Carlo Ettore Fiorini

List of Publications by Year
in descending order

83	1,640	361388 20	315719 38
papers	citations	h-index	g-index

84	84	84	1093
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Kaonic atoms measurements at the DAÎ¦NE collider: the SIDDHARTA-2 experiment. EPJ Web of Conferences, 2022, 258, 07006.	0.3	0
2	Handheld Magnetic-Compliant Gamma-Ray Spectrometer for Environmental Monitoring and Scrap Metal Screening. Sensors, 2022, 22, 1412.	3.8	11
3	Main Features of the SIDDHARTA-2 Apparatus for Kaonic Deuterium X-Ray Measurements. EPJ Web of Conferences, 2022, 262, 01016.	0.3	1
4	Large area silicon drift detectors system for high precision timed x-ray spectroscopy. Measurement Science and Technology, 2022, 33, 095502.	2.6	13
5	A 144-SiPM 3â€•LaBr3 readout module for PMTs replacement in Gamma spectroscopy. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2022, 1040, 167179.	1.6	3
6	GAMMA: A 16-Channel Spectroscopic ASIC for SiPMs Readout With 84-dB Dynamic Range. IEEE Transactions on Nuclear Science, 2021, 68, 2559-2572.	2.0	27
7	A Lightweight SiPM-Based Gamma-Ray Spectrometer for Environmental Monitoring with Drones. Lecture Notes in Electrical Engineering, 2021, , 55-61.	0.4	3
8	Reducing the MIPs Charge-Sharing Background in X-Ray Spectroscopic SDD Arrays. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-7.	4.7	4
9	Miniaturized USB-powered multi-channel module for gamma spectroscopy and imaging. Review of Scientific Instruments, 2021, 92, 063306.	1.3	6
10	The MiniSDD-Based 1-Mpixel Camera of the DSSC Project for the European XFEL. IEEE Transactions on Nuclear Science, 2021, 68, 1334-1350.	2.0	28
11	Silicon Drift Detectorsâ€™ Spectroscopic Response during the SIDDHARTA-2 Kaonic Helium Run at the DAÎ¦NE Collider. Condensed Matter, 2021, 6, 47.	1.8	7
12	A Filterless Fluorescence Detector Based on a Time-Gated SiPM. , 2021, , .		1
13	Challenges for Microelectronics in Non-Invasive Medical Diagnostics. Sensors, 2020, 20, 3636.	3.8	5
14	A Directional Gamma-Ray Spectrometer With Microcontroller-Embedded Machine Learning. IEEE Journal on Emerging and Selected Topics in Circuits and Systems, 2020, 10, 433-443.	3.6	25
15	Clinical SiPM-Based MRI-Compatible SPECT: Preliminary Characterization. IEEE Transactions on Radiation and Plasma Medical Sciences, 2020, 4, 371-377.	3.7	15
16	TERA: Throughput-Enhanced Readout ASIC for High-Rate Energy-Dispersive X-Ray Detection. IEEE Transactions on Nuclear Science, 2020, 67, 1746-1759.	2.0	10
17	A SiPM-based 144-Channel Detection System for Gamma Spectroscopy up to 20 MeV. , 2020, , .		0
18	DOI Estimation for a Clinical MRI-Compatible SPECT Insert. , 2020, , .		0

