Franco Zappa

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/8002135/publications.pdf

Version: 2024-02-01

231 papers	7,290 citations	61857 43 h-index	64668 79 g-index
233 all docs	233 docs citations	233 times ranked	3340 citing authors

#	Article	IF	Citations
1	Avalanche photodiodes and quenching circuits for single-photon detection. Applied Optics, 1996, 35, 1956.	2.1	850
2	On the bremsstrahlung origin of hot-carrier-induced photons in silicon devices. IEEE Transactions on Electron Devices, 1993, 40, 577-582.	1.6	259
3	Evolution and prospects for single-photon avalanche diodes and quenching circuits. Journal of Modern Optics, 2004, 51, 1267-1288.	0.6	257
4	Principles and features of single-photon avalanche diode arrays. Sensors and Actuators A: Physical, 2007, 140, 103-112.	2.0	250
5	Progress in Silicon Single-Photon Avalanche Diodes. IEEE Journal of Selected Topics in Quantum Electronics, 2007, 13, 852-862.	1.9	237
6	CMOS Imager With 1024 SPADs and TDCs for Single-Photon Timing and 3-D Time-of-Flight. IEEE Journal of Selected Topics in Quantum Electronics, 2014, 20, 364-373.	1.9	198
7	Advances in InGaAsP-based avalanche diode single photon detectors. Journal of Modern Optics, 2011, 58, 174-200.	0.6	170
8	Photon-efficient imaging with a single-photon camera. Nature Communications, 2016, 7, 12046.	5.8	169
9	SPAD Figures of Merit for Photon-Counting, Photon-Timing, and Imaging Applications: A Review. IEEE Sensors Journal, 2016, 16, 3-12.	2.4	161
10	Single photon avalanche diodes (SPADs) for 1.5â€‰Î¼m photon counting applications. Journal of Modern Optics, 2007, 54, 283-304.	0.6	156
11	100 000 Frames/s 64 Ã— 32 Single-Photon Detector Array for 2-D Imaging and 3-D Ranging. IEEE Journal of Selected Topics in Quantum Electronics, 2014, 20, 354-363.	1.9	144
12	A High-Linearity, 17 ps Precision Time-to-Digital Converter Based on a Single-Stage Vernier Delay Loop Fine Interpolation. IEEE Transactions on Circuits and Systems I: Regular Papers, 2013, 60, 557-569.	3.5	143
13	Single-photon detection beyond 1 Î¼m: performance of commercially available InGaAs/InP detectors. Applied Optics, 1996, 35, 2986.	2.1	141
14	Spectrum folding and phase noise in LC tuned oscillators. IEEE Transactions on Circuits and Systems Part 2: Express Briefs, 1998, 45, 781-790.	2.3	130
15	Time-Resolved Diffuse Reflectance Using Small Source-Detector Separation and Fast Single-Photon Gating. Physical Review Letters, 2008, 100, 138101.	2.9	119
16	Monolithic active-quenching and active-reset circuit for single-photon avalanche detectors. IEEE Journal of Solid-State Circuits, 2003, 38, 1298-1301.	3.5	103
17	Development of new photon-counting detectors for single-molecule fluorescence microscopy. Philosophical Transactions of the Royal Society B: Biological Sciences, 2013, 368, 20120035.	1.8	100
18	Two-Dimensional SPAD Imaging Camera for Photon Counting. IEEE Photonics Journal, 2010, 2, 759-774.	1.0	96

