and J. Jeffers	Journal of Optics	<b>2018</b>
"Enhancing the recovery of a temporal sequence of images using joint deconvolution"	P. Caramazza, K. Wilson, G. Gariepy, J. Leach, S. McLaughlin, D. Faccio, Y. Altmann	Scientific Reports	<b>2018</b>
"Experimental Limits of Ghost Diffraction: Popper's Thought Experiment"	P.A. Moreau, P.A. Morris, E. Toninelli, T. Gregory, R.S. Aspden and G. Spalding	Scientific Reports 8	<b>2018</b>
"Fault-tolerant quantum metrology"	T. Kapourniotis and A. Datta	arXiv	<b>2018</b>
"Fundamental Quantum Limits of Multicarrier Optomechanical Sensors"	D. Branford, H. Miao, A. Datta	Physical Review Letters	<b>2018</b>
"Ghost Imaging Using Optical Correlations"	P. A Moreau, E. Toninelli, T. Gregory, M. J. Padgett	Laser & Photonics Reviews	<b>2018</b>
"Ghost imaging with the human eye"	A. Boccolini, A. Fedrizzi, D. Faccio	arXiv	<b>2018</b>
"High Dynamic Range Imaging at the Quantum Limit with SPAD-based Image Sensors"	N. Dutton, T. Al abbas, I. Gyongy, F. Mattioli & R. Henderson	Sensors	<b>2018</b>
"High-resolution depth profiling using a range-gated CMOS SPAD quanta image sensor"	R. Ximing, P. Connolly, A. Halimi, Y. Altmann, S. McLaughlin, I. Gyongy, R. Henderson & G.S. Buller	Optics Express	<b>2018</b>
"Holographic optical trapping Raman micro-spectroscopy for non-invasive measurement and manipulation of live cells"	F. Sinjab, D. Awuah, G. Gibson, M. J. Padgett, A.M. Ghaemmaghami	Optics Express 26	<b>2018</b>
"How fast is a twisted photon?"	A. Lyons, T. Roger, N. Westerberg, S. Vezzoli, C. Maitland & J. Leach	Optica	<b>2018</b>
"Imaging Beyond a Multimode Fibre with Time of Flight Depth Information"	D. Stellinga, D.B Phillips, M.P. Edgar, S. Turtaev, T. Čižmár, M. J. Padgett	CLEO: Science and Innovations	<b>2018</b>

"Individual differences in bilingual grammar"	C.Cohen, C. Higham, S. Waqar Nabi, L. Schwartz, M. Putnam, G. Jan Kootstra and J. Van Hell	International Symposium on Bilingual Processing"	<b>2018</b>
"Light, the universe and everything – 12 Herculean tasks for quantum cowboys and black diamond skiers"	G. Agarwal, R.E Allen, I. Bezděková, R.W Boyd, G. Chen, R. Hanson	Journal of Modern Optics	<b>2018</b>
"Maximum-likelihood quantum process tomography via projected gradient descent"	G. C. Knee, E. Bolduc, J. Leach, E. M. Gauger	arXiv	<b>2018</b>
"MEMS gravity sensors for imaging density anomalies"	A. Noack, R.P Middlemiss, A. Prasad and G.D. Hammond	SPIE Proceedings Volume 10723	<b>2018</b>
"Metasurface imaging with entangled photons"	C. Altuzarra, A. Lyons, G. Yuan, C. Simpson, T. Roger, J. Ben-Benjamin, D. Faccio	arXiv	<b>2018</b>
"Microelectromechanical system gravimeters as a new tool for gravity imaging"	R. P. Middlemiss et al	Philosophical Transactions A Royal Society	<b>2018</b>
"Neural Network classification for intensity imaging through multimode optical fibres"	P. Caramazza, R. Murray-Smith, and D. Faccio	Computational Optical Sensing and Imaging	<b>2018</b>
"On the fundamental quantum limits of multi-carrier laser interferometric gravitational-wave detectors"	D. Branford, H. Miao, A. Datta,	arXiv:1804.02682	<b>2018</b>
"Poissonian communications: free space optical data transfer at the few-photon level"	A. D. Griffiths, J. Herrnsdorf, C. Lowe, M. Macdonald, R. Henderson, M.J. Strain, M. D. Dawson		<b>2018</b>
"Polarization Encoded Color Image Embedded in a Dielectric Metasurface"	X. Zang, F. Dong, F. Yue, C. Zhang, L. Xu, Z. Song, M. Chen, P. Chen, G.S. Buller, Y. Zhu, S. Zhuang, W. Chu, S. Zhang, X. Chen	Adv. Materials	<b>2018</b>