#	Article	IF	Citations
19	First Prototype of 2Ã—2 SCARLET: Readout ASIC for Bump-bonded SDD Array for Large Event Throughput. , 2020, , .		3
20	Implementation of Real-Time Machine Learning Algorithms for 3D Scintillation Position Estimation in Thick Crystals. , 2020, , .		2
21	A Compact 4-Decade Dynamic Range Readout Module for Gamma Spectroscopy and Imaging. , 2019, , .		11
22	Assessment of analog pulse processor performance for ultra high-rate x-ray spectroscopy. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2019, 945, 162479.	1.6	19
23	Charge Sensitive Amplifier With Offset-Compensated V-to-I Converter for the Mini-SDD-Based DSSC Detector. IEEE Transactions on Nuclear Science, 2019, 66, 2233-2238.	2.0	3
24	Validation and Performance Assessment of a Preclinical SiPM-Based SPECT/MRI Insert. IEEE Transactions on Radiation and Plasma Medical Sciences, 2019, 3, 483-490.	3.7	13
25	Characterization of ARDESIA: a 4-channel SDD X-ray spectrometer for synchrotron measurements at high count rates. Journal of Instrumentation, 2019, 14, P06027-P06027.	1.2	20
26	Spectroscopic performance of a Sr co-doped 3â€•LaBr3 scintillator read by a SiPM array. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2019, 931, 158-161.	1.6	19
27	Energy Response of Silicon Drift Detectors for Kaonic Atom Precision Measurements. Condensed Matter, 2019, 4, 31.	1.8	20
28	ARDESIA: A fast silicon drift detector X-ray spectrometer for synchrotron applications. X-Ray Spectrometry, 2019, 48, 382-386.	1.4	7
29	32-Channel Detection Unit for Combined XRF-XRD in Mining Transportable Applications. , 2019, , .		2
30	A High Dynamic Range 144-SiPM Detection Module for Gamma Spectroscopy and Imaging with 3â€•LaBr3. , 2019, , .		4
31	A SiPM-Based Clinical MRI-Compatible SPECT Insert. , 2019, , .		1
32	GAMMA: a High Dynamic Range 16-ch ASIC for Large Scintillators Readout with SiPM Array. , 2019, , .		3
33	Passivated SDD-Based Detection Unit to Improve Reliability in Scintillation Detection. , 2019, , .		0
34	Spectroscopic Performance of TERA: Fast Multichannel Analog Pulse Processor ASIC for X-ray Detection Applications. , 2019, , .		0
35	Wireless and Robust Radioactivity Detector for Environmental Monitoring. , 2019, , .		1
36	Application of Silicon Drift Detectors for the Readout of a CdWO₄ Scintillating Crystal. IEEE Transactions on Nuclear Science, 2018, 65, 1040-1046.	2.0	7

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37	High-Resolution Gamma-Ray Spectroscopy With a SiPM-Based Detection Module for 1â€•and 2â€• LaBr₃:Ce Readout. IEEE Transactions on Nuclear Science, 2018, 65, 645-655.	2.0	24
38	Development of clinical simultaneous SPECT/MRI. British Journal of Radiology, 2018, 91, 20160690.	2.2	51
39	LAILA: a Compact, High-Dynamic Range Readout for High-Density SiPM Arrays. , 2018, , .		3
40	Characterization of the First Prototype of TERA: A Readout ASIC for Ultra High Rate X-ray Detection Applications. , 2018, , .		1
41	SPECT/MRI INSERT Compatibility: Assessment, Solutions, and Design Guidelines. IEEE Transactions on Radiation and Plasma Medical Sciences, 2018, 2, 369-379.	3.7	28
42	Characterization of the Detection Module of the INSERT SPECT/MRI Clinical System. IEEE Transactions on Radiation and Plasma Medical Sciences, 2018, 2, 554-563.	3.7	19
43	GAMMA ASIC: 8-channels Prototype Measurements and Development of a New 16-channels Prototype. , 2018, , .		4
44	SiPM-Based Scrap Metal Radioactivity Detector Embeddable in Lifting Electromagnets. , 2018, , .		2
45	ETTORE: a 12-Channel Front-End ASIC for SDDs with Integrated JFET. , 2018, , .		6
46	Simultaneous SPECT/MR Imaging with a SiPM-Based Preclinical Insert. , 2018, , .		1
47	Laser-Based Scintillator Crystal Emulator for Optical Testing of SiPM Readout Technologies. , 2018, , .		1
48	ARDESIA Detection Module: A Four-Channel Array of SDDs for Mcps X-Ray Spectroscopy in Synchrotron Radiation Applications. IEEE Transactions on Nuclear Science, 2018, 65, 1355-1364.	2.0	20
49	A SiPM-Readout ASIC for SPECT Applications. IEEE Transactions on Radiation and Plasma Medical Sciences, 2018, 2, 404-410.	3.7	27
50	Development of a Practical Calibration Procedure for a Clinical SPECT/MRI System Using a Single INSERT Prototype Detector and Multimini Slit-Slat Collimator. IEEE Transactions on Radiation and Plasma Medical Sciences, 2018, 2, 380-386.	3.7	7
51	A Bulk Control Circuit for Open-Loop Front-Ends for X-Ray Pixel Detectors. IEEE Transactions on Nuclear Science, 2017, 64, 1605-1610.	2.0	2
52	Characterization of high density SiPM non-linearity and energy resolution for prompt gamma imaging applications. Journal of Instrumentation, 2017, 12, P07001-P07001.	1.2	18
53	An open-loop front-end stage with signal compression capability and improved PSRR for mini-SDD pixel detectors. Journal of Instrumentation, 2017, 12, T12008-T12008.	1.2	2
54	Study of PMOS front-end solution with signal compression for XFEL MiniSDD X-ray detectors. , 2016, , .		2

