Massimo Manghisoni

List of Publications by Year
in descending order

190 papers	1,725 citations	361413 20 h-index	454955 30 g-index
192 all docs	192 docs citations	192 times ranked	742 citing authors

#	Article	IF	Citations
1	Comments by the Senior Editor. IEEE Transactions on Nuclear Science, 2022, 69, 647-647.	2.0	0
2	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
3	Cosmic antihelium-3 nuclei sensitivity of the GAPS experiment. Astroparticle Physics, 2021, 130, 102580.	4.3	10
4	Optimization of the 65-nm CMOS Linear Front-End Circuit for the CMS Pixel Readout at the HL-LHC. IEEE Transactions on Nuclear Science, 2021, 68, 2682-2692.	2.0	3
5	Low-Noise Analog Channel for the Readout of the Si(Li) Detector of the GAPS Experiment. IEEE Transactions on Nuclear Science, 2021, 68, 2661-2669.	2.0	6
6	Threshold tuning DACs for pixel readout chips at the High Luminosity LHC. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2020, 969, 164025.	1.6	3
7	A Rad-Hard Bandgap Voltage Reference for High Energy Physics Experiments. Lecture Notes in Electrical Engineering, 2020, , 19-24.	0.4	0
8	Large-area Si(Li) detectors for X-ray spectrometry and particle tracking in the GAPS experiment. Journal of Instrumentation, 2019, 14, P10009-P10009.	1.2	17
9	Qualification and Integration Aspects of the DSSC Mega-Pixel X-Ray Imager. IEEE Transactions on Nuclear Science, 2019, 66, 1966-1975.	2.0	4
10	Signal and Noise Performance of a 110-nm CMOS Technology for Photon Science Applications. IEEE Transactions on Nuclear Science, 2019, 66, 752-759.	2.0	0
11	Characterization of PFM3, a 32Ã—32 readout chip for PixFEL X-ray imager. , 2019, , .		1
12	Large-area Si(Li) Detectors for X-ray Spectrometry and Particle Tracking for the GAPS Experiment. , 2019, , .		1
13	Analog front-end design perspective of a 14 nm finFET technology. , 2019, , .		1
14	First test results of the CHIPIX65 asynchronous front-end connected to a 3D sensor. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2019, 936, 319-320.	1.6	0
15	Ionizing Radiation Effects on the Noise of 65 nm CMOS Transistors for Pixel Sensor Readout at Extreme Total Dose Levels. IEEE Transactions on Nuclear Science, 2018, 65, 550-557.	2.0	8
16	Dynamic Compression of the Signal in a Charge Sensitive Amplifier: Experimental Results. IEEE Transactions on Nuclear Science, 2018, 65, 636-644.	2.0	9
17	Qualification of a high-resolution on-chip injection circuit for the calibration of the DSSC X-ray imager for the European XFEL. , 2018, , .		2
18	Heavily Irradiated 65-nm Readout Chip With Asynchronous Channels for Future Pixel Detectors. IEEE Transactions on Nuclear Science, 2018, 65, 2699-2706.	2.0	2

