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	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
2	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
3	Submicron CMOS technologies for low-noise analog front-end circuits. IEEE Transactions on Nuclear Science, 2002, 49, 1783-1790.	2.0	74
4	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
5	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
6	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
7	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
8	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
9	Experimental study and modeling of the white noise sources in submicron Pand N-MOSFETs. IEEE Transactions on Nuclear Science, 2001, 48, 1577-1586.	2.0	29
10	Instrumentation for noise measurements on CMOS transistors for fast detector preamplifiers. IEEE Transactions on Nuclear Science, 2002, 49, 1281-1286.	2.0	29
11	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
12	Radiation hardness perspectives for the design of analog detector readout circuits in the 0.18-/spl mu/m CMOS generation. IEEE Transactions on Nuclear Science, 2002, 49, 2902-2909.	2.0	27
13	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
14	FSSR2, a Self-Triggered Low Noise Readout Chip for Silicon Strip Detectors. IEEE Transactions on Nuclear Science, 2006, 53, 2470-2476.	2.0	24
15	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
16	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
17	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
18	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

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19	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
20	Proposal of a data sparsification unit for a mixed-mode MAPS detector. , 2007, , .		22
21	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
22	CHIPIX65: Developments on a new generation pixel readout ASIC in CMOS 65 nm for HEP experiments. , 2015, , .		20
23	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
24	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
25	Experimental studies of the noise properties of a deep submicron CMOS process. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2001, 461, 537-539.	1.6	18
26	Front-end electronics for pixel sensors. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2001, 465, 140-147.	1.6	18
27	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
28	Noise Performance of 0.13mum CMOS Technologies for Detector Front-End Applications. IEEE Transactions on Nuclear Science, 2006, 53, 2456-2462.	2.0	18
29	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
30	The DSSC pixel readout ASIC with amplitude digitization and local storage for DEPFET sensor matrices at the European XFEL. , 2012, , .		17
31	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
32	65 nm CMOS analog front-end for pixel detectors at the HL-LHC. Journal of Instrumentation, 2016, 11, C02049-C02049.	1.2	17
33	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
34	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
35	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
36	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

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37	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
38	Front-End Performance and Charge Collection Properties of Heavily Irradiated DNW MAPS. IEEE Transactions on Nuclear Science, 2010, 57, 1781-1789.	2.0	15
39	Selection criteria for P- and N-channel JFETs as input elements in low-noise radiation-hard charge preamplifiers. IEEE Transactions on Nuclear Science, 2001, 48, 1598-1604.	2.0	14
40	<title>Integrated front-end electronics in a detector compatible process: source-follower and charge-sensitive preamplifier configurations</title>. , 2001, 4507, 141.		14
41	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
42	TID Effects in Deep N-Well CMOS Monolithic Active Pixel Sensors. IEEE Transactions on Nuclear Science, 2009, 56, 2124-2131.	2.0	14
43	Mechanisms of Noise Degradation in Low Power 65 nm CMOS Transistors Exposed to Ionizing Radiation. IEEE Transactions on Nuclear Science, 2010, , .	2.0	14
44	Pixel readout ASIC with per pixel digitization and digital storage for the DSSC detector at XFEL. , 2010, , .		14
45	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
46	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
47	JFET front-end circuits integrated in a detector-grade silicon substrate. IEEE Transactions on Nuclear Science, 2003, 50, 942-947.	2.0	13
48	Noise Characterization of 130 nm and 90 nm CMOS Technologies for Analog Front-end Electronics. , 2006, , .		13
49	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
50	The associative memory for the self-triggered SLIM5 silicon telescope. , 2008, , .		13
51	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
52	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
53	Recent development on triple well 130 nm CMOS MAPS with in-pixel signal processing and data sparsification capability. , 2007, , .		12
54	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