#	Article	IF	Citations
19	Fast Sensing and Quenching of CMOS SPADs for Minimal Afterpulsing Effects. IEEE Photonics Technology Letters, 2013, 25, 776-779.	1.3	93
20	Fast-gated single-photon counting technique widens dynamic range and speeds up acquisition time in time-resolved measurements. Optics Express, 2011, 19, 10735.	1.7	89
21	A VLSI-compatible high-speed silicon photodetector for optical data link applications. IEEE Transactions on Electron Devices, 1996, 43, 1054-1060.	1.6	84
22	SPADs and SiPMs Arrays for Long-Range High-Speed Light Detection and Ranging (LiDAR). Sensors, 2021, 21, 3839.	2.1	83
23	Silicon planar technology for single-photon optical detectors. IEEE Transactions on Electron Devices, 2003, 50, 918-925.	1.6	82
24	Fast-Gated Single-Photon Avalanche Diode for Wide Dynamic Range Near Infrared Spectroscopy. IEEE Journal of Selected Topics in Quantum Electronics, 2010, 16, 1023-1030.	1.9	81
25	Variable-load quenching circuit for single-photon avalanche diodes. Optics Express, 2008, 16, 2232.	1.7	78
26	SPAD Smart Pixel for Time-of-Flight and Time-Correlated Single-Photon Counting Measurements. IEEE Photonics Journal, 2012, 4, 795-804.	1.0	77
27	CMOS SPADs with up to 500 Î¼m diameter and 55% detection efficiency at 420 nm. Journal of Modern Optics, 2014, 61, 102-115.	0.6	77
28	Solidâ€state singleâ€photon detectors. Optical Engineering, 1996, 35, 938.	0.5	76
29	Compact active quenching circuit for fast photon counting with avalanche photodiodes. Review of Scientific Instruments, 1996, 67, 3440-3448.	0.6	76
30	Automotive Three-Dimensional Vision Through a Single-Photon Counting SPAD Camera. IEEE Transactions on Intelligent Transportation Systems, 2016, 17, 782-795.	4.7	75
31	SPICE modeling of single photon avalanche diodes. Sensors and Actuators A: Physical, 2009, 153, 197-204.	2.0	74
32	Single-Photon Avalanche Diodes in a 0.16 Î¼m BCD Technology With Sharp Timing Response and Red-Enhanced Sensitivity. IEEE Journal of Selected Topics in Quantum Electronics, 2018, 24, 1-9.	1.9	73
33	Electronics for single photon avalanche diode arrays. Sensors and Actuators A: Physical, 2007, 140, 113-122.	2.0	69
34	Single-Photon Avalanche Diode Model for Circuit Simulations. IEEE Photonics Technology Letters, 2007, 19, 1922-1924.	1.3	67
35	Single-photon avalanche diodes for the near-infrared range: detector and circuit issues. Journal of Modern Optics, 2009, 56, 299-308.	0.6	64
36	An integrated active-quenching circuit for single-photon avalanche diodes. IEEE Transactions on Instrumentation and Measurement, 2000, 49, 1167-1175.	2.4	57

#	Article	IF	Citations
37	CMOS Circuit Testing via Time-Resolved Luminescence Measurements and Simulations. IEEE Transactions on Instrumentation and Measurement, 2004, 53, 163-169.	2.4	53
38	Enhanced single-photon time-of-flight 3D ranging. Optics Express, 2015, 23, 24962.	1.7	52
39	Photonâ€assisted avalanche spreading in reachâ€through photodiodes. Applied Physics Letters, 1993, 62, 606-608.	1.5	50
40	Time-Resolved Diffuse Optical Spectroscopy up to 1700 nm by Means of a Time-Gated InGaAs/InP Single-Photon Avalanche Diode. Applied Spectroscopy, 2012, 66, 944-950.	1.2	48
41	Design Criteria for InGaAs/InP Single-Photon Avalanche Diode. IEEE Photonics Journal, 2013, 5, 6800209-6800209.	1.0	47
42	Sub-Rayleigh Imaging via<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>N</mml:mi></mml:math>-Photon Detection. Physical Review Letters, 2010, 105, 163602.	2.9	46
43	Non-contact time-resolved diffuse reflectance imaging at null source-detector separation. Optics Express, 2012, 20, 283.	1.7	46
44	High-speed multi-exposure laser speckle contrast imaging with a single-photon counting camera. Biomedical Optics Express, 2015, 6, 2865.	1.5	46
45	A Single-Photon Avalanche Camera for Fluorescence Lifetime Imaging Microscopy and Correlation Spectroscopy. IEEE Journal of Selected Topics in Quantum Electronics, 2014, 20, 344-353.	1.9	45
46	High-speed CMOS circuit testing by 50 ps time-resolved luminescence measurements. IEEE Transactions on Electron Devices, 2001, 48, 2830-2835.	1.6	42
47	Fully-integrated CMOS single photon counter. Optics Express, 2007, 15, 2873.	1.7	42
48	InGaAs/InP Single-Photon Avalanche Diode With Reduced Afterpulsing and Sharp Timing Response With 30 ps Tail. IEEE Journal of Quantum Electronics, 2012, 48, 1227-1232.	1.0	42
49	A Compact Two-Wavelength Time-Domain NIRS System Based on SiPM and Pulsed Diode Lasers. IEEE Photonics Journal, 2017, 9, 1-14.	1.0	42
50	Low-noise and large-area CMOS SPADs with timing response free from slow tails. , 2012, , .		39
51	A process and deep level evaluation tool: afterpulsing in avalanche junctions. , 0, , .		37
52	SPAD-based asynchronous-readout array detectors for image-scanning microscopy. Optica, 2020, 7, 755.	4.8	37
53	Single-fiber diffuse optical time-of-flight spectroscopy. Optics Letters, 2012, 37, 2877.	1.7	36
54	Fill-factor improvement of Si CMOS single-photon avalanche diode detector arrays by integration of diffractive microlens arrays. Optics Express, 2015, 23, 33777.	1.7	36

