Giovanni Bonanno

List of Publications by Year
in descending order

96 papers	2,649 citations	279487 23 h-index	189595 50 g-index
99 all docs	99 docs citations	99 times ranked	2673 citing authors

#	Article	IF	Citations
1	Proof-of-Principle of a Cherenkov-Tag Detector Prototype. Sensors, 2020, 20, 3437.	2.1	2
2	The innovative Cherenkov camera based on SiPM sensors of the ASTRI-Horn telescope: from the T/M and electrical design to the full assembly and testing in a harsh environment. , 2019, , .		0
3	The ASTRI camera for the Cherenkov Telescope Array. , 2018, , .		10
4	A New Simple and Effective Procedure for SiPM Electrical Parameter Extraction. IEEE Sensors Journal, 2016, 16, 3620-3626.	2.4	11
5	New Improved Model and Accurate Analytical Response of SiPMs Coupled to Read-Out Electronics. IEEE Sensors Journal, 2016, 16, 19-21.	2.4	14
6	Development of an ultra-miniaturised XRD/XRF instrument for the in situ mineralogical and chemical analysis of planetary soils and rocks: implication for archaeometry. Rendiconti Lincei, 2015, 26, 529-537.	1.0	4
7	Fabrication, characterization and testing of silicon photomultipliers for the Muon Portal Project. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2015, 787, 236-239.	0.7	18
8	Characterization and performance of the ASIC (CITIROC) front-end of the ASTRI camera. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2015, 794, 185-192.	0.7	58
9	A new enhanced PSPICE implementation of the equivalent circuit model of SiPM detectors. , 2015, , .		5
10	Evaluation of the optical cross talk level in the SiPMs adopted in ASTRI SST-2M Cherenkov Camera using EASIROC front-end electronics. Journal of Instrumentation, 2014, 9, C02015-C02015.	0.5	6
11	The muon portal double tracker to inspect travelling containers. , 2014, , .		1
12	SiPM detectors for the ASTRI project in the framework of the Cherenkov Telescope Array. , 2014, , .		1
13	The camera of the ASTRI SST-2M prototype for the Cherenkov Telescope Array. , 2014, , .		6
14	Characterization Measurements Methodology and Instrumental Set-Up Optimization for New SiPM Detectorsâ€"Part I: Electrical Tests. IEEE Sensors Journal, 2014, 14, 3557-3566.	2.4	22
15	Characterization Measurements Methodology and Instrumental Set-Up Optimization for New SiPM Detectors - Part II: Optical Tests. IEEE Sensors Journal, 2014, 14, 3567-3578.	2.4	24
16	Silicon Photomultipliers Electrical Model Extensive Analytical Analysis. IEEE Transactions on Nuclear Science, 2014, 61, 23-34.	1.2	56
17	Electro-optical characterization of MPPC detectors for the ASTRI Cherenkov telescope camera. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2014, 768, 32-42.	0.7	6
18	Accurate Analytical Single-Photoelectron Response of Silicon Photomultipliers. IEEE Sensors Journal, 2014, 14, 2749-2754.	2.4	20

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19	PSPICE HIGH-LEVEL MODEL AND SIMULATIONS OF THE EASIROC ANALOG FRONT-END. International Journal of Modelling and Simulation, 2014, 34, .	2.3	3
20	Design of a muonic tomographic detector to scan travelling containers. Journal of Instrumentation, 2014, 9, C05029-C05029.	0.5	6
21	A new accurate analytical expression for the SiPM transient response to single photons. , 2014, , .		1
22	The muon portal project: A dedicated muon detector for the inspection of shipping containers. , 2013, , .		0
23	Introducing the CTA concept. Astroparticle Physics, 2013, 43, 3-18.	1.9	504
24	Characterization of EASIROC as front-end for the readout of the SiPM at the focal plane of the Cherenkov telescope ASTRI. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2013, 729, 484-490.	0.7	12
25	Improved SPICE electrical model of silicon photomultipliers. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2013, 726, 1-7.	0.7	25
26	Characterization of the front-end EASIROC for read-out of SiPM in the ASTRI camera. Nuclear Physics, Section B, Proceedings Supplements, 2013, 239-240, 254-257.	0.5	9
27	UVSiPM: A light detector instrument based on a SiPM sensor working in single photon counting. Nuclear Physics, Section B, Proceedings Supplements, 2013, 239-240, 258-261.	0.5	12
28	The Muon Portal Project: Development of an innovative scanning portal based on muon tomography. , 2013, , .		4
29	The ASTRI SST-2M prototype: camera design. , 2013, , .		2
30	A large area cosmic ray detector for the inspection of hidden high-Z materials inside containers. Journal of Physics: Conference Series, 2013, 409, 012046.	0.3	13
31	Design of a large area tomograph to search for high-Z materials inside containers by cosmic muons. , 2012, , .		8
32	Geiger Avalanche Photodiodes (G-APDs) and Their Characterization. , 2011, , .		7
33	Design concepts for the Cherenkov Telescope Array CTA: an advanced facility for ground-based high-energy gamma-ray astronomy. Experimental Astronomy, 2011, 32, 193-316.	1.6	640
34	Solid State Photon-Counters for High Time Resolution Astrophysics (HTRA). , 2011, , .		0
35	On the use of bioluminescence for estimating shear stresses over a rippled seabed. Meccanica, 2010, 45, 881-895.	1.2	11
36	Iqueye: a single-photon counting very high-speed photometer for the ESO 3.5m NTT. Proceedings of SPIE, 2010, , .	0.8	2

