Angelo Gulinatti

List of Publications by Year
in descending order

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	Custom silicon technology for SPAD-arrays with red-enhanced sensitivity and low timing jitter. Optics Express, 2021, 29, 4559.	3.4	20
2	Recent Advances and Future Perspectives of Singleâ€Photon Avalanche Diodes for Quantum Photonics Applications. Advanced Quantum Technologies, 2021, 4, 2000102.	3.9	54
3	Relocating Single Molecules in Super-Resolved Fluorescence Lifetime Images near a Plasmonic Nanostructure. ACS Photonics, 2020, 7, 393-400.	6.6	15
4	High-performance integrated circuits for fast and picosecond-precision measurements with single-photon avalanche diodes. , 2020, , .		0
5	Time-resolved multi-dimensional fluorescence imaging using a Digital-Micromirror-Device and a SPAD-array detector. , 2020, , .		0
6	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
7	Fast fully integrated active quenching circuit for single photon counting up to 160 Mcounts/s. , 2019, , .		0
8	High performance single photon counting and timing with single photon avalanche diodes. , 2019, , .		0
9	High-speed fully-integrated electronics for high-performance measurements with single photon avalanche diode arrays. , 2019, , .		0
10	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
11	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
12	48-spot single-molecule FRET setup with periodic acceptor excitation. Journal of Chemical Physics, 2018, 148, 123304.	3.0	12
13	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
14	High energy pulsed laser deposition of ohmic tungsten contacts on silicon at room temperature. Thin Solid Films, 2018, 666, 121-129.	1.8	2
15	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
16	Space QUEST mission proposal: experimentally testing decoherence due to gravity. New Journal of Physics, 2018, 20, 063016.	2.9	36
17	Triple epitaxial singleâ€photon avalanche diode for multichannel timing applications. Electronics Letters, 2018, 54, 644-645.	1.0	4
18	Prospects for wireless optical intensity interferometry with the Southern Connecticut stellar interferometer. , 2018, , .		1

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19	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
20	16-Ch time-resolved single-molecule spectroscopy using line excitation. Proceedings of SPIE, 2017, 10071, .	0.8	4
21	Development and characterization of an 8x8 SPAD-array module for gigacount per second applications. Proceedings of SPIE, 2017, 10229, .	0.8	4
22	Correlated blinking of fluorescent emitters mediated by single plasmons. Physical Review A, 2017, 95, .	2.5	14
23	Bright nanoscale source of deterministic entangled photonÂpairs violating Bellâ€™s inequality. Scientific Reports, 2017, 7, 1700.	3.3	56
24	Multispot single-molecule FRET: High-throughput analysis of freely diffusing molecules. PLoS ONE, 2017, 12, e0175766.	2.5	27
25	Time-domain diffuse correlation spectroscopy. Optica, 2016, 3, 1006.	9.3	92
26	High-voltage integrated active quenching circuit for single photon count rate up to 80 Mcounts/s. Optics Express, 2016, 24, 17819.	3.4	32
27	Enhancement and Inhibition of Spontaneous Photon Emission by Resonant Silicon Nanoantennas. Physical Review Applied, 2016, 6, .	3.8	65
28	A Multispot Confocal Platform for High-Throughput Freely Diffusing Single-Molecule FRET Studies. Biophysical Journal, 2016, 110, 194a-195a.	0.5	1
29	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
30	Silicon technologies for arrays of Single Photon Avalanche Diodes. , 2016, 9858, .		5
31	SCSI: the Southern Connecticut Stellar Interferometer. Proceedings of SPIE, 2016, , .	0.8	3
32	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
33	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
34	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
35	Observation of strongly entangled photon pairs from a nanowire quantum dot. Nature Communications, 2014, 5, 5298.	12.8	179
36	Compact 32-channel time-resolved single-photon detection system. Proceedings of SPIE, 2013, , .	0.8	4

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37	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
38	New silicon technologies enable high-performance arrays of single photon avalanche diodes. Proceedings of SPIE, 2013, 8727, .	0.8	5
39	Complete and Compact 32-Channel System for Time-Correlated Single-Photon Counting Measurements. IEEE Photonics Journal, 2013, 5, 6801514-6801514.	2.0	40
40	A 48-pixel array of single photon avalanche diodes for multispot single molecule analysis. Proceedings of SPIE, 2013, 8631, .	0.8	10
41	8-spot smFRET analysis using two 8-pixel SPAD arrays. , 2013, 8590, .		23
42	Single-molecule FRET experiments with a red-enhanced custom technology SPAD. , 2013, 8590, .		13
43	Avalanche current readâ€out circuit for lowâ€jitter parallel photon timing. Electronics Letters, 2013, 49, 1017-1018.	1.0	9
44	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
45	An extremely low-noise heralded single-photon source without temporal post-selection. , 2013, , .		0
46	Improving the performance of bright quantum dot single photon sources using temporal filtering via amplitude modulation. Scientific Reports, 2013, 3, 1397.	3.3	45
47	Temporal filtering via amplitude modulation to improve quantum dot single photon sources. , 2013, , .		0
48	Erasing spectral distinguishability in quantum dot based single photon sources using quantum frequency conversion. , 2013, , .		0
49	Custom single-photon avalanche diode with integrated front-end for parallel photon timing applications. Review of Scientific Instruments, 2012, 83, 033104.	1.3	9
50	Parallel multispot smFRET analysis using an 8-pixel SPAD array. Proceedings of SPIE, 2012, 8228, .	0.8	15
51	An extremely low-noise heralded single-photon source: A breakthrough for quantum technologies. Applied Physics Letters, 2012, 101, .	3.3	56
52	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
53	Planar technologies for SPAD arrays with improved performances. , 2012, , .		2
54	Scintillating fibers readout by Single Photon Avalanche Diodes (SPAD) for space applications. Proceedings of SPIE, 2012, , .	0.8	1