#	Article	IF	Citations
55	Single-photon avalanche diode with ultrafast pulse response free from slow tails. IEEE Electron Device Letters, 1993, 14, 360-362.	2.2	35
56	Effects of time-gated detection in diffuse optical imaging at short source-detector separation. Journal Physics D: Applied Physics, 2015, 48, 045401.	1.3	35
57	High-rate photon counting and picosecond timing with silicon-SPAD based compact detector modules. Journal of Modern Optics, 2007, 54, 225-237.	0.6	34
58	Recent advances in the detection of optical photons with silicon photodiodes. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1993, 326, 290-294.	0.7	33
59	Single-photon pulsed-light indirect time-of-flight 3D ranging. Optics Express, 2013, 21, 5086.	1.7	32
60	High-Speed Quantum Random Number Generation Using CMOS Photon Counting Detectors. IEEE Journal of Selected Topics in Quantum Electronics, 2015, 21, 23-29.	1.9	32
61	Wearable and wireless time-domain near-infrared spectroscopy system for brain and muscle hemodynamic monitoring. Biomedical Optics Express, 2020, 11, 5934.	1.5	31
62	SPADA: single-photon avalanche diode arrays. IEEE Photonics Technology Letters, 2005, 17, 657-659.	1.3	29
63	Fast Active Quenching Circuit for Reducing Avalanche Charge and Afterpulsing in InGaAs/InP Single-Photon Avalanche Diode. IEEE Journal of Quantum Electronics, 2013, 49, 563-569.	1.0	29
64	High-Fill-Factor <inline-formula> <tex-math notation="LaTeX">$60imes 1$ </tex-math></inline-formula> SPAD Array With 60 Subnanosecond Integrated TDCs. IEEE Photonics Technology Letters, 2015, 27, 1261-1264.	1.3	28
65	Ultra high-throughput single molecule spectroscopy with a 1024 pixel SPAD. Proceedings of SPIE, 2011, 7905, .	0.8	27
66	Afterpulse-like noise limits dynamic range in time-gated applications of thin-junction silicon single-photon avalanche diode. Applied Physics Letters, 2012, 100, 241111.	1.5	27
67	Monolithic CMOS detector module for photon counting and picosecond timing. , 0, , .		25
68	Single Photon Avalanche Diode Arrays for Quantum Imaging and Microscopy. Advanced Quantum Technologies, 2021, 4, 2100005.	1.8	25
69	SPICE Electrical Models and Simulations of Silicon Photomultipliers. IEEE Transactions on Nuclear Science, 2015, 62, 1950-1960.	1.2	24
70	Real-time multispectral fluorescence lifetime imaging using Single Photon Avalanche Diode arrays. Scientific Reports, 2020, 10, 8116.	1.6	24
71	Nanosecond single-photon timing with InGaAs/InP photodiodes. Optics Letters, 1994, 19, 846.	1.7	22
72	Complete single-photon counting and timing module in a microchip. Optics Letters, 2005, 30, 1327.	1.7	22

