

Piotr Maj

List of Publications by Year in descending order

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118
papers

1,576
citations

361413

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345221

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118
all docs

118
docs citations

118
times ranked

1356
citing authors

#	ARTICLE	IF	CITATIONS
1	Laser and Electron Beam Additive Manufacturing Methods of Fabricating Titanium Bone Implants. Applied Sciences (Switzerland), 2017, 7, 657.	2.5	180
2	Microstructure and mechanical properties investigation of CP titanium processed by selective laser melting (SLM). Journal of Materials Processing Technology, 2017, 241, 13-23.	6.3	141
3	Measurements of Matching and Noise Performance of a Prototype Readout Chip in 40Ånm CMOS Process for Hybrid Pixel Detectors. IEEE Transactions on Nuclear Science, 2015, 62, 359-367.	2.0	80
4	Design and Tests of the Vertically Integrated Photon Imaging Chip. IEEE Transactions on Nuclear Science, 2014, 61, 663-674.	2.0	76
5	A Prototype Pixel Readout IC for High Count Rate X-Ray Imaging Systems in 90 nm CMOS Technology. IEEE Transactions on Nuclear Science, 2010, 57, 1664-1674.	2.0	73
6	FPDR90â€™A Low Noise, Fast Pixel Readout Chip in 90 nm CMOS Technology. IEEE Transactions on Nuclear Science, 2011, 58, 1361-1369.	2.0	71
7	32k Channel Readout IC for Single Photon Counting Pixel Detectors with Pitch, Dead Time of 85 ns, Offset Spread and 2% rms Gain Spread. IEEE Transactions on Nuclear Science, 2016, 63, 1155-1161.	2.0	56
8	18k Channels single photon counting readout circuit for hybrid pixel detector. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2013, 697, 32-39.	1.6	52
9	Noise Optimization of Charge Amplifiers With MOS Input Transistors Operating in Moderate Inversion Region for Short Peaking Times. IEEE Transactions on Nuclear Science, 2007, 54, 555-560.	2.0	44
10	Sub-microsecond-resolved multi-speckle X-ray photon correlation spectroscopy with a pixel array detector. Journal of Synchrotron Radiation, 2018, 25, 1408-1416.	2.4	41
11	Microstructure and strain-stress analysis of the dynamic strain aging in inconel 625 at high temperature. Metals and Materials International, 2017, 23, 54-67.	3.4	32
12	Dynamic Scaling of Colloidal Gel Formation at Intermediate Concentrations. Physical Review Letters, 2017, 119, 178006.	7.8	31
13	Fully 3-D Integrated Pixel Detectors for X-Rays. IEEE Transactions on Electron Devices, 2016, 63, 205-214.	3.0	30
14	Microstructure and mechanical properties of duplex stainless steel subjected to hydrostatic extrusion. Materials Characterization, 2014, 93, 110-118.	4.4	27
15	Relation of various GFA indicators to the critical diameter of Zr-based BMGs. Journal of Alloys and Compounds, 2015, 625, 13-17.	5.5	27
16	Statistical analysis of the Portevinâ€™Le Chatelier effect in Inconel 718 at high temperature. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 619, 158-164.	5.6	26
17	Submillisecond X-ray photon correlation spectroscopyâ€™from a pixel array detector with fastâ€™dual gating and no readout dead-time. Journal of Synchrotron Radiation, 2016, 23, 679-684.	2.4	25
18	Hard-sphere-like dynamics in highly concentrated alpha-crystallin suspensions. Physical Review E, 2018, 97, 020601.	2.1	24