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19	A Front-End Channel in 65 nm CMOS for Pixel Detectors at the HL-LHC Experiment Upgrades. IEEE Transactions on Nuclear Science, 2017, 64, 789-799.	2.0	16
20	Characterisation of irradiated thin silicon sensors for the CMS phase II pixel upgrade. European Physical Journal C, 2017, 77, 1.	3.9	4
21	65-nm CMOS Front-End Channel for Pixel Readout in the HL-LHC Radiation Environment. IEEE Transactions on Nuclear Science, 2017, 64, 2922-2932.	2.0	5
22	A pixelated x-ray detector for diffraction imaging at next-generation high-rate FEL sources. , 2017, , .		2
23	Design of analog front-ends for the RD53 demonstrator chip. , 2017, , .		2
24	Recent progress of RD53 Collaboration towards next generation Pixel Read-Out Chip for HL-LHC. Journal of Instrumentation, 2016, 11, C12058-C12058.	1.2	17
25	65 nm CMOS analog front-end for pixel detectors at the HL-LHC. Journal of Instrumentation, 2016, 11, C02049-C02049.	1.2	17
26	PFM2: a 32 Ã— 32 processor for X-ray diffraction imaging at FELs. Journal of Instrumentation, 2016, 11, C11033-C11033.	1.2	0
27	A 2D imager for X-ray FELs with a 65 nm CMOS readout based on per-pixel signal compression and 10 bit A/D conversion. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2016, 831, 301-308.	1.6	6
28	Design and test of clock distribution circuits for the Macro Pixel ASIC. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2016, 824, 287-289.	1.6	0
29	PFM2: A 32 Ã— 32 readout chip for the PixFEL X-ray imager demonstrator. , 2016, , .		1
30	First experimental results on active and slim-edge silicon sensors for XFEL. Journal of Instrumentation, 2016, 11, C12018-C12018.	1.2	1
31	Charge preamplifier in a 65 nm CMOS technology for pixel readout in the Grad TID regime. , 2016, , .		1
32	The PixFEL project: Progress towards a fine pitch X-ray imaging camera for next generation FEL facilities. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2016, 824, 131-134.	1.6	0
33	In-pixel conversion with a 10 bit SAR ADC for next generation X-ray FELs. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2016, 824, 313-315.	1.6	4
34	Characterization of bandgap reference circuits designed for high energy physics applications. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2016, 824, 371-373.	1.6	8
35	Design and TCAD simulation of planar p-on-n active-edge pixel sensors for the next generation of FELs. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2016, 824, 384-385.	1.6	6
36	Low-noise fast charge sensitive amplifier with dynamic signal compression. , 2015, , .		0

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37	A 10 bit resolution readout channel with dynamic range compression for X-ray imaging at FELs. , 2015, , .		0
38	CHIPIX65: Developments on a new generation pixel readout ASIC in CMOS 65 nm for HEP experiments. , 2015, , .		20
39	Dynamic Compression of the Signal in a Charge Sensitive Amplifier: From Concept to Design. IEEE Transactions on Nuclear Science, 2015, 62, 2318-2326.	2.0	24
40	Design of bandgap reference circuits in a 65 nm CMOS technology for HL-LHC applications. Journal of Instrumentation, 2015, 10, C02004-C02004.	1.2	3
41	Design of low-power, low-voltage, differential I/O links for High Energy Physics applications. Journal of Instrumentation, 2015, 10, C01055-C01055.	1.2	5
42	Advantages of a vertical integration process in the design of DNW MAPS. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2015, 784, 255-259.	1.6	0
43	The PixFEL project: development of advanced X-ray pixel detectors for application at future FEL facilities. Journal of Instrumentation, 2015, 10, C02024-C02024.	1.2	13
44	Low-power clock distribution circuits for the Macro Pixel ASIC. Journal of Instrumentation, 2015, 10, C01051-C01051.	1.2	1
45	PixFEL: developing a fine pitch, fast 2D X-ray imager for the next generation X-FELs. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2015, 796, 2-7.	1.6	10
46	Novel active signal compression in low-noise analog readout at future X-ray FEL facilities. Journal of Instrumentation, 2015, 10, C04003-C04003.	1.2	5
47	Effects of Substrate Thinning on the Properties of Quadruple Well CMOS MAPS. IEEE Transactions on Nuclear Science, 2014, 61, 1039-1046.	2.0	2
48	Assessment of a Low-Power 65Ânm CMOS Technology for Analog Front-End Design. IEEE Transactions on Nuclear Science, 2014, 61, 553-560.	2.0	13
49	CMOS MAPS in a Homogeneous 3D Process for Charged Particle Tracking. IEEE Transactions on Nuclear Science, 2014, 61, 700-707.	2.0	0
50	Low-noise readout channel with a novel dynamic signal compression for future X-FEL applications. , 2014, , .		1
51	PixFEL: Enabling technologies, building blocks and architectures for advanced X-ray pixel cameras at the next generation FELs. , 2014, , .		2
52	Design and TCAD simulations of planar active-edge pixel sensors for future XFEL applications. , 2014, , .		4
53	Pixel-Level Charge and Current Injection Circuit for High Accuracy Calibration of the DSSC Chip at the European XFEL. IEEE Transactions on Nuclear Science, 2013, 60, 3852-3861.	2.0	3
54	Recent developments on CMOS MAPS for the SuperB Silicon Vertex Tracker. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2013, 718, 283-287.	1.6	5