#	Article	IF	Citations
73	Low-noise low-jitter 32-pixels CMOS single-photon avalanche diodes array for single-photon counting from 300 nm to 900 nm. Review of Scientific Instruments, 2013, 84, 123112.	0.6	22
74	Large-Area, Fast-Gated Digital SiPM With Integrated TDC for Portable and Wearable Time-Domain NIRS. IEEE Journal of Solid-State Circuits, 2020, 55, 3097-3111.	3.5	21
75	High-rate quantum key distribution at short wavelength: Performance analysis and evaluation of silicon single photon avalanche diodes. Journal of Modern Optics, 2003, 50, 2251-2269.	0.6	20
76	Integrated Circuit for Subnanosecond Gating of InGaAs/InP SPAD. IEEE Journal of Quantum Electronics, 2015, 51, 1-7.	1.0	20
77	Monolithic time-to-digital converter with 20ps resolution. , 0, , .		19
78	Hot-Carrier Photoemission in Scaled CMOS Technologies: A Challenge for Emission Based Testing and Diagnostics. , 2006, , .		19
79	Compact, Low-Power and Fully Reconfigurable 10 ps Resolution, 160 Range, Time-Resolved Single-Photon Counting System. IEEE Sensors Journal, 2016, 16, 3827-3833.	2.4	19
80	Single-Photon Detectors Modeling and Selection Criteria for High-Background LiDAR. IEEE Sensors Journal, 2020, 20, 7021-7032.	2.4	19
81	Statistical Modelling of SPADs for Time-of-Flight LiDAR. Sensors, 2021, 21, 4481.	2.1	19
82	High concentration factor diffractive microlenses integrated with CMOS single-photon avalanche diode detector arrays for fill-factor improvement. Applied Optics, 2020, 59, 4488.	0.9	19
83	Subnanosecond single-photon timing with commercially available germanium photodiodes. Optics Letters, 1993, 18, 75.	1.7	18
84	MRS detectors with high gain for registration of weak visible and UV light fluxes. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1997, 387, 225-230.	0.7	18
85	Single-Photon Avalanche Diode Arrays for Fast Transients and Adaptive Optics. IEEE Transactions on Instrumentation and Measurement, 2006, 55, 365-374.	2.4	18
86	InGaAs SPAD and electronics for low time jitter and low noise. , 2007, , .		18
87	Optimum amplification of microchannelâ€plate photomultiplier pulses for picosecond photon timing. Review of Scientific Instruments, 1991, 62, 2596-2601.	0.6	17
88	Effects of trap levels in single-photon optical time-domain reflectometry: evaluation and correction. Journal of Lightwave Technology, 1992, 10, 1398-1402.	2.7	16
89	Photon counting arrays for astrophysics. Journal of Modern Optics, 2007, 54, 163-189.	0.6	16
90	Photon-counting chip for avalanche detectors. IEEE Photonics Technology Letters, 2005, 17, 184-186.	1.3	15

#	Article	IF	Citations
91	InGaAs/InP single-photon avalanche diodes show low dark counts and require moderate cooling. , 2009, , .		15
92	Fast single-photon imager acquires 1024 pixels at 100 kframe/s. , 2009, , .		15
93	10 ps resolution, 160 ns full scale range and less than 1.5% differential non-linearity time-to-digital converter module for high performance timing measurements. Review of Scientific Instruments, 2012, 83, 074703.	0.6	15
94	New photon-counting detectors for single-molecule fluorescence spectroscopy and imaging. , 2011, 8033, 803316.		14
95	Planar CMOS analog SiPMs: design, modeling, and characterization. Journal of Modern Optics, 2015, 62, 1693-1702.	0.6	14
96	Pushing technologies: single-photon avalanche diode arrays. , 2004, , .		13
97	Gated SPAD Arrays for Single-Photon Time-Resolved Imaging and Spectroscopy. IEEE Photonics Journal, 2019, 11, 1-10.	1.0	13
98	Multi-Channel FPGA Time-to-Digital Converter With 10 ps Bin and 40 ps FWHM. IEEE Transactions on Instrumentation and Measurement, 2022, 71, 1-9.	2.4	13
99	Constantâ€fraction circuits for picosecond photon timing with microchannel plate photomultipliers. Review of Scientific Instruments, 1993, 64, 118-124.	0.6	12
100	High-throughput single-molecule fluorescence spectroscopy using parallel detection. , 2010, 7608, .		12
101	Fast-gated single-photon avalanche diode for extremely wide dynamic-range applications. Proceedings of SPIE, 2009, , .	0.8	11
102	Charge Persistence in InGaAs/InP Single-Photon Avalanche Diodes. IEEE Journal of Quantum Electronics, 2016, 52, 1-7.	1.0	11
103	True constant fraction trigger circuit for picosecond photon-timing with ultrafast microchannel plate photomultipliers. Review of Scientific Instruments, 1997, 68, 2228-2237.	0.6	10
104	A probe detector for defectivity assessment in p-n junctions. IEEE Transactions on Electron Devices, 2000, 47, 609-616.	1.6	10
105	Single-photon imaging at 20,000â€‰framesâˆ•s. Optics Letters, 2005, 30, 3024.	1.7	10
106	Modeling of afterpulsing in single-photon avalanche diodes. Proceedings of SPIE, 2011, , .	0.8	10
107	Avalanche Current Waveform Estimated From Electroluminescence in InGaAs/InP SPADs. IEEE Photonics Technology Letters, 2013, 25, 1778-1780.	1.3	10
108	MiSPIA: microelectronic single-photon 3D imaging arrays for low-light high-speed safety and security applications. , 2013, , .		10