"Positioning and Data Broadcasting using Illumination Pattern Sequences Displayed by LED Arrays"	J. Herrnsdorf, M. Dawson, M. Strain	IEEE Transactions on Communications	<b>2018</b>
"Practical classification of different moving targets using automotive radar and deep neural networks"	A. Angelov, A. Robertson, R. Murray-Smith, F. Fioranelli	IET Radar, Sonar & Navigation	<b>2018</b>
"Principles and prospects for single-pixel imaging"	M.P. Edgar, G.M. Gibson and M. J. Padgett	Nature Photonics	<b>2018</b>
"Quantum Technologies 2018"	J. Stuhler, A.J. Shields, M. J. Padgett	Proceedings of SPIE Vol 10674	<b>2018</b>
"Quantum-inspired computational imaging"	Y. Altmann, S. McLaughlin, M. J. Padgett, V. K Goyal, A. O. Hero, D. Faccio	Science 361	<b>2018</b>
"Real-time computational photon-counting LiDAR"	M. P. Edgar, S. Johnson, D. Phillips, M. J. Padgett	Optical Engineering	<b>2018</b>
"Real-time photon-counting LiDAR enhanced with deep-learning"	M.P. Edgar, M. J. Padgett, C. Higham, R. Murray-Smith	Emerging Imaging and Sensing Technologies for Security and Defence III	<b>2018</b>
"Resolution limits of quantum ghost imaging"	P.A Moreau, E. Toninelli, P.A Morris, R.S Aspden, T. Gregory & G.Spalding	Optics Express	<b>2018</b>
"Resolution-enhanced imaging with quantum correlations"	E. Toninelli, P.A. Moreau, A. Mihalyi, T. Gregory, M.P. Edgar, M. J. Padgett	CLEO: QELS_Fundamental Science	<b>2018</b>
"Reversal of orbital angular momentum arising from an extreme Doppler shift"	G.M. Gibson, E. Toninelli, S.A.R Horsley, G.C Spalding, E. Hendry, D.B Phillips	Proceedings of the National Academy of Sciences	<b>2018</b>
"Single-Photon Tracking for High-Speed Vision"	I. Gyongy, N. Dutton, R. Henderson	Sensors	<b>2018</b>
"Spectral Classification of Sparse Photon Depth Images"	Y. Altmann, A. Maccarone, A McCarthy, S. McLaughlin and G.S. Buller	Optics Express	<b>2018</b>

"Sub-nanosecond Temporally Resolved Imaging with a Single Pixel Camera"	S. Johnson, M.P Edgar, D. Phillips, M. J. Padgett	CLEO: QELS Fundamental Science	<b>2018</b>
"Temporal Encoding to Reject Background Signals in a Low Complexity, Photon Counting Communication Link"	A.D. Griffiths, J. Herrnsdorf, C. Lowe, M. Macdonald, R. Henderson, M. J. Strain and M.D Dawson	Materials 11	<b>2018</b>
"Testing for entanglement with periodic coarse graining"	D.S Tasca, L. Rudnicki, R.S Aspden, M. J. Padgett, P.HS Ribeiro & S. P. Walborn	Physical Review A	<b>2018</b>
"Twisted'electrons"	H. Larocque, I. Kaminer, V. Grillo, G. Leuchs, M. J. Padgett & R.W Boyd	Contemporary Physics 59	<b>2018</b>
"Time-of-Flight Imaging at 10 ps Resolution with an ICCD Camera"	L. Cester, A. Lyons, M. Chiara Braidotti, D. Faccio	Sensors	<b>2019</b>