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37	Iqueye, a single photon-counting photometer applied to the ESO new technology telescope. Astronomy and Astrophysics, 2009, 508, 531-539.	2.1	42
38	AquEYE, a single photon counting photometer for astronomy. Journal of Modern Optics, 2009, 56, 261-272.	0.6	34
39	Precision measurements of Photon Detection Efficiency for SiPM detectors. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2009, 610, 93-97.	0.7	47
40	Features of Silicon Photo Multipliers: Precision Measurements of Noise, Cross-Talk, Afterpulsing, Detection Efficiency. IEEE Transactions on Nuclear Science, 2009, 56, 1033-1041.	1.2	50
41	Silicon Photomultiplier Technology at STMicroelectronics. IEEE Transactions on Nuclear Science, 2009, 56, 2434-2442.	1.2	77
42	Characterization of detectors for the Italian Astronomical Quantum Photometer Project. Journal of Modern Optics, 2009, 56, 273-283.	0.6	17
43	Very fast photon counting photometers for astronomical applications: IquEYE for the ESO 3.5m New Technology Telescope. , 2009, , .		1
44	Single-photon avalanche photodiodes with integrated quenching resistor. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2008, 591, 367-373.	0.7	26
45	Characterization of a Novel 100-Channel Silicon Photomultiplierâ€"Part II: Charge and Time. IEEE Transactions on Electron Devices, 2008, 55, 2765-2773.	1.6	44
46	Characterization of a Novel 100-Channel Silicon Photomultiplierâ€"Part I: Noise. IEEE Transactions on Electron Devices, 2008, 55, 2757-2764.	1.6	46
47	Quantum Detection Efficiency in Geiger Mode Avalanche Photodiodes. IEEE Transactions on Nuclear Science, 2008, 55, 3620-3625.	1.2	27
48	Silicon photomultipliers for nuclear medical imaging applications. Proceedings of SPIE, 2008, , .	0.8	8
49	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
50	4H-SiC Schottky Array Photodiodes for UV Imaging Application Based on the Pinch-off Surface Effect. Materials Science Forum, 2007, 556-557, 945-948.	0.3	3
51	Photocurrent gain in 4H-SiC interdigit Schottky UV detectors with a thermally grown oxide layer. Applied Physics Letters, 2007, 90, 223507.	1.5	24
52	Photon counting arrays for astrophysics. Journal of Modern Optics, 2007, 54, 163-189.	0.6	16
53	High efficiency 4H-SiC Schottky UV-photodiodes using self-aligned semitransparent contacts. Superlattices and Microstructures, 2007, 41, 29-35.	1.4	12
54	Multipixel geiger-mode photon detectors for ultra-weak light sources. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2007, 571, 350-354.	0.7	5