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55	SFERA: An Integrated Circuit for the Readout of X and <inline-formula> <tex-math notation="LaTeX">$gamma $ </tex-math> </inline-formula>-Ray Detectors. IEEE Transactions on Nuclear Science, 2016, 63, 1797-1807.	2.0	46
56	Development of arrays of Silicon Drift Detectors and readout ASIC for the SIDDHARTA experiment. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2016, 824, 449-451.	1.6	14
57	A 12-bit SAR ADC integrated on a multichannel silicon drift detector readout IC. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2016, 824, 353-355.	1.6	6
58	A CMOS self-triggered gated integrator circuit for SiPM readout in SPECT applications. , 2015, , .		1
59	Experimental Evaluation of a SiPM-Based Scintillation Detector for MR-Compatible SPECT Systems. IEEE Transactions on Nuclear Science, 2015, 62, 2122-2128.	2.0	27
60	Silicon Drift Detectors and CUBE Preamplifiers for High-Resolution X-ray Spectroscopy. IEEE Transactions on Nuclear Science, 2015, 62, 221-227.	2.0	45
61	Development of a Detector for Gamma-Ray Spectroscopy Based on Silicon Drift Detector Arrays and 2<formula formulatype="inline"><tex Notation="TeX">${^prime}{^prime}$</tex> </formula> Lanthanum Bromide Scintillator. IEEE Transactions on Nuclear Science, 2015, 62, 2334-2342.	2.0	8
62	Collimator Design for a Brain SPECT/MRI Insert. IEEE Transactions on Nuclear Science, 2015, 62, 1716-1724.	2.0	20
63	A Simple Technique for Signal Compression in High Dynamic Range, High Speed X-ray Pixel Detectors. IEEE Transactions on Nuclear Science, 2014, 61, 2595-2600.	2.0	16
64	Simulation of the expected performance of INSERT: A new multi-modality SPECT/MRI system for preclinical and clinical imaging. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2014, 734, 141-146.	1.6	21
65	Prompt gamma imaging of proton pencil beams at clinical dose rate. Physics in Medicine and Biology, 2014, 59, 5849-5871.	3.0	120
66	ANGUS: A multichannel CMOS circuit for large capacitance silicon photomultiplier detectors for SPECT applications. , 2014, , .		12
67	A compact SiPM photodetector array for SPECT applications. , 2014, , .		4
68	Development of a SiPM-based Anger camera for INSERT, a new multi-modality SPECT/MRI system for preclinical and clinical imaging. , 2014, , .		5
69	A Multichannel Integrated Readout Circuit for High Throughput X-Ray Spectroscopy With Silicon Drift Detectors. IEEE Transactions on Nuclear Science, 2013, 60, 430-436.	2.0	13
70	Silicon Drift Detectors for Readout of Scintillators in Gamma-Ray Spectroscopy. IEEE Transactions on Nuclear Science, 2013, 60, 2923-2933.	2.0	23
71	High rate X-ray spectroscopy with “CUBE” preamplifier coupled with silicon drift detector. , 2012, , .		18
72	Development of the DEPFET Sensor With Signal Compression: A Large Format X-Ray Imager With Mega-Frame Readout Capability for the European XFEL. IEEE Transactions on Nuclear Science, 2012, 59, 3339-3351.	2.0	83

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73	VERDI-3: A versatile readout ASIC for different families of radiation detectors. , 2012, , .		2
74	The HICAM Gamma Camera. IEEE Transactions on Nuclear Science, 2012, 59, 537-544.	2.0	22
75	Characterization of the Flip Capacitor Filter for the XFEL-DSSC Project. IEEE Transactions on Nuclear Science, 2011, 58, 2032-2038.	2.0	13
76	A new measurement of kaonic hydrogen X-rays. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2011, 704, 113-117.	4.1	314
77	Performance of silicon-drift detectors in kaonic atom X-ray measurements. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2011, 628, 264-267.	1.6	27
78	“CUBE”, A low-noise CMOS preamplifier as alternative to JFET front-end for high-count rate spectroscopy. , 2011, , .		57
79	A fast current readout strategy for the XFEL DePFET detector. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2010, 624, 360-366.	1.6	19
80	Expected performance of the DEPFET sensor with signal compression: A large format X-ray imager with mega-frame readout capability for the European XFEL. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2010, 624, 509-519.	1.6	71
81	ICARUS-SDD: a 16 channel ASIC for silicon drift detectors read-out. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2003, 504, 304-306.	1.6	7
82	Single-side biasing of silicon drift detectors with homogeneous light-entrance window. IEEE Transactions on Nuclear Science, 2000, 47, 1691-1695.	2.0	24
83	Gamma ray spectroscopy with CsI(Tl) scintillator coupled to silicon drift chamber. IEEE Transactions on Nuclear Science, 1997, 44, 2553-2560.	2.0	90