#	Article	IF	Citations
109	Growths and diffusions for InGaAs/InP single-photon avalanche diodes. Sensors and Actuators A: Physical, 2013, 201, 207-213.	2.0	10
110	Silicon planar technology for single-photon optical detectors. , 2004, , .		9
111	Germanium and InGaAs/InP SPADs for single-photon detection in the near-infrared. Proceedings of SPIE, 2007, , .	0.8	9
112	Smart-pixel with SPAD detector and time-to-digital converter for time-correlated single photon counting. , 2010, , .		9
113	SPAD imagers for remote sensing at the single-photon level. , 2012, , .		9
114	Spot Tracking and TDC Sharing in SPAD Arrays for TOF LiDAR. Sensors, 2021, 21, 2936.	2.1	9
115	Single-photon avalanche diode arrays and CMOS microelectronics for counting, timing, and imaging quantum events. Proceedings of SPIE, 2010, , .	0.8	8
116	Single-photon camera for high-sensitivity high-speed applications. Proceedings of SPIE, 2010, , .	0.8	8
117	Monitoring the motor cortex hemodynamic response function in freely moving walking subjects: a time-domain fNIRS pilot study. Neurophotonics, 2021, 8, 015006.	1.7	8
118	Range-Finding SPAD Array With Smart Laser-Spot Tracking and TDC Sharing for Background Suppression. IEEE Open Journal of the Solid-State Circuits Society, 2022, 2, 26-37.	2.0	8
119	Counting, timing, and tracking with a single-photon germanium detector. Optics Letters, 1996, 21, 59.	1.7	7
120	Monolithic dual-detector for photon-correlation spectroscopy with wide dynamic range and optical 70-ps resolution. IEEE Journal of Quantum Electronics, 2001, 37, 1588-1593.	1.0	7
121	A view on progress of silicon single-photon avalanche diodes and quenching circuits. , 2006, 6372, 123.		7
122	Monolithic array of 32 SPAD pixels for single-photon imaging at high frame rates. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2009, 610, 24-27.	0.7	7
123	SPAD arrays for parallel photon counting and timing. , 2010, , .		7
124	Smart-pixel for 3D ranging imagers based on single-photon avalanche diode and time-to-digital converter. Proceedings of SPIE, 2011, , .	0.8	7
125	Indirect time-of-flight 3D ranging based on SPADs. Proceedings of SPIE, 2012, , .	0.8	7
126	MiSPiA: microelectronic single-photon 3D imaging arrays for low-light high-speed safety and security applications. , 2013, , .		7