#	ARTICLE	IF	CITATIONS
19	Single Photon-Counting Pixel Readout Chip Operating Up to 1.2 Gcps/mm ² for Digital X-Ray Imaging Systems. IEEE Journal of Solid-State Circuits, 2018, 53, 2651-2662.	5.4	22
20	The Precipitation Processes and Mechanical Properties of Aged Inconel 718 Alloy After Annealing. Archives of Metallurgy and Materials, 2017, 62, 1695-1702.	0.6	21
21	VIPIC IC — Design and test aspects of the 3D pixel chip. , 2010, , .		18
22	Characterization of the Photon Counting CHASE Jr., Chip Built in a 40-nm CMOS Process With a Charge Sharing Correction Algorithm Using a Collimated X-Ray Beam. IEEE Transactions on Nuclear Science, 2017, 64, 2561-2568.	2.0	18
23	Characterization and performance evaluation of the XSPA-500k detector using synchrotron radiation. Journal of Synchrotron Radiation, 2021, 28, 439-447.	2.4	18
24	Fast nanoparticle rotational and translational diffusion in synovial fluid and hyaluronic acid solutions. Science Advances, 2021, 7, .	10.3	18
25	Measurements of Matching and High Count Rate Performance of Multichannel ASIC for Digital X-Ray Imaging Systems. IEEE Transactions on Nuclear Science, 2007, 54, 1207-1215.	2.0	17
26	20-Å-resolved high-throughput X-ray photon correlation spectroscopy on a 500k pixel detector enabled by data-management workflow. Journal of Synchrotron Radiation, 2021, 28, 259-265.	2.4	17
27	Active Feedback With Leakage Current Compensation for Charge Sensitive Amplifier Used in Hybrid Pixel Detector. IEEE Transactions on Nuclear Science, 2019, 66, 664-673.	2.0	16
28	Nanoscale Critical Phenomena in a Complex Fluid Studied by X-Ray Photon Correlation Spectroscopy. Physical Review Letters, 2020, 125, 125504.	7.8	16
29	Analysis of full charge reconstruction algorithms for X-ray pixelated detectors. , 2011, , .		15
30	Algorithms for minimization of charge sharing effects in a hybrid pixel detector taking into account hardware limitations in deep submicron technology. Journal of Instrumentation, 2012, 7, C12020-C12020.	1.2	13
31	An Effective Multilevel Offset Correction Technique for Single Photon Counting Pixel Detectors. IEEE Transactions on Nuclear Science, 2016, 63, 1194-1201.	2.0	13
32	Flow forming and heat-treatment of Inconel 718 cylinders. Journal of Materials Processing Technology, 2018, 253, 64-71.	6.3	13
33	Fast and precise algorithms for calculating offset correction in single photon counting ASICs built in deep sub-micron technologies. Journal of Instrumentation, 2014, 9, C07009-C07009.	1.2	11
34	Asynchronous Approximation of a Center of Gravity for Pixel Detectorsâ€™ Readout Circuits. IEEE Journal of Solid-State Circuits, 2018, 53, 1550-1558.	5.4	11
35	Evaluation of the UFXC32k photon-counting detector for pumpâ€™probe experiments using synchrotron radiation. Journal of Synchrotron Radiation, 2018, 25, 413-418.	2.4	11
36	Mechanical properties and microstructure of Inconel 625 cylinders used in aerospace industry subjected to flow forming with laser and standard heat treatment. International Journal of Material Forming, 2019, 12, 135-144.	2.0	11