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55	Single photon avalanche photodiodes arrays. Sensors and Actuators A: Physical, 2007, 138, 306-312.	2.0	25
56	Silicon Geiger mode avalanche photodiodes. Optoelectronics Letters, 2007, 3, 177-180.	0.4	3
57	High responsivity 4H-SiC Schottky UV photodiodes based on the pinch-off surface effect. Applied Physics Letters, 2006, 89, 081111.	1.5	74
58	Arrays of Geiger mode avalanche photodiodes. IEEE Photonics Technology Letters, 2006, 18, 1633-1635.	1.3	27
59	Spada: An Array of Spad Detectors For Astrophysical Applications. Experimental Astronomy, 2006, 19, 163-168.	1.6	2
60	Single-Photon Avalanche Diode Arrays for Fast Transients and Adaptive Optics. IEEE Transactions on Instrumentation and Measurement, 2006, 55, 365-374.	2.4	18
61	Electro-Optical Characteristics of the Single Photon Avalanche Diode (SPAD). , 2006, , 461-468.		3
62	Characterization of SPAD Arrays: First Results. , 2006, , 469-474.		4
63	SPADA: An Array of SPAD Detectors for Astrophysical Applications. , 2006, , 455-460.		0
64	Silicon planar technology for single-photon optical detectors. , 2004, , .		9
65	Pushing technologies: single-photon avalanche diode arrays. , 2004, , .		13
66	No planet around HD 219542 B. Astronomy and Astrophysics, 2004, 420, L27-L30.	2.1	16
67	Abundance difference between components of wide binaries. Astronomy and Astrophysics, 2004, 420, 683-697.	2.1	83
68	A New Photon Counting Detector: Intensified CMOS-APS. , 2004, , 21-28.		0
69	Silicon planar technology for single-photon optical detectors. IEEE Transactions on Electron Devices, 2003, 50, 918-925.	1.6	82
70	Correction to "Silicon planar technology for single-photon optical detectors". IEEE Transactions on Electron Devices, 2003, 50, 1819-1819.	1.6	0
71	The AVES adaptive optics spectrograph for the VLT: status report. , 2003, 4841, 715.		1
72	Progress on photon-counting intensified APS. , 2003, 4854, 583.		4

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73	Scientific Objectives and Design Study of an Adaptive Optics Visual Echelle Spectrograph and Imager Coronograph (AVES-IMCO) for the NAOS Visitor Focus at the VLT. Globular Clusters - Guides To Galaxies, 2002, , 205-212.	0.1	0
74	Influence of metalâ€“diamond interfaces on the response of UV photoconductors. Diamond and Related Materials, 2001, 10, 698-705.	1.8	15
75	<title>Photon counting system based on intensified CMOS-APS: PC-IAPS</title>. , 2001, , .		4
76	<title>Characterization of a photon-counting intensified active pixel sensor (PC-IAPS): preliminary results</title>. , 2001, , .		2
77	SARG: The High Resolution Spectrograph of TNG. Experimental Astronomy, 2001, 12, 107-143.	1.6	56
78	Metal Abundances of Red Clump Stars in Open Clusters. I. NGC 6819. Astronomical Journal, 2001, 121, 327-336.	1.9	154
79	<title>Feasibility study of a camera for the UV Italian Sky Surveyor (UVISS) on the International Space Station</title>. , 2000, , .		0
80	Design study of an adaptive optics visual echelle spectrograph and imager for the VLT. , 2000, , .		3
81	Tests of SARG: the high-resolution spectrograph for TNG. , 2000, , .		2
82	<title>Ultraviolet Italian Sky Surveyor (UVISS) on the International Space Station (ISS): study report</title>. , 2000, 4139, 199.		0
83	<title>High-resolution spectrograph of TNG: a status report</title>. , 1998, , .		0
84	<title>AIRWATCH: the fast detector</title>. , 1998, 3445, 486.		1
85	<title>AIR WATCH: air-induced fluorescence by radiation laboratory experiments</title>. , 1998, , .		2
86	<title>SARG: the high-resolution spectrograph of TNG</title>. , 1997, 2871, 1204.		1
87	<title>Catania Astrophysical Observatory facility for UV CCD characterization</title>. , 1996, , .		12
88	<title>CCD cameras for the Italian national telescope Galileo</title>. , 1996, , .		7
89	New Developments in CCD Technology for the UV-EUV Spectral Range. Symposium - International Astronomical Union, 1995, 167, 39-48.	0.1	0
90	New Developments in CCD Technology for the UV-EUV Spectral Range. , 1995, , 39-48.		1

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91	<title>Performances of ion-implanted CCDs in the EUV spectral region</title>. , 1994, 2278, 98.		2
92	<title>Characterization of CCDs with enhanced UV response</title>. , 1992, 1743, 223.		4
93	<title>Comparison between the EUV performances of cryogenically cooled CCDs and a MAMA detector</title>. , 1992, , .		5
94	VMEbus system for CCD image acquisition. Publications of the Astronomical Society of the Pacific, 1992, 104, 1252.	1.0	0
95	Extreme UV imaging telescope array on the spectrum X-G satellite. , 1990, 1344, 132.		4
96	Scientific Objectives and Design Study of an Adaptive Optics Visual Echelle Spectrograph and Imager Coronograph (AVES-IMCO) for the NAOS Visitor Focus at the VLT. , 0, , 205-212.		0