#	Article	IF	Citations
127	Analog SiPM in planar CMOS technology. , 2014, , .		7
128	High-throughput gated photon counter with two detection windows programmable down to 70 ps width. Review of Scientific Instruments, 2014, 85, 013107.	0.6	7
129	Eight-Channel 21 ps Precision <inline-formula> <tex-math notation="LaTeX">$10~mu ext{s}$ </tex-math></inline-formula> Range Time-to-Digital Converter Module. IEEE Transactions on Instrumentation and Measurement, 2016, 65, 423-430.	2.4	7
130	Biometric Signals Estimation Using Single Photon Camera and Deep Learning. Sensors, 2020, 20, 6102.	2.1	7
131	Photon-efficient computational imaging with a single-photon camera. , 2016, , .		7
132	<title>Avalanche photodiodes for near-infrared photon counting</title>. , 1995, 2388, 56.		6
133	High-performance silicon single-photon avalanche diode array. Proceedings of SPIE, 2009, , .	0.8	6
134	Large-area CMOS SPADs with very low dark counting rate. Proceedings of SPIE, 2013, , .	0.8	6
135	Multispectral Depth-Resolved Fluorescence Lifetime Spectroscopy Using SPAD Array Detectors and Fiber Probes. Sensors, 2019, 19, 2678.	2.1	6
136	High Detection Rate Fast-Gated CMOS Single-Photon Avalanche Diode Module. IEEE Photonics Journal, 2020, 12, 1-12.	1.0	6
137	Multi-Channel SPAD Chip for Silicon Photonics With Multi-Photon CoIncidence Detection. IEEE Journal of Selected Topics in Quantum Electronics, 2022, 28, 1-7.	1.9	6
138	Ultrafast single photon avalanche diodes without slow tails in the pulse response. IEEE Transactions on Electron Devices, 1993, 40, 2145.	1.6	5
139	Hot-carrier luminescence: comparison of different CMOS technologies. , 0, , .		5
140	Implementation of TRE systems into Emission Microscopes. Microelectronics Reliability, 2004, 44, 1529-1534.	0.9	5
141	InGaAs/InP Single Photon Avalanche Diode Design and Characterization. Solid-State Device Research Conference, 2008 ESSDERC 2008 38th European, 2006, , .	0.0	5
142	Gated operation of InGaAs SPADs with active quenching and fast timing circuits. , 2006, 6372, 191.		5
143	All-Silicon 1.55-Î¼m High-Resolution Photon Counting and Timing. IEEE Photonics Technology Letters, 2008, 20, 1956-1958.	1.3	5
144	100 kframe/s 8 bit monolithic single-photon imagers. , 2008, , .		5

#	Article	IF	Citations
145	Integrated simulator for single photon avalanche diodes. , 2011, , .		5
146	2D simulation for the impact of edge effects on the performance of planar InGaAs/InP SPADs. Proceedings of SPIE, 2012, , .	0.8	5
147	Dark Count Rate Dependence on Bias Voltage During Gate-OFF in InGaAs/InP Single-Photon Avalanche Diodes. IEEE Photonics Technology Letters, 2013, 25, 1832-1834.	1.3	5
148	3D RGB Non-Line-Of-Sight single-pixel imaging. , 2019, , .		5
149	Single-Shot Pulsed-LiDAR SPAD Sensor with on-chip Peak Detection for Background Rejection. IEEE Journal of Selected Topics in Quantum Electronics, 2022, 28, 1-10.	1.9	5
150	Tools for contactless testing and simulation of CMOS circuits. Microelectronics Reliability, 2001, 41, 1801-1808.	0.9	4
151	Cone-effect-free adaptive optics laser guide star development for the ELTs. , 2004, , .		4
152	Modeling and Probing Hot-Carrier Luminescence From MOSFETs. IEEE Electron Device Letters, 2008, 29, 350-352.	2.2	4
153	InGaAs/InP SPADs for near-infrared applications: device operating conditions and dedicated electronics. Proceedings of SPIE, 2010, , .	0.8	4
154	Experimental characterization of afterpulsing and timing jitter of InGaAs/InP SPAD. Proceedings of SPIE, 2011, , .	0.8	4
155	Single-photon detectors for practical quantum cryptography. Proceedings of SPIE, 2012, , .	0.8	4
156	Dual channel timeâ€toâ€digital converter module with 10 ps resolution and 320Âns full scale range. Electronics Letters, 2015, 51, 994-996.	0.5	4
157	0.16 Âµmâ€“BCD Silicon Photomultipliers with Sharp Timing Response and Reduced Correlated Noise. Sensors, 2018, 18, 3763.	2.1	4
158	<title>Single-photon avalanche detectors for low-light-level imaging</title>. , 1997, 3114, 333.		3
159	Characterization and modeling of metal-resistance-semiconductor photodetectors. IEEE Transactions on Nuclear Science, 1997, 44, 957-960.	1.2	3
160	Backside Flip-Chip testing by means of high-bandwidth luminescence detection. Microelectronics Reliability, 2003, 43, 1669-1674.	0.9	3
161	Single photon counting detectors in action: Retrospect and prospect. , 2010, , .		3
162	Photonics for Life. IEEE Pulse, 2011, 2, 16-23.	0.1	3