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37	Results of Tests of Three-Dimensionally Integrated Chips Bonded to Sensors. IEEE Transactions on Nuclear Science, 2015, 62, 349-358.	2.0	10
38	Zirconium purity influence on the critical diameter and thermal indicators of the Zr ₄₈ Cu ₃₆ Al ₉ Ag ₇ alloy. Journal of Non-Crystalline Solids, 2019, 509, 80-87.	3.1	10
39	First pump-probe hard X-ray diffraction experiments with a 2D hybrid pixel detector developed at the SOLEIL synchrotron. Journal of Synchrotron Radiation, 2020, 27, 340-350.	2.4	10
40	The Influence of Microstructure on Corrosion Resistance of Mg-3Al-1Zn-15Li (LAZ1531) Alloy. Journal of Materials Engineering and Performance, 2020, 29, 2679-2686.	2.5	10
41	High-speed readout solution for single-photon counting ASICs. Journal of Instrumentation, 2016, 11, C02057-C02057.	1.2	9
42	Formability, Microstructure and Mechanical Properties of Flow-Formed 17-4 PH Stainless Steel. Journal of Materials Engineering and Performance, 2018, 27, 6435-6442.	2.5	9
43	Texture, residual stresses and mechanical properties analysis in the commercial 1.4462 duplex stainless steel subjected to hydrostatic extrusion. Archives of Civil and Mechanical Engineering, 2019, 19, 525-534.	3.8	9
44	First experimental feasibility study of VIPIC: a custom-made detector for X-ray speckle measurements. Journal of Synchrotron Radiation, 2016, 23, 404-409.	2.4	9
45	RG64 High Count Rate Low Noise Multichannel ASIC With Energy Window Selection and Continuous Readout Mode. IEEE Transactions on Nuclear Science, 2009, 56, 487-495.	2.0	8
46	The effect of a notch on the Portevin-Le Chatelier phenomena in an Al-3Mg model alloy. Materials Characterization, 2014, 96, 46-53.	4.4	8
47	Development of a Four-Side Buttable X-Ray Detection Module With Low Dead Area Using the UFXC32k Chips With TSVs. IEEE Transactions on Nuclear Science, 2017, 64, 2433-2440.	2.0	8
48	±-Synuclein Sterically Stabilizes Spherical Nanoparticle-Supported Lipid Bilayers. ACS Applied Bio Materials, 2019, 2, 1413-1419.	4.6	8
49	FRIC a 50 μ m pixel-pitch single photon counting ASIC with Pattern Recognition algorithm in 40 nm CMOS technology. Journal of Instrumentation, 2020, 15, C01016-C01016.	1.2	8
50	Low-noise multichannel ASIC for high count rate X-ray diffractometry applications. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2009, 607, 229-232.	1.6	7
51	An on-chip charge cluster reconstruction technique in the miniVIPIC pixel readout chip for X-ray counting and timing. , 2014, , .		7
52	Precipitation and mechanical properties of UNS 2205 duplex steel subjected to hydrostatic extrusion after heat treatment. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 734, 85-92.	5.6	7
53	High frame rate measurements of semiconductor pixel detector readout IC. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2012, 680, 56-60.	1.6	6
54	Comparison of allocation algorithms for unambiguous registration of hits in presence of charge sharing in pixel detectors. Journal of Instrumentation, 2017, 12, C01027-C01027.	1.2	6