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55	Radiation Tolerance of Devices and Circuits in a 3D Technology Based on the Vertical Integration of Two 130-nm CMOS Layers. IEEE Transactions on Nuclear Science, 2013, 60, 4526-4532.	2.0	8
56	The design of fast analog channels for the readout of strip detectors in the inner layers of the SuperB SVT. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2013, 718, 205-207.	1.6	2
57	Advances in the development of pixel detector for the SuperB Silicon Vertex Tracker. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2013, 731, 25-30.	1.6	1
58	The front-end chip of the SuperB SVT detector. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2013, 718, 180-183.	1.6	3
59	Latest results of the R&D on CMOS MAPS for the Layer0 of the SuperB SVT. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2013, 732, 484-487.	1.6	1
60	Beam test results for the SuperB-SVT thin striplet detector. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2013, 718, 314-317.	1.6	1
61	The first fully functional 3D CMOS chip with Deep N-well active pixel sensors for the ILC vertex detector. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2013, 732, 543-546.	1.6	0
62	Review of radiation damage studies on DNW CMOS MAPS. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2013, 730, 155-158.	1.6	0
63	High accuracy injection circuit for the calibration of a large pixel sensor matrix. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2013, 718, 234-236.	1.6	0
64	First results from the characterization of a three-dimensional deep N-well MAPS prototype for vertexing applications. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2013, 699, 41-46.	1.6	6
65	Active pixel sensors with enhanced pixel-level analog and digital functionalities in a 2-tier 3D CMOS technology. , 2013, , .		0
66	Characterization of a large scale DNW MAPS fabricated in a 3D integration process. , 2013, , .		1
67	Discriminators in 65 nm CMOS process for high granularity, high time resolution pixel detectors. , 2013, , .		7
68	Effects of substrate thinning on the properties of quadruple well CMOS MAPS. , 2013, , .		0
69	CMOS MAPS in a homogeneous 3D process for charged particle tracking. , 2012, , .		0
70	Recent progress in the development of 3D deep n-well CMOS MAPS. Journal of Instrumentation, 2012, 7, C02007-C02007.	1.2	1
71	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
72	Fast analog front-end for the readout of the SuperB SVT inner Layers. , 2012, , .		1

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73	The DSSC pixel readout ASIC with amplitude digitization and local storage for DEPFET sensor matrices at the European XFEL. , 2012, , .		17
74	A 65-nm CMOS Prototype Chip With Monolithic Pixel Sensors and Fast Front-End Electronics. IEEE Transactions on Nuclear Science, 2012, 59, 3304-3311.	2.0	2
75	TID-Induced Degradation in Static and Noise Behavior of Sub-100 nm Multifinger Bulk NMOSFETs. IEEE Transactions on Nuclear Science, 2011, 58, 776-784.	2.0	11
76	A 3D Vertically Integrated Deep N-Well CMOS MAPS for the SuperB Layer0. Journal of Instrumentation, 2011, 6, C01010-C01010.	1.2	0
77	Vertically integrated monolithic pixel sensors for charged particle tracking and biomedical imaging. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2011, 652, 630-633.	1.6	0
78	Front-end electronics in a 65nm CMOS process for high density readout of pixel sensors. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2011, 650, 163-168.	1.6	5
79	Thin pixel development for the SuperB silicon vertex tracker. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2011, 650, 169-173.	1.6	14
80	2D and 3D CMOS MAPS with high performance pixel-level signal processing. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2011, 628, 212-215.	1.6	0
81	The SuperB silicon vertex tracker. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2011, 636, S168-S172.	1.6	9
82	Beam test results of different configurations of deep N-well MAPS matrices featuring in pixel full signal processing. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2011, 628, 234-237.	1.6	4
83	Analog design criteria for high-granularity detector readout in the 65 nm CMOS technology. , 2011, , .		0
84	2D and 3D thin pixel technologies for the Layer0 of the SuperB Silicon Vertex Tracker. , 2011, , .		7
85	High precision injection circuit for in-pixel calibration of a large sensor matrix. , 2011, , .		2
86	The Apsel65 front-end chip for the readout of pixel sensors in the 65 nm CMOS node. , 2011, , .		2
87	Performance of a high accuracy injection circuit for in-pixel calibration of a large sensor matrix. , 2011, , .		6
88	Vertical integration approach to the readout of pixel detectors for vertexing applications. , 2011, , .		5
89	Forecasting noise and radiation hardness of CMOS front-end electronics beyond the 100nm frontier. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2010, 617, 358-361.	1.6	4
90	Beam-test results of 4k pixel CMOS MAPS and high resistivity striplet detectors equipped with digital sparsified readout in the Slim5 low mass silicon demonstrator. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2010, 617, 596-600.	1.6	9

