Angelo Gulinatti

List of Publications by Year
in descending order

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103	2,332	236925 25	233421 45
papers	citations	h-index	g-index

107	107	107	2229
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Progress in Silicon Single-Photon Avalanche Diodes. IEEE Journal of Selected Topics in Quantum Electronics, 2007, 13, 852-862.	2.9	237
2	Observation of strongly entangled photon pairs from a nanowire quantum dot. Nature Communications, 2014, 5, 5298.	12.8	179
3	Two-Photon Interference Using Background-Free Quantum Frequency Conversion of Single Photons Emitted by an InAs Quantum Dot. Physical Review Letters, 2012, 109, 147405.	7.8	113
4	Development of new photon-counting detectors for single-molecule fluorescence microscopy. Philosophical Transactions of the Royal Society B: Biological Sciences, 2013, 368, 20120035.	4.0	100
5	Time-domain diffuse correlation spectroscopy. Optica, 2016, 3, 1006.	9.3	92
6	Fast-gated single-photon counting technique widens dynamic range and speeds up acquisition time in time-resolved measurements. Optics Express, 2011, 19, 10735.	3.4	89
7	35â€...ps time resolution at room temperature with large area single photon avalanche diodes. Electronics Letters, 2005, 41, 272.	1.0	86
8	High-throughput FCS using an LCOS spatial light modulator and an 8 Ã— 1 SPAD array. Biomedical Optics Express, 2010, 1, 1408.	2.9	74
9	New silicon SPAD technology for enhanced red-sensitivity, high-resolution timing and system integration. Journal of Modern Optics, 2012, 59, 1489-1499.	1.3	72
10	Enhancement and Inhibition of Spontaneous Photon Emission by Resonant Silicon Nanoantennas. Physical Review Applied, 2016, 6, .	3.8	65
11	An extremely low-noise heralded single-photon source: A breakthrough for quantum technologies. Applied Physics Letters, 2012, 101, .	3.3	56
12	Silicon Photon-Counting Avalanche Diodes for Single-Molecule Fluorescence Spectroscopy. IEEE Journal of Selected Topics in Quantum Electronics, 2014, 20, 248-267.	2.9	56
13	Bright nanoscale source of deterministic entangled photonÂpairs violating Bellâ€™s inequality. Scientific Reports, 2017, 7, 1700.	3.3	56
14	Recent Advances and Future Perspectives of Singleâ€Photon Avalanche Diodes for Quantum Photonics Applications. Advanced Quantum Technologies, 2021, 4, 2000102.	3.9	54
15	Improving the performance of bright quantum dot single photon sources using temporal filtering via amplitude modulation. Scientific Reports, 2013, 3, 1397.	3.3	45
16	Fully Integrated Active Quenching Circuit Driving Custom-Technology SPADs With 6.2-ns Dead Time. IEEE Photonics Technology Letters, 2019, 31, 102-105.	2.5	41
17	Complete and Compact 32-Channel System for Time-Correlated Single-Photon Counting Measurements. IEEE Photonics Journal, 2013, 5, 6801514-6801514.	2.0	40
18	Photon-Timing Jitter Dependence on Injection Position in Single-Photon Avalanche Diodes. IEEE Journal of Quantum Electronics, 2011, 47, 151-159.	1.9	36

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19	Space QUEST mission proposal: experimentally testing decoherence due to gravity. New Journal of Physics, 2018, 20, 063016.	2.9	36
20	Large-area low-jitter silicon single photon avalanche diodes. Proceedings of SPIE, 2008, , .	0.8	35
21	High-rate photon counting and picosecond timing with silicon-SPAD based compact detector modules. Journal of Modern Optics, 2007, 54, 225-237.	1.3	34
22	High-voltage integrated active quenching circuit for single photon count rate up to 80 Mcounts/s. Optics Express, 2016, 24, 17819.	3.4	32
23	SPADA: single-photon avalanche diode arrays. IEEE Photonics Technology Letters, 2005, 17, 657-659.	2.5	29
24	152-dB Dynamic Range With a Large-Area Custom-Technology Single-Photon Avalanche Diode. IEEE Photonics Technology Letters, 2018, 30, 391-394.	2.5	28
25	Analysis of detector performance in a gigahertz clock rate quantum key distribution system. New Journal of Physics, 2011, 13, 075008.	2.9	27
26	Multispot single-molecule FRET: High-throughput analysis of freely diffusing molecules. PLoS ONE, 2017, 12, e0175766.	2.5	27
27	Monolithic CMOS detector module for photon counting and picosecond timing. , 0, , .		25
28	8-spot smFRET analysis using two 8-pixel SPAD arrays. , 2013, 8590, .		23
29	Complete single-photon counting and timing module in a microchip. Optics Letters, 2005, 30, 1327.	3.3	22
30	Operation of silicon single photon avalanche diodes at cryogenic temperature. Review of Scientific Instruments, 2007, 78, 063105.	1.3	22
31	Note: Fully integrated active quenching circuit achieving 100 MHz count rate with custom technology single photon avalanche diodes. Review of Scientific Instruments, 2017, 88, 026103.	1.3	21
32	83-ps Timing Jitter With a Red-Enhanced SPAD and a Fully Integrated Front End Circuit. IEEE Photonics Technology Letters, 2018, 30, 1727-1730.	2.5	20
33	Custom silicon technology for SPAD-arrays with red-enhanced sensitivity and low timing jitter. Optics Express, 2021, 29, 4559.	3.4	20
34	Planar silicon SPADs with 200-Î¼m diameter and 35-ps photon timing resolution. , 2006, 6372, 203.		19
35	SPAD array module for multi-dimensional photon timing applications. Journal of Modern Optics, 2012, 59, 131-139.	1.3	19
36	Modeling photon detection efficiency and temporal response of single photon avalanche diodes. Proceedings of SPIE, 2009, , .	0.8	18