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55	Evolution of structure and dynamics of thermo-reversible nanoparticle gels – A combined XPCS and rheology study. Journal of Chemical Physics, 2019, 151, 104902.	3.0	6
56	Characterisation of the UFXC32k hybrid pixel detector for time-resolved pump-probe diffraction experiments at Synchrotron SOLEIL. Journal of Instrumentation, 2017, 12, C03057-C03057.	1.2	5
57	Fabrication of 3D Hybrid Pixel Detector Modules Based on TSV Processing and Advanced Flip Chip Assembly of Thin Read Out Chips. , 2017, , .		5
58	High speed systems for time-resolved experiments with synchrotron radiation. Journal of Instrumentation, 2018, 13, C02049-C02049.	1.2	5
59	Advancing Chemical Separations: Unraveling the Structure and Dynamics of Phase Splitting in Liquid – Liquid Extraction. Journal of Physical Chemistry B, 2022, 126, 2420-2429.	2.6	5
60	Comparison of Two Pole-Zero Cancellation Circuits for Fast Charge Sensitive Amplifier in CMOS Technology. , 2007, , .		4
61	FPGA Simulations of Charge Sharing Effect Compensation Algorithms for Implementation in Deep Sub-Micron Technologies. , 2013, , .		4
62	Results of tests of three-dimensionally integrated chips bonded to sensors. , 2013, , .		4
63	23552-channel IC for single photon counting pixel detectors with 75 μm pitch, ENC of 89 e ⁺ rms, 19 e ⁺ rms offset spread and 3% rms gain spread. , 2014, , .		4
64	Comparison of the charge sharing effect in two hybrid pixel detectors of different thickness. Journal of Instrumentation, 2015, 10, C02006-C02006.	1.2	4
65	Measurements of Ultra-Fast single photon counting chip with energy window and 75 μm pixel pitch with Si and CdTe detectors. Journal of Instrumentation, 2017, 12, C03064-C03064.	1.2	4
66	An Algorithm of an X-ray Hit Allocation to a Single Pixel in a Cluster and Its Test-Circuit Implementation. IEEE Transactions on Circuits and Systems I: Regular Papers, 2018, 65, 185-197.	5.4	4
67	SPC Pixel IC with 9.4 e ⁺ rms Offset Spread, 60 e ⁺ rms ENC and 70 kfps Frame Rate. , 2019, , .		4
68	A digital X-ray imaging system based on silicon strip detectors working in edge-on configuration. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2009, 608, 410-416.	1.6	3
69	Digital System for Detection and Location of Miners Trapped in Hard Coalmines - GLOP2. Metrology and Measurement Systems, 2010, 17, 245-254.	1.4	3
70	A pixel readout chip in 40 nm CMOS process for high count rate imaging systems with minimization of charge sharing effects. , 2013, , .		3
71	HyPix-3000 - a large area single-photon counting detector with two discriminator thresholds. , 2014, , .		3
72	Hardware solutions for the 65k pixel X-ray camera module of 75 μm pixel size. Journal of Instrumentation, 2016, 11, C01060-C01060.	1.2	3

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73	UFXC32k based camera module with a custom soft processor and USB 3.0 for large area detectors. Journal of Instrumentation, 2018, 13, P01017-P01017.	1.2	3
74	High rate proton detection with single photon counting hybrid pixel detector. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2020, 956, 163333.	1.6	3
75	Single software platform used for high speed data transfer implementation in a 65k pixel camera working in single photon counting mode. Journal of Instrumentation, 2015, 10, C12025-C12025.	1.2	3
76	RG64 — high count rate multichannel ASIC with energy window selection for X-ray imaging applications. , 2008, , .		2
77	PXD18k - fast single photon counting chip with energy window for hybrid pixel detector. , 2011, , .		2
78	The Influence of Laser Treatment and the Application of Reduced Pressure Force Piston Rings on the Engine Exhaust Emissions under the Conditions of Engine Lubrication with Different Engine Oils. Applied Mechanics and Materials, 2014, 518, 102-107.	0.2	2
79	A new approach for a cameras backend design for the 75 Åµm pitch hybrid pixel detector. , 2014, , .		2
80	Testing multistage gain and offset trimming in a single photon counting IC with a charge sharing elimination algorithm. Journal of Instrumentation, 2015, 10, C12003-C12003.	1.2	2
81	Methodology of automation process of wafer tests. , 2015, , .		2
82	Digitally assisted low noise and fast signal processing charge sensitive amplifier for single photon counting systems. , 2015, , .		2
83	Low Power Discriminators With Input Offsets Correction For Fast Multichannel Recording ASIC. , 0, , .		1
84	DEDIX - Development of Fully Integrated Multichannel ASIC for High Count Rate Digital X-ray Imaging Systems. , 2006, , .		1
85	Integrated Charge Sensitive Amplifier with Pole-Zero Cancellation Circuit for High Rates. , 0, , .		1
86	On the detection performance of semi-insulating GaAs detectors coupled to multichannel ASIC DX64 for X-ray imaging applications. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2008, 591, 101-104.	1.6	1
87	A low noise, Fast Pixel Readout IC working in single photon counting mode with energy window selection in 90 nm CMOS. , 2011, , .		1
88	A fast 300k X-Ray camera with an energy window selection and continuous readout mode. , 2013, , .		1
89	Design of the low area monotonic trim DAC in 40 nm CMOS technology for pixel readout chips. Journal of Instrumentation, 2014, 9, C12046-C12046.	1.2	1
90	ADCs in deep submicron technologies for ASICs of pixel architecture. , 2014, , .		1