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91	Vertically integrated deep N-well CMOS MAPS with sparsification and time stamping capabilities for thin charged particle trackers. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2010, 624, 379-386.	1.6	20
92	SLIM5 beam test results for thin striplet detector and fast readout beam telescope. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2010, 617, 601-604.	1.6	10
93	A 3D deep n-well CMOS MAPS for the ILC vertex detector. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2010, 617, 324-326.	1.6	1
94	The high rate data acquisition system for the SLIM5 beam test. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2010, 617, 321-323.	1.6	6
95	The superB silicon vertex tracker. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2010, 617, 585-587.	1.6	15
96	Deep n-well MAPS in a 130nm CMOS technology: Beam test results. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2010, 623, 195-197.	1.6	7
97	Introducing 65nm CMOS technology in low-noise read-out of semiconductor detectors. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2010, 624, 373-378.	1.6	18
98	The SLIM5 low mass silicon tracker demonstrator. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2010, 623, 942-953.	1.6	25
99	Evaluation of the radiation tolerance of 65 nm CMOS devices for high-density front-end electronics. , 2010, , .		0
100	Front-End Performance and Charge Collection Properties of Heavily Irradiated DNW MAPS. IEEE Transactions on Nuclear Science, 2010, 57, 1781-1789.	2.0	15
101	Thin pixel development for the Layer0 of the SuperB Silicon Vertex Tracker. , 2010, , .		0
102	High accuracy injection circuit for pixel-level calibration of readout electronics. , 2010, , .		9
103	Mechanisms of Noise Degradation in Low Power 65 nm CMOS Transistors Exposed to Ionizing Radiation. IEEE Transactions on Nuclear Science, 2010, , .	2.0	14
104	Pixel readout ASIC with per pixel digitization and digital storage for the DSSC detector at XFEL. , 2010, , .		14
105	Design of Time Invariant Analog Front-End Circuits for Deep N-Well CMOS MAPS. IEEE Transactions on Nuclear Science, 2009, 56, 2360-2373.	2.0	14
106	Front-end performance and charge collection properties of heavily irradiated DNW MAPS. , 2009, , .		0
107	3D DNW MAPS for high resolution, highly efficient, sparse readout CMOS detectors. , 2009, , .		1
108	Design and Performance of a DNW CMOS Active Pixel Sensor for the ILC Vertex Detector. IEEE Transactions on Nuclear Science, 2009, 56, 3002-3009.	2.0	2

