

# Alessandro Restelli

## List of Publications by Year in descending order

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38  
papers

730  
citations

687363

13  
h-index

580821

25  
g-index

38  
all docs

38  
docs citations

38  
times ranked

1021  
citing authors

#	ARTICLE	IF	CITATIONS
1	Programmable system on chip for controlling an atomic physics experiment. Review of Scientific Instruments, 2021, 92, 055107.	1.3	6
2	RF Signal Classification using Boolean Reservoir Computing on an FPGA. , 2021, , .		4
3	Reservoir Computing Using Networks of CMOS Logic Gates. , 2021, , .		1
4	A radiofrequency voltage-controlled current source for quantum spin manipulation. Review of Scientific Instruments, 2020, 91, 104708.	1.3	0
5	Microcontroller based scanning transfer cavity lock for long-term laser frequency stabilization. Review of Scientific Instruments, 2019, 90, 043115.	1.3	18
6	Dynamics of analog logic-gate networks for machine learning. Chaos, 2019, 29, 123130.	2.5	7
7	A low-steering piezo-driven mirror. Review of Scientific Instruments, 2018, 89, 073110.	1.3	2
8	An ultra-low noise, high-voltage piezo-driver. Review of Scientific Instruments, 2016, 87, 124702.	1.3	8
9	Active stabilization of ion trap radiofrequency potentials. Review of Scientific Instruments, 2016, 87, 053110.	1.3	52
10	Characterization of an advanced harmonic subtraction single-photon detection system based on an InGaAs/InP avalanche diode. , 2016, , .		2
11	Ultra-narrow gating of InGaAs/InP SPAD for high-detection-efficiency low-error-rate high-speed single-photon detection. , 2016, , .		0
12	Fast Gated InGaAs/InP Single-Photon Detector for Gigahertz Quantum Communications and Atmospheric Sensing. , 2016, , .		0
13	Harnessing high-dimensional hyperentanglement through a biphoton frequency comb. Nature Photonics, 2015, 9, 536-542.	31.4	138
14	Photon-efficient quantum key distribution using time-entangled energy entanglement with high-dimensional encoding. New Journal of Physics, 2015, 17, 022002.	2.9	150
15	Afterpulse Reduction Through Prompt Quenching in Silicon Reach-Through Single-Photon Avalanche Diodes. Journal of Lightwave Technology, 2014, 32, 4097-4103.	4.6	14
16	Ultra-short gates improve the performance of high-speed gated single-photon avalanche diodes. , 2014, , .		2
17	Gigahertz-gated InGaAs SPAD system with avalanche charge sensitivity approaching the fundamental limit. Proceedings of SPIE, 2013, , .	0.8	0
18	Single-photon detection efficiency up to 50% at 1310nm with an InGaAs/InP avalanche diode gated at 1.25GHz. Applied Physics Letters, 2013, 102, .	3.3	83

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19	Semiconductor-Based Detectors. <i>Experimental Methods in the Physical Sciences</i> , 2013, 45, 83-146.	0.1	9
20	Efficient single-spatial-mode PPKTP waveguide source for high dimensional entanglement-based QKD. , 2012, , .		1
21	Efficient single-spatial-mode periodically-poled KTiOPO <sub>4</sub> waveguide source for high-dimensional entanglement-based quantum key distribution. <i>Optics Express</i> , 2012, 20, 26868.	3.4	26
22	Time-domain measurements of afterpulsing in InGaAs/InP SPAD gated with sub-nanosecond pulses. <i>Journal of Modern Optics</i> , 2012, 59, 1465-1471.	1.3	28
23	Increased Maximum Count Rates in Single-photon Avalanche Diodes with Ultrafast Active Quenching. , 2012, , .		0
24	Avalanche discrimination and high-speed counting in periodically gated single-photon avalanche diodes. <i>Proceedings of SPIE</i> , 2012, , .	0.8	9
25	SPAD electronics for high-speed quantum communications. <i>Proceedings of SPIE</i> , 2011, , .	0.8	2
26	A technique to measure afterpulse probabilities in InGaAs SPADs at nanosecond time scales with sub-picoCoulomb avalanche charge. <i>Proceedings of SPIE</i> , 2011, , .	0.8	1
27	Improved Timing Resolution Single-Photon Detectors in Daytime Free-Space Quantum Key Distribution With 1.25 GHz Transmission Rate. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2010, 16, 1084-1090.	2.9	11
28	Programmable instrumentation and gigahertz signaling for single-photon quantum communication systems. <i>New Journal of Physics</i> , 2009, 11, 045016.	2.9	13
29	Quantum key distribution at GHz transmission rates. <i>Proceedings of SPIE</i> , 2009, , .	0.8	7
30	Dual-color microchip electrophoresis with single-photon avalanche diodes: Application to mutation detection. <i>Electrophoresis</i> , 2008, 29, 4972-4975.	2.4	4
31	Free-space quantum key distribution at GHz repetition rates. , 2007, , .		0
32	High-repetition rate quantum key distribution. , 2007, , .		7
33	Monolithic silicon matrix detector with 50 $\mu$ m photon counting pixels. <i>Journal of Modern Optics</i> , 2007, 54, 213-223.	1.3	28
34	A large-area monolithic array of silicon drift detectors for medical imaging. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2006, 568, 96-100.	1.6	13
35	Microchips and single-photon avalanche diodes for DNA separation with high sensitivity. <i>Electrophoresis</i> , 2006, 27, 3797-3804.	2.4	20
36	Digital field programmable gate array-based lock-in amplifier for high-performance photon counting applications. <i>Review of Scientific Instruments</i> , 2005, 76, 093112.	1.3	47

#	ARTICLE	IF	CITATIONS
37	Microelectronic photosensors for genetic diagnostic microsystems. Sensors and Actuators B: Chemical, 2004, 100, 158-162.	7.8	17
38	COMPACT ELECTROPHORESIS SYSTEM FOR GENETIC DIAGNOSTICS WITH ULTRASENSITIVE MICROSENSORS. , 2004, , .		0