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91	Ultra fast X-ray detection systems in nanometer and 3D technologies. , 2014, , .		1
92	Low noise single photon counting chip with energy window for hybrid pixel detector with precise offset and gain correction. , 2014, , .		1
93	32k Channels readout IC for single photon counting detectors with 75 μ m pitch, ENC of 123 e ⁻ rms, 9 e ⁻ rms offset spread and 2% rms gain spread. , 2015, , .		1
94	Simulation approach to charge sharing compensation algorithms with experimental cross-check. Journal of Instrumentation, 2017, 12, C03071-C03071.	1.2	1
95	Heterogeneity of deformation in duplex stainless steel subjected to hydrostatic extrusion. , 2017, , .		1
96	Addressing of imperfection of a hybrid pixel sensor for X-ray detection with a circuit for charge sharing cancellation implemented. Journal of Instrumentation, 2018, 13, C12014-C12014.	1.2	1
97	1.2 Mfps standalone X-ray detector for Time-Resolved Experiments. Journal of Instrumentation, 2020, 15, C03010-C03010.	1.2	1
98	Evaluation of the Quality of Coatings Deposited on AZ31 Magnesium Alloy Using the Anodising Method / Ocena JakoÅci PowÅok Wykonanych Na Stopie Magnezu Åz31 MetodÅ.. Anodowania. Archives of Metallurgy and Materials, 2015, 60, 2843-2850.	0.6	1
99	Design, Functionality And Testability Of A Multichannel Asic For Digital X-ray Imaging. , 0, , .		0
100	<title>Testing of application specific integrated circuit in LabVIEW environment</title>. , 2006, , .		0
101	A pixel readout chip designed in 90nm CMOS process for high count rate imaging systems. , 2009, , .		0
102	FPDR90 a low noise, fast pixel readout chip in 90 nm CMOS. , 2010, , .		0
103	Multichannel integrated system for fast X-ray imaging applications. , 2010, , .		0
104	Development of a fast readout chip in deep submicron technology for pixel hybrid detectors. , 2011, , .		0
105	Readout Electronics for Pixel Detectors in Deep Submicron and 3D Technologies. International Journal of Electronics and Telecommunications, 2011, 57, .	0.5	0
106	Tests of FPDR90 IC for hybrid detector readout for high frame rate X-ray applications. , 2011, , .		0
107	Minimization of charge sharing effect in silicon hybrid pixel X-ray detectors based on pattern recognition algorithm. , 2012, , .		0
108	An automated system for testing readout electronics of silicon strip x-ray detectors. , 2012, , .		0

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109	FPGA based extension to the multichannel pixel readout ASIC. , 2013, , .		0
110	ASICs in nanometer and 3D technologies for readout of hybrid pixel detectors. Proceedings of SPIE, 2013, , .	0.8	0
111	Mismatch effects and their correction in large area ASICs. , 2014, , .		0
112	Testability features of a single photon counting hybrid pixel detector readout circuit with charge sharing elimination algorithm. , 2014, , .		0
113	Design and testing of integrated circuit of pixel architecture for fast x-ray imaging applications. , 2014, , .		0
114	Design of a control system for ultrafast x-ray camera working in a single photon counting mode. Proceedings of SPIE, 2015, , .	0.8	0
115	7.3kfps readout solution for 65k pixel X-Ray Camera working in zero dead-time mode. , 2016, , .		0
116	Trimming the threshold dispersion below 10 e-rms in a large area readout IC working in a single photon counting mode. Journal of Instrumentation, 2016, 11, C01067-C01067.	1.2	0
117	Single photon counting integrated circuit operating with CdTe pixel detector. , 2017, , .		0
118	Heterogeneity of deformation in duplex stainless steel subjected to hydrostatic extrusion. , 2017, , .		0