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109	A 4096-pixel MAPS device with on-chip data sparsification. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2009, 604, 408-411.	1.6	16
110	First generation of deep n-well CMOS MAPS with in-pixel sparsification for the ILC vertex detector. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2009, 604, 390-392.	1.6	1
111	On-Chip Fast Data Sparsification for a Monolithic 4096-Pixel Device. IEEE Transactions on Nuclear Science, 2009, 56, 1159-1162.	2.0	2
112	Charge signal processors in sparse readout CMOS MAPS and hybrid pixel sensors for the SuperB Layer0. , 2009, , .		1
113	Design Optimization of Charge Preamplifiers With CMOS Processes in the 100 nm Gate Length Regime. IEEE Transactions on Nuclear Science, 2009, 56, 235-242.	2.0	24
114	TID Effects in Deep N-Well CMOS Monolithic Active Pixel Sensors. IEEE Transactions on Nuclear Science, 2009, 56, 2124-2131.	2.0	14
115	CMOS technologies in the 100nm range for rad-hard front-end electronics in future collider experiments. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2008, 596, 107-112.	1.6	5
116	Review of radiation effects leading to noise performance degradation in 100 - nm scale microelectronic technologies. , 2008, , .		2
117	Investigating Degradation Mechanisms in 130 nm and 90 nm Commercial CMOS Technologies Under Extreme Radiation Conditions. IEEE Transactions on Nuclear Science, 2008, 55, 1992-2000.	2.0	19
118	TID effects in deep N-well CMOS monolithic active pixel sensors. , 2008, , .		1
119	Noise Behavior of a 180 nm CMOS SOI Technology for Detector Front-End Electronics. IEEE Transactions on Nuclear Science, 2008, 55, 2408-2413.	2.0	2
120	Gate Current Noise in Ultrathin Oxide MOSFETs and Its Impact on the Performance of Analog Front-End Circuits. IEEE Transactions on Nuclear Science, 2008, 55, 2399-2407.	2.0	13
121	Comprehensive Study of Total Ionizing Dose Damage Mechanisms and Their Effects on Noise Sources in a 90 nm CMOS Technology. IEEE Transactions on Nuclear Science, 2008, 55, 3272-3279.	2.0	24
122	The associative memory for the self-triggered SLIM5 silicon telescope. , 2008, , .		13
123	Development of deep N-well MAPS in a 130 nm CMOS technology and beam test results on a 4k-pixel matrix with digital sparsified readout. , 2008, , .		19
124	Performance of a DNW CMOS Active Pixel Sensor Designed for the ILC Vertex Detector. , 2008, , .		1
125	Time invariant analog processors for monolithic deep n-well CMOS pixel detectors. , 2008, , .		4
126	Impact of gate-leakage current noise in sub-100 nm CMOS front-end electronics. , 2007, , .		5

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127	Minimum noise design of charge amplifiers with CMOS processes in the 100 nm feature size range. , 2007, , .		9
128	Perspectives for low noise detector readout in a sub-quarter-micron CMOS SOI technology. , 2007, , .		0
129	Recent development on triple well 130 nm CMOS MAPS with in-pixel signal processing and data sparsification capability. , 2007, , .		12
130	Proposal of a data sparsification unit for a mixed-mode MAPS detector. , 2007, , .		22
131	Impact of Lateral Isolation Oxides on Radiation-Induced Noise Degradation in CMOS Technologies in the 100-nm Regime. IEEE Transactions on Nuclear Science, 2007, 54, 2218-2226.	2.0	35
132	Investigating degradation mechanisms in 130 nm and 90 nm commercial CMOS technologies exposed to up to 100 Mrad ionizing radiation dose. , 2007, , .		1
133	Resolution Limits in 130 nm and 90 nm CMOS Technologies for Analog Front-End Applications. IEEE Transactions on Nuclear Science, 2007, 54, 531-537.	2.0	23
134	Channel hot carrier stress on irradiated 130-nm NMOSFETs: Impact of bias conditions during X-ray exposure. , 2007, , .		0
135	130 and 90nm CMOS technologies for detector front-end applications. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2007, 572, 368-370.	1.6	3
136	Development of deep N-well monolithic active pixel sensors in a CMOS technology. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2007, 572, 277-280.	1.6	9
137	Pixel-level continuous-time analog signal processing for 130nm CMOS MAPS. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2007, 572, 396-398.	1.6	1
138	Recent developments in 130 nm CMOS monolithic active pixel detectors. Nuclear Physics, Section B, Proceedings Supplements, 2007, 172, 20-24.	0.4	1
139	First prototype of a silicon microstrip detector with the data-driven readout chip FSSR2 for a tracking-based trigger system. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2007, 572, 388-391.	1.6	0
140	Total Ionizing Dose effects in 130-nm commercial CMOS technologies for HEP experiments. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2007, 582, 750-754.	1.6	93
141	CMOS MAPS with pixel level sparsification and time stamping capabilities for applications at the ILC. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2007, 581, 291-294.	1.6	24
142	Noise Characterization of 130 nm and 90 nm CMOS Technologies for Analog Front-end Electronics. , 2006, , .		13
143	Noise Performance of 0.13mum CMOS Technologies for Detector Front-End Applications. IEEE Transactions on Nuclear Science, 2006, 53, 2456-2462.	2.0	18
144	FSSR2, a Self-Triggered Low Noise Readout Chip for Silicon Strip Detectors. IEEE Transactions on Nuclear Science, 2006, 53, 2470-2476.	2.0	24