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55	High-performance SPAD array detectors for parallel photon timing applications. , 2012, , .		1
56	SPAD array module for multi-dimensional photon timing applications. Journal of Modern Optics, 2012, 59, 131-139.	1.3	19
57	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
58	Silicon single-photon avalanche diodes for high-performance parallel photon timing. Proceedings of SPIE, 2012, , .	0.8	3
59	Benchmark of a New Red-Enhanced Custom Technology Spad Detector for Single-Molecule FRET Experiments. Biophysical Journal, 2012, 102, 278a.	0.5	0
60	High-detection efficiency and picosecond timing compact detector modules with red-enhanced SPADs. , 2012, , .		6
61	Timing enhanced silicon SPAD design. , 2011, , .		0
62	Cumulative data acquisition in comparative photon-counting three-dimensional imaging. Journal of Modern Optics, 2011, 58, 244-256.	1.3	18
63	Towards picosecond array detector for single-photon time-resolved multispot parallel analysis. Journal of Modern Optics, 2011, 58, 233-243.	1.3	7
64	Avalanche Current Measurements in SPADs by Means of Hot-Carrier Luminescence. IEEE Photonics Technology Letters, 2011, 23, 1319-1321.	2.5	7
65	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
66	An Analysis of Single-Photon Detectors in an Environmentally Robust GigaHertz Clock Rate Quantum Key Distribution System. , 2011, , .		0
67	Silicon SPAD with near-infrared enhanced spectral response. , 2011, , .		1
68	Compact eight channel SPAD module for photon timing applications. , 2011, , .		1
69	High performance SPAD array detectors for parallel photon timing applications. , 2011, , .		1
70	Photon-Timing Jitter Dependence on Injection Position in Single-Photon Avalanche Diodes. IEEE Journal of Quantum Electronics, 2011, 47, 151-159.	1.9	36
71	Improving the performance of silicon single-photon avalanche diodes. Proceedings of SPIE, 2011, , .	0.8	12
72	Parallel fluorescence photon timing module with monolithic SPAD array detector. Proceedings of SPIE, 2011, , .	0.8	2

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73	Single Photon Avalanche Diodes for space applications. , 2011, , .		5
74	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
75	Analysis of detector performance in a gigahertz clock rate quantum key distribution system. New Journal of Physics, 2011, 13, 075008.	2.9	27
76	Planar silicon SPADs with improved photon detection efficiency. Proceedings of SPIE, 2011, , .	0.8	4
77	New photon-counting detectors for single-molecule fluorescence spectroscopy and imaging. , 2011, 8033, 803316.		14
78	Planar silicon SPADs with improved photon detection efficiency. , 2010, , .		8
79	Photon-timing jitter dependence on the injection position in single-photon avalanche diodes. Proceedings of SPIE, 2010, , .	0.8	0
80	Single-Photon Avalanche Detectors for Quantum Communications. , 2010, , .		7
81	Portable genotyping system: Four-colour microchip electrophoresis. Sensors and Actuators B: Chemical, 2010, 143, 583-589.	7.8	6
82	High-throughput single-molecule fluorescence spectroscopy using parallel detection. , 2010, 7608, .		12
83	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
84	Single photon counting detectors in action: Retrospect and prospect. , 2010, , .		3
85	Design-oriented simulation of the Photon Detection Efficiency and temporal response of Single Photon Avalanche Diodes. , 2009, , .		3
86	Monolithic front-end system for photon timing applications. , 2009, , .		2
87	Modeling photon detection efficiency and temporal response of single photon avalanche diodes. Proceedings of SPIE, 2009, , .	0.8	18
88	High-performance silicon single-photon avalanche diode array. Proceedings of SPIE, 2009, , .	0.8	6
89	Large-area low-jitter silicon single photon avalanche diodes. Proceedings of SPIE, 2008, , .	0.8	35
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	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
92	Operation of silicon single photon avalanche diodes at cryogenic temperature. Review of Scientific Instruments, 2007, 78, 063105.	1.3	22
93	Self-suppression of reset induced triggering in picosecond SPAD timing circuits. Review of Scientific Instruments, 2007, 78, 086112.	1.3	12
94	Silicon single photon avalanche diodes: situation and prospect. , 2007, , .		1
95	Progress in Silicon Single-Photon Avalanche Diodes. IEEE Journal of Selected Topics in Quantum Electronics, 2007, 13, 852-862.	2.9	237
96	A view on progress of silicon single-photon avalanche diodes and quenching circuits. , 2006, 6372, 123.		7
97	Planar silicon SPADs with 200-Î¼m diameter and 35-ps photon timing resolution. , 2006, 6372, 203.		19
98	Recent advances in silicon single photon avalanche diodes and their applications. , 2006, , .		2
99	35â€…ps time resolution at room temperature with large area single photon avalanche diodes. Electronics Letters, 2005, 41, 272.	1.0	86
100	Complete single-photon counting and timing module in a microchip. Optics Letters, 2005, 30, 1327.	3.3	22
101	SPADA: single-photon avalanche diode arrays. IEEE Photonics Technology Letters, 2005, 17, 657-659.	2.5	29
102	Monolithic CMOS detector module for photon counting and picosecond timing. , 0, , .		25
103	Large-area avalanche diodes for picosecond time-correlated photon counting. , 0, , .		16