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55	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
56	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
57	Feasibility studies of microelectrode silicon detectors with integrated electronics. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2002, 478, 372-376.	1.6	10
58	Low-noise design criteria for detector readout systems in deep submicron CMOS technology. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2002, 478, 362-366.	1.6	10
59	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
60	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
61	Cosmic antihelium-3 nuclei sensitivity of the GAPS experiment. Astroparticle Physics, 2021, 130, 102580.	4.3	10
62	Survey of noise performances and scaling effects in deep submicron CMOS devices from different foundries. , 0, , .		9
63	Fermilab silicon strip readout chip for BTeV. IEEE Transactions on Nuclear Science, 2005, 52, 799-804.	2.0	9
64	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
65	Minimum noise design of charge amplifiers with CMOS processes in the 100 nm feature size range. , 2007, , .		9
66	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
67	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
68	High accuracy injection circuit for pixel-level calibration of readout electronics. , 2010, , .		9
69	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
70	Dynamic Compression of the Signal in a Charge Sensitive Amplifier: Experimental Results. IEEE Transactions on Nuclear Science, 2018, 65, 636-644.	2.0	9
71	Effects of /spl gamma/-rays on JFET devices and circuits fabricated in a detector-compatible Process. IEEE Transactions on Nuclear Science, 2003, 50, 2474-2480.	2.0	8
72	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

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73	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
74	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
75	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
76	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
77	Triple Well CMOS Active Pixel Sensor with In-Pixel Full Signal Analog. , 0, , .		7
78	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
79	2D and 3D thin pixel technologies for the Layer0 of the SuperB Silicon Vertex Tracker. , 2011, , .		7
80	Discriminators in 65 nm CMOS process for high granularity, high time resolution pixel detectors. , 2013, , .		7
81	Design and characterization of integrated front-end transistors in a micro-strip detector technology. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2002, 485, 193-198.	1.6	6
82	Non-Standard Approach to Charge Signal Processing in CMOS MAPS for Charged Particle Trackers. , 0, , .		6
83	Development of 130nm CMOS Monolithic Active Pixels with In-pixel Signal Processing. , 2006, , .		6
84	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
85	Performance of a high accuracy injection circuit for in-pixel calibration of a large sensor matrix. , 2011, , .		6
86	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
87	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
88	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
89	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
90	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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91	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
92	Total ionizing dose effects on the analog performance of a 0.13μm CMOS technology. , 0, , .		5
93	Impact of gate-leakage current noise in sub-100 nm CMOS front-end electronics. , 2007, , .		5
94	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
95	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
96	Vertical integration approach to the readout of pixel detectors for vertexing applications. , 2011, , .		5
97	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
98	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
99	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
100	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
101	Design and Performance of Analog Circuits for DNW-MAPS in 100-nm-scale CMOS Technology. , 2006, , .		4
102	Time invariant analog processors for monolithic deep n-well CMOS pixel detectors. , 2008, , .		4
103	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
104	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
105	Design and TCAD simulations of planar active-edge pixel sensors for future XFEL applications. , 2014, , .		4
106	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
107	Characterisation of irradiated thin silicon sensors for the CMS phase II pixel upgrade. European Physical Journal C, 2017, 77, 1.	3.9	4
108	Qualification and Integration Aspects of the DSSC Mega-Pixel X-Ray Imager. IEEE Transactions on Nuclear Science, 2019, 66, 1966-1975.	2.0	4

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109	Correction to "Selection criteria for F and N-channel JFETs as input elements in low-noise radiation-hard charge preamplifiers". IEEE Transactions on Nuclear Science, 2001, 48, 2432-2432.	2.0	3
110	A bilinear analog compressor to adapt the signal dynamic range in the AUGER fluorescence detector. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2001, 461, 526-529.	1.6	3
111	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
112	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
113	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
114	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
115	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
116	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
117	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
118	Radiation hardness test of FSSR, a multichannel, mixed signal chip for microstrip detector readout. , 2005, , .		2
119	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
120	Review of radiation effects leading to noise performance degradation in 100 - nm scale microelectronic technologies. , 2008, , .		2
121	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
122	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
123	On-Chip Fast Data Sparsification for a Monolithic 4096-Pixel Device. IEEE Transactions on Nuclear Science, 2009, 56, 1159-1162.	2.0	2
124	High precision injection circuit for in-pixel calibration of a large sensor matrix. , 2011, , .		2
125	The Apsel65 front-end chip for the readout of pixel sensors in the 65 nm CMOS node. , 2011, , .		2
126	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