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145	Design and Performance of Analog Circuits for DNW-MAPS in 100-nm-scale CMOS Technology. , 2006, , .		4
146	Development of 130nm CMOS Monolithic Active Pixels with In-pixel Signal Processing. , 2006, , .		6
147	A novel monolithic active pixel detector in triple well CMOS technology with pixel level analog processing. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2006, 565, 195-201.	1.6	32
148	Monolithic pixel detectors in a CMOS technology with sensor level continuous time charge amplification and shaping. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2006, 568, 159-166.	1.6	48
149	Design criteria for low noise front-end electronics in the 0.13Î¼m CMOS generation. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2006, 568, 343-349.	1.6	9
150	A new approach to the design of monolithic active pixel detectors in triple well CMOS technology. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2006, 569, 61-64.	1.6	2
151	Total ionizing dose effects on the noise performances of a 0.13 /spl mu/m CMOS technology. IEEE Transactions on Nuclear Science, 2006, 53, 1599-1606.	2.0	37
152	Response of SOI bipolar transistors exposed to /spl gamma/-rays under different dose rate and bias conditions. IEEE Transactions on Nuclear Science, 2005, 52, 1040-1047.	2.0	11
153	Radiation hardness test of FSSR, a multichannel, mixed signal chip for microstrip detector readout. , 2005, , .		2
154	Survey of noise performances and scaling effects in deep submicrometer CMOS devices from different foundries. IEEE Transactions on Nuclear Science, 2005, 52, 2733-2740.	2.0	18
155	Fermilab silicon strip readout chip for BTeV. IEEE Transactions on Nuclear Science, 2005, 52, 799-804.	2.0	9
156	Recent results from the development of silicon detectors with integrated electronics. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2004, 518, 354-356.	1.6	0
157	Gamma-ray response of SOI bipolar junction transistors for fast, radiation tolerant front-end electronics. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2004, 518, 477-481.	1.6	16
158	The readout of the LHC beam luminosity monitor: accurate shower energy measurements at a repetition rate. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2004, 518, 501-506.	1.6	3
159	A study for the detection of ionizing particles with phototransistors on thick high-resistivity silicon substrates. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2004, 530, 98-104.	1.6	11
160	Noise analysis of NPN SOI bipolar transistors for the design of charge measuring systems. IEEE Transactions on Nuclear Science, 2004, 51, 980-986.	2.0	5
161	Proton-induced damage in JFET transistors and charge preamplifiers on high-resistivity silicon. IEEE Transactions on Nuclear Science, 2004, 51, 2880-2886.	2.0	7
162	Initial test results of an ionization chamber shower detector for a LHC luminosity monitor. IEEE Transactions on Nuclear Science, 2003, 50, 258-262.	2.0	5

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163	JFET preamplifiers with different reset techniques on detector-grade high-resistivity silicon. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2003, 512, 199-206.	1.6	7
164	Radiation effects on the noise parameters of a 0.18 Î¼m CMOS technology for detector front-end applications. Nuclear Physics, Section B, Proceedings Supplements, 2003, 125, 400-405.	0.4	1
165	Resolution limits achievable with CMOS front-end in X- and Î³-ray analysis with semiconductor detectors. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2003, 512, 167-178.	1.6	13
166	Comparison of ionizing radiation effects in 0.18 and 0.25 /spl mu/m CMOS technologies for analog applications. IEEE Transactions on Nuclear Science, 2003, 50, 1827-1833.	2.0	41
167	JFET front-end circuits integrated in a detector-grade silicon substrate. IEEE Transactions on Nuclear Science, 2003, 50, 942-947.	2.0	13
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