#	Article	IF	Citations
163	Low-power 20-meter 3D ranging SPAD camera based on continuous-wave indirect time-of-flight. , 2012, , .		3
164	Compact dual-wavelength system for time-resolved diffuse optical spectroscopy. , 2017, , .		3
165	A 20 A Sub-Nanosecond Integrated CMOS Laser Diode Driver for High Repetition Rate SPAD-Based Direct Time-of-Flight Measurements. , 2018, , .		3
166	High-sensitivity photodetectors with on-chip pinhole for laser scanning microscopy. IEEE Transactions on Electron Devices, 2000, 47, 1472-1476.	1.6	2
167	Spada: An Array of Spad Detectors For Astrophysical Applications. Experimental Astronomy, 2006, 19, 163-168.	1.6	2
168	Single-photon 3D ranging based on SPAD imagers. , 2010, , .		2
169	Advanced single photon counting instrumentation for SPADs. , 2011, , .		2
170	3D ranging with a single-photon imaging array. , 2011, , .		2
171	Time-resolved diffuse optical spectroscopy up to 1700 nm using a time-gated InGaAs/InP single-photon avalanche diode. Proceedings of SPIE, 2011, , .	0.8	2
172	Low-noise CMOS SPAD arrays with in-pixel time-to-digital converters. , 2014, , .		2
173	Time-resolved CMOS SPAD arrays: architectures, applications and perspectives. , 2017, , .		2
174	SPADs and TDCs for photon-counting, timing and gated-imaging at 30 ps resolution and 60% efficiency. , 2018, , .		2
175	LUMINESCENCE MEASUREMENTS FOR THE INVESTIGATION OF VLSI CIRCUITS DEFECTS. , 2004, , .		2
176	Sub-Rayleigh Imaging via N-Photon Detection. , 2010, , .		2
177	0.16 Âµm BCD single-photon avalanche diode with 30 ps timing jitter, high detection efficiency and low noise. , 2018, , .		2
178	Time-gated SPAD camera with reconfigurable macropixels for LIDAR applications. , 2019, , .		2
179	Design of a 16 x 16 fast-gated SPAD imager with 16 integrated shared picosecond TDCs for non-line-of-sight imaging. , 2019, , .		2
180	Microelectronic 3D Imaging and Neuromorphic Recognition for Autonomous UAVs. NATO Science for Peace and Security Series B: Physics and Biophysics, 2020, , 185-194.	0.2	2

#	Article	IF	Citations
181	First demonstration of sub-nanosecond photon timing with a Germanium photodiode. Microelectronic Engineering, 1992, 19, 61-64.	1.1	1
182	<title>Single-photon avalanche detectors for fluorescence imaging applications</title>. , 1997, , .		1
183	Impact of local-negative-feedback on the MRS avalanche photodetector operation. IEEE Transactions on Electron Devices, 1998, 45, 91-97.	1.6	1
184	Silicon pâ€“n junctions biased above breakdown used as monitors of carrier lifetime. Materials Science in Semiconductor Processing, 2001, 4, 159-161.	1.9	1
185	Innovative packaging technique for backside optical testing of wire-bonded chips. Microelectronics Reliability, 2005, 45, 1493-1498.	0.9	1
186	60-Channel 10 mus Time-Resolution Counter Array for Long Term Continuous Event Counting. IEEE Transactions on Nuclear Science, 2007, 54, 549-554.	1.2	1
187	Silicon single photon avalanche diodes: situation and prospect. , 2007, , .		1
188	A Packaging Solution for Optically Testing Wire-Bonded Chips. IEEE Transactions on Advanced Packaging, 2008, 31, 490-495.	1.7	1
189	One-chip quantum random number generator. Proceedings of SPIE, 2009, , .	0.8	1
190	Brain functional imaging at small source-detector distances based on fast-gated single-photon avalanche diodes. Proceedings of SPIE, 2009, , .	0.8	1
191	Functional diffuse reflectance spectroscopy at small source-detector distances based on fast-gated single-photon avalanche diodes. , 2010, , .		1
192	Linear arrays of single-photon detectors for photon counting and timing. , 2011, , .		1
193	Monolithic single-photon detectors and time-to-digital converters for picoseconds time-of-flight ranging. Proceedings of SPIE, 2011, , .	0.8	1
194	Time-domain diffuse optical spectroscopy up to 1700 nm using an InGaAs/InP single-photon avalanche diode. Proceedings of SPIE, 2011, , .	0.8	1
195	Fast-gated single-photon detection module with 200 ps transitions running up to 50 MHz with 30 ps resolution. , 2012, , .		1
196	InGaAs/InP single-photon counting module running up to 133 MHz. Proceedings of SPIE, 2012, , .	0.8	1
197	3D sensor for indirect ranging with pulsed laser source. Proceedings of SPIE, 2012, , .	0.8	1
198	In-vivo optical spectroscopy in the time-domain beyond 1100 nm. , 2013, , .		1