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127	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
128	Effects of Substrate Thinning on the Properties of Quadruple Well CMOS MAPS. IEEE Transactions on Nuclear Science, 2014, 61, 1039-1046.	2.0	2
129	PixFEL: Enabling technologies, building blocks and architectures for advanced X-ray pixel cameras at the next generation FELs. , 2014, , .		2
130	Qualification of a high-resolution on-chip injection circuit for the calibration of the DSSC X-ray imager for the European XFEL. , 2018, , .		2
131	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
132	A pixelated x-ray detector for diffraction imaging at next-generation high-rate FEL sources. , 2017, , .		2
133	Design of analog front-ends for the RD53 demonstrator chip. , 2017, , .		2
134	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
135	Noise Performances of 0.13 μm CMOS Technologies for Detector Front-end Applications. , 0, , .		1
136	FSSR2, a Self-Triggered Low Noise Readout Chip for Silicon Strip Detectors. , 0, , .		1
137	Investigating degradation mechanisms in 130 nm and 90 nm commercial CMOS technologies exposed to up to 100 Mrad ionizing radiation dose. , 2007, , .		1
138	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
139	Recent developments in 130 nm CMOS monolithic active pixel detectors. Nuclear Physics, Section B, Proceedings Supplements, 2007, 172, 20-24.	0.4	1
140	TID effects in deep N-well CMOS monolithic active pixel sensors. , 2008, , .		1
141	Performance of a DNW CMOS Active Pixel Sensor Designed for the ILC Vertex Detector. , 2008, , .		1
142	3D DNW MAPS for high resolution, highly efficient, sparse readout CMOS detectors. , 2009, , .		1
143	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
144	Charge signal processors in sparse readout CMOS MAPS and hybrid pixel sensors for the SuperB Layer0. , 2009, , .		1

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145	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
146	Recent progress in the development of 3D deep n-well CMOS MAPS. Journal of Instrumentation, 2012, 7, C02007-C02007.	1.2	1
147	Fast analog front-end for the readout of the SuperB SVT inner Layers. , 2012, , .		1
148	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
149	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
150	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
151	Characterization of a large scale DNW MAPS fabricated in a 3D integration process. , 2013, , .		1
152	Low-noise readout channel with a novel dynamic signal compression for future X-FEL applications. , 2014, , .		1
153	Low-power clock distribution circuits for the Macro Pixel ASIC. Journal of Instrumentation, 2015, 10, C01051-C01051.	1.2	1
154	PFM2: A 32 Ã— 32 readout chip for the PixFEL X-ray imager demonstrator. , 2016, , .		1
155	First experimental results on active and slim-edge silicon sensors for XFEL. Journal of Instrumentation, 2016, 11, C12018-C12018.	1.2	1
156	Charge preamplifier in a 65 nm CMOS technology for pixel readout in the Grad TID regime. , 2016, , .		1
157	Characterization of PFM3, a 32Ã—32 readout chip for PixFEL X-ray imager. , 2019, , .		1
158	Large-area Si(Li) Detectors for X-ray Spectrometry and Particle Tracking for the GAPS Experiment. , 2019, , .		1
159	Analog front-end design perspective of a 14 nm finFET technology. , 2019, , .		1
160	Instrumentation for noise measurements on CMOS transistors for fast detector preamplifiers. , 0, , .		0
161	JFET front-end circuits integrated in a detector-grade silicon substrate. , 0, , .		0
162	Noise analysis of NPN SOI bipolar transistors for the design of charge measuring systems. , 2003, , .		0

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163	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
164	Perspectives for low noise detector readout in a sub-quarter-micron CMOS SOI technology. , 2007, , .		0
165	Channel hot carrier stress on irradiated 130-nm NMOSFETs: Impact of bias conditions during X-ray exposure. , 2007, , .		0
166	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
167	Front-end performance and charge collection properties of heavily irradiated DNW MAPS. , 2009, , .		0
168	Evaluation of the radiation tolerance of 65 nm CMOS devices for high-density front-end electronics. , 2010, , .		0
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