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37	Cumulative data acquisition in comparative photon-counting three-dimensional imaging. Journal of Modern Optics, 2011, 58, 244-256.	1.3	18
38	A physically based model for evaluating the photon detection efficiency and the temporal response of SPAD detectors. Journal of Modern Optics, 2011, 58, 210-224.	1.3	18
39	Radiation tests of single photon avalanche diode for space applications. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2013, 711, 65-72.	1.6	17
40	Large-area avalanche diodes for picosecond time-correlated photon counting. , 0, , .		16
41	Parallel multispot smFRET analysis using an 8-pixel SPAD array. Proceedings of SPIE, 2012, 8228, .	0.8	15
42	Relocating Single Molecules in Super-Resolved Fluorescence Lifetime Images near a Plasmonic Nanostructure. ACS Photonics, 2020, 7, 393-400.	6.6	15
43	New photon-counting detectors for single-molecule fluorescence spectroscopy and imaging. , 2011, 8033, 803316.		14
44	A 2-GHz Bandwidth, Integrated Transimpedance Amplifier for Single-Photon Timing Applications. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2015, 23, 2819-2828.	3.1	14
45	Correlated blinking of fluorescent emitters mediated by single plasmons. Physical Review A, 2017, 95, .	2.5	14
46	Single-molecule FRET experiments with a red-enhanced custom technology SPAD. , 2013, 8590, .		13
47	Red-Enhanced Photon Detection Module Featuring a $32 imes 1$ Single-Photon Avalanche Diode Array. IEEE Photonics Technology Letters, 2018, 30, 557-560.	2.5	13
48	Self-suppression of reset induced triggering in picosecond SPAD timing circuits. Review of Scientific Instruments, 2007, 78, 086112.	1.3	12
49	High-throughput single-molecule fluorescence spectroscopy using parallel detection. , 2010, 7608, .		12
50	Improving the performance of silicon single-photon avalanche diodes. Proceedings of SPIE, 2011, , .	0.8	12
51	48-spot single-molecule FRET setup with periodic acceptor excitation. Journal of Chemical Physics, 2018, 148, 123304.	3.0	12
52	A 48-pixel array of single photon avalanche diodes for multispot single molecule analysis. Proceedings of SPIE, 2013, 8631, .	0.8	10
53	Gigacount/second Photon Detection Module Based on an 8x8 Single-Photon Avalanche Diode Array. IEEE Photonics Technology Letters, 2016, 28, 1-1.	2.5	10
54	Custom single-photon avalanche diode with integrated front-end for parallel photon timing applications. Review of Scientific Instruments, 2012, 83, 033104.	1.3	9

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55	Avalanche current readâ€out circuit for lowâ€jitter parallel photon timing. Electronics Letters, 2013, 49, 1017-1018.	1.0	9
56	Planar silicon SPADs with improved photon detection efficiency. , 2010, , .		8
57	A view on progress of silicon single-photon avalanche diodes and quenching circuits. , 2006, 6372, 123.		7
58	Single-Photon Avalanche Detectors for Quantum Communications. , 2010, , .		7
59	Towards picosecond array detector for single-photon time-resolved multispot parallel analysis. Journal of Modern Optics, 2011, 58, 233-243.	1.3	7
60	Avalanche Current Measurements in SPADs by Means of Hot-Carrier Luminescence. IEEE Photonics Technology Letters, 2011, 23, 1319-1321.	2.5	7
61	High-performance silicon single-photon avalanche diode array. Proceedings of SPIE, 2009, , .	0.8	6
62	Portable genotyping system: Four-colour microchip electrophoresis. Sensors and Actuators B: Chemical, 2010, 143, 583-589.	7.8	6
63	High-detection efficiency and picosecond timing compact detector modules with red-enhanced SPADs. , 2012, , .		6
64	Optical crosstalk in SPAD arrays for high-throughput single-molecule fluorescence spectroscopy. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2018, 912, 255-258.	1.6	6
65	Single Photon Avalanche Diodes for space applications. , 2011, , .		5
66	New silicon technologies enable high-performance arrays of single photon avalanche diodes. Proceedings of SPIE, 2013, 8727, .	0.8	5
67	Silicon technologies for arrays of Single Photon Avalanche Diodes. , 2016, 9858, .		5
68	Planar silicon SPADs with improved photon detection efficiency. Proceedings of SPIE, 2011, , .	0.8	4
69	Compact 32-channel time-resolved single-photon detection system. Proceedings of SPIE, 2013, , .	0.8	4
70	16-Ch time-resolved single-molecule spectroscopy using line excitation. Proceedings of SPIE, 2017, 10071, .	0.8	4
71	Development and characterization of an 8x8 SPAD-array module for gigacount per second applications. Proceedings of SPIE, 2017, 10229, .	0.8	4
72	Triple epitaxial singleâ€photon avalanche diode for multichannel timing applications. Electronics Letters, 2018, 54, 644-645.	1.0	4