#	Article	IF	Citations
199	High linearity SPAD and TDC array for TCSPC and 3D ranging applications. Proceedings of SPIE, 2015, , .	0.8	1
200	MICROELECTRONIC ULTRASENSITIVE DETECTORS FOR CHIP ELECTROPHORESIS MICROSYSTEMS. , 2002, , .		1
201	Time-gated CMOS SPAD array in 0.16 Âµm BCD with shared timing electronics and background light rejection for LIDAR applications. , 2018, , .		1
202	<title>Germanium quad-cell for single-photon detection in the near infrared</title>. , 1995, , .		0
203	Correction to "Silicon planar technology for single-photon optical detectors". IEEE Transactions on Electron Devices, 2003, 50, 1819-1819.	1.6	0
204	MINIATURE MODULES FOR SINGLE-PHOTON DETECTION. , 2004, , .		0
205	Time-gated single-photon avalanche diode for time-resolved diffuse reflectance at small source-detector separation. Proceedings of SPIE, 2007, , .	0.8	0
206	Monolithic quad-cells for single-photon timing and tracking. , 2007, , .		0
207	Time-resolved diffuse reflectance at small source-detector separation using a time-gated single-photon avalanche diode. , 2007, , .		0
208	SPAD detection head with 32 fully-parallel channels for time-tagging single-photons at 3Î¼s. , 2009, , .		0
209	Fast-gated single-photon detectors boost dynamic range in NIR spectroscopy. Proceedings of SPIE, 2010, , .	0.8	0
210	High Throughput Single-Molecule Spectroscopy with Highly Parallel Excitation and Detection. Biophysical Journal, 2010, 98, 623a.	0.2	0
211	Characterization of InGaAs/InP single-photon avalanche diodes. , 2010, , .		0
212	Compact detection module based on InGaAs/InP SPADs for near-infrared single-photon counting up to 1.7 Î¼m. , 2011, , .		0
213	Towards arrays of smart-pixels for time-correlated single photon counting and time of flight application. , 2011, , .		0
214	A 32Ã—32 photon counting camera. Optik & Photonik, 2011, 6, 43-46.	0.3	0
215	1024 pixels single photon imaging array for 3D ranging. Proceedings of SPIE, 2011, , .	0.8	0
216	Imaging Beyond the Rayleigh Bound. , 2011, , .		0

#	Article	IF	Citations
217	32 channels SPAD array for single photon timing applications. , 2012, , .		0
218	InGaAs/InP SPAD with improved structure for sharp timing response. , 2012, , .		0
219	InGaAs/InP Single-Photon Avalanche Diode with narrow photon timing response. , 2012, , .		0
220	Low afterpulsing and narrow timing response InGaAs/InP Single-Photon Avalanche Diode. Proceedings of SPIE, 2013, , .	0.8	0
221	Time-resolved optical spectrometer based on a monolithic array of high-precision TDCs and SPADs. , 2013, , .		0
222	Fully CMOS analog and digital SiPMs. Proceedings of SPIE, 2015, , .	0.8	0
223	COMPACT ELECTROPHORESIS SYSTEM FOR GENETIC DIAGNOSTICS WITH ULTRASENSITIVE MICROSENSORS. , 2004, , .		0
224	Ultra-Fast Time-Gated SPAD for Multi-Wavelength Wide Dynamic Range Spectroscopy. , 2010, , .		0
225	The Spread Matrix: a method to predict the effect of a non time-invariant measurement system. , 2010, , .		0
226	A new method utilizing novel single-photon avalanche diode arrays for multi-exposure laser speckle flowmetry. , 2016, , .		0
227	Short-gate techniques for high-speed photon counting with InGaAs/InP SPADs. , 2016, , .		0
228	Quantum weak-interaction-based measurement: from sequential weak measurement to protective measurement. , 2018, , .		0
229	Linear SPAD array single- and multiple-photon coincidence- based Quantum Random Number Generator. , 2021, , .		0
230	Fast-gated digital silicon photomultiplier maximizes light harvesting and depth sensitivity in time-domain diffuse optics. , 2021, , .		0
231	SPADA: An Array of SPAD Detectors for Astrophysical Applications. , 2006, , 455-460.		0