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73	Design-oriented simulation of the Photon Detection Efficiency and temporal response of Single Photon Avalanche Diodes. , 2009, , .		3
74	Single photon counting detectors in action: Retrospect and prospect. , 2010, , .		3
75	Silicon single-photon avalanche diodes for high-performance parallel photon timing. Proceedings of SPIE, 2012, , .	0.8	3
76	SCSI: the Southern Connecticut Stellar Interferometer. Proceedings of SPIE, 2016, , .	0.8	3
77	Recent advances in silicon single photon avalanche diodes and their applications. , 2006, , .		2
78	Monolithic front-end system for photon timing applications. , 2009, , .		2
79	Parallel fluorescence photon timing module with monolithic SPAD array detector. Proceedings of SPIE, 2011, , .	0.8	2
80	Planar technologies for SPAD arrays with improved performances. , 2012, , .		2
81	High energy pulsed laser deposition of ohmic tungsten contacts on silicon at room temperature. Thin Solid Films, 2018, 666, 121-129.	1.8	2
82	Silicon single photon avalanche diodes: situation and prospect. , 2007, , .		1
83	Silicon SPAD with near-infrared enhanced spectral response. , 2011, , .		1
84	Compact eight channel SPAD module for photon timing applications. , 2011, , .		1
85	High performance SPAD array detectors for parallel photon timing applications. , 2011, , .		1
86	Scintillating fibers readout by Single Photon Avalanche Diodes (SPAD) for space applications. Proceedings of SPIE, 2012, , .	0.8	1
87	High-performance SPAD array detectors for parallel photon timing applications. , 2012, , .		1
88	A Multispot Confocal Platform for High-Throughput Freely Diffusing Single-Molecule FRET Studies. Biophysical Journal, 2016, 110, 194a-195a.	0.5	1
89	Prospects for wireless optical intensity interferometry with the Southern Connecticut stellar interferometer. , 2018, , .		1
90	Toward single-molecule detection with very compact DNA sequencer based on single-photon avalanche diode array. Proceedings of SPIE, 2008, , .	0.8	0

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91	Photon-timing jitter dependence on the injection position in single-photon avalanche diodes. Proceedings of SPIE, 2010, , .	0.8	0
92	Timing enhanced silicon SPAD design. , 2011, , .		0
93	An Analysis of Single-Photon Detectors in an Environmentally Robust GigaHertz Clock Rate Quantum Key Distribution System. , 2011, , .		0
94	Benchmark of a New Red-Enhanced Custom Technology Spad Detector for Single-Molecule FRET Experiments. Biophysical Journal, 2012, 102, 278a.	0.5	0
95	An extremely low-noise heralded single-photon source without temporal post-selection. , 2013, , .		0
96	A 16 Channel Spad Array for High-Throughput Tcspc Measurements of Single-Molecule FRET of Freely Diffusing Molecules. Biophysical Journal, 2016, 110, 633a.	0.5	0
97	Temporal filtering via amplitude modulation to improve quantum dot single photon sources. , 2013, , .		0
98	Erasing spectral distinguishability in quantum dot based single photon sources using quantum frequency conversion. , 2013, , .		0
99	Fast fully integrated active quenching circuit for single photon counting up to 160 Mcounts/s. , 2019, , .		0
100	High performance single photon counting and timing with single photon avalanche diodes. , 2019, , .		0
101	High-speed fully-integrated electronics for high-performance measurements with single photon avalanche diode arrays. , 2019, , .		0
102	High-performance integrated circuits for fast and picosecond-precision measurements with single-photon avalanche diodes. , 2020, , .		0
103	Time-resolved multi-dimensional fluorescence imaging using a Digital-Micromirror-Device and a SPAD-array detector. , 2020, , .		0