## Amine Bermak

List of Publications by Year in descending order

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305 papers 4,244 citations

33 h-index 52 g-index

307 all docs

307 docs citations

307 times ranked

3675 citing authors

#	Article	IF	CITATIONS
1	A Sub-\$mu\$W Embedded CMOS Temperature Sensor for RFID Food Monitoring Application. IEEE Journal of Solid-State Circuits, 2010, 45, 1246-1255.	5.4	180
2	Recent Developments in Printing Flexible and Wearable Sensing Electronics for Healthcare Applications. Sensors, 2019, 19, 1230.	3.8	151
3	Liquid-crystal micropolarimeter array for full Stokes polarization imaging in visible spectrum. Optics Express, 2010, 18, 17776.	3.4	105
4	Self-Gating Effect Induced Large Performance Improvement of ZnO Nanocomb Gas Sensors. ACS Nano, 2013, 7, 9318-9324.	14.6	104
5	Ultra-Low-Power Smart Electronic Nose System Based on Three-Dimensional Tin Oxide Nanotube Arrays. ACS Nano, 2018, 12, 6079-6088.	14.6	88
6	A fast-response/recovery ZnO hierarchical nanostructure based gas sensor with ultra-high room-temperature output response. Sensors and Actuators B: Chemical, 2015, 206, 764-771.	7.8	82
7	Arbitrated Time-to-First Spike CMOS Image Sensor With On-Chip Histogram Equalization. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2007, 15, 346-357.	3.1	81
8	A CMOS Single-Chip Gas Recognition Circuit for Metal Oxide Gas Sensor Arrays. IEEE Transactions on Circuits and Systems I: Regular Papers, 2011, 58, 1569-1580.	5.4	80
9	Thin Photo-Patterned Micropolarizer Array for CMOS Image Sensors. IEEE Photonics Technology Letters, 2009, 21, 805-807.	2.5	79
10	A system-on-chip EPC Gen-2 passive UHF RFID tag with embedded temperature sensor. , 2010, , .		78
11	A System-on-Chip EPC Gen-2 Passive UHF RFID Tag With Embedded Temperature Sensor. IEEE Journal of Solid-State Circuits, 2010, , .	5.4	72
12	A 405-nW CMOS Temperature Sensor Based on Linear MOS Operation. IEEE Transactions on Circuits and Systems II: Express Briefs, 2009, 56, 891-895.	3.0	66
13	An Empirical Study for PCA- and LDA-Based Feature Reduction for Gas Identification. IEEE Sensors Journal, 2016, 16, 5734-5746.	4.7	65
14	A monolithic integrated 4×4 tin oxide gas sensor array with on-chip multiplexing and differential readout circuits. Solid-State Electronics, 2007, 51, 69-76.	1.4	62
15	High-resolution thin "guest-host" micropolarizer arrays for visible imaging polarimetry. Optics Express, 2011, 19, 5565.	3.4	61
16	Residual interpolation for division of focal plane polarization image sensors. Optics Express, 2017, 25, 10651.	3.4	58
17	High-Voltage Generation With Stacked Photodiodes in Standard CMOS Process. IEEE Electron Device Letters, 2010, 31, 1425-1427.	3.9	56
18	Pulse-Modulation Imagingâ€"Review and Performance Analysis. IEEE Transactions on Biomedical Circuits and Systems, 2011, 5, 64-82.	4.0	56

#	Article	IF	CITATIONS
19	Design of Sub-Gigahertz Reconfigurable RF Energy Harvester From â^22 to 4 dBm With 99.8% Peak MPPT Power Efficiency. IEEE Journal of Solid-State Circuits, 2019, 54, 2601-2613.	5.4	55
20	A Committee Machine Gas Identification System Based on Dynamically Reconfigurable FPGA. IEEE Sensors Journal, 2008, 8, 403-414.	4.7	49
21	Spike Latency Coding in Biologically Inspired Microelectronic Nose. IEEE Transactions on Biomedical Circuits and Systems, 2011, 5, 160-168.	4.0	49
22	A Passive RFID Tag Embedded Temperature Sensor With Improved Process Spreads Immunity for a $-\frac{30}}^{circ}{hbox {C}}\$ to $-\frac{1}{60}$ Sensing Range. IEEE Transactions on Circuits and Systems I: Regular Papers, 2014, 61, 337-346.	5.4	48
23	Mixture Gases Classification Based on Multi-Label One-Dimensional Deep Convolutional Neural Network. IEEE Access, 2019, 7, 12630-12637.	4.2	48
24	Inkjet-Printed Human Body Temperature Sensor for Wearable Electronics. IEEE Access, 2019, 7, 163981-163987.	4.2	47
25	Low-Power CMOS Image Sensor Based on Column-Parallel Single-Slope/SAR Quantization Scheme. IEEE Transactions on Electron Devices, 2013, 60, 2561-2566.	3.0	45
26	An Integrated Surface Micromachined Convex Microhotplate Structure for Tin Oxide Gas Sensor Array. IEEE Sensors Journal, 2007, 7, 1720-1726.	4.7	43
27	High-resolution photoaligned liquid-crystal micropolarizer array for polarization imaging in visible spectrum. Optics Letters, 2009, 34, 3619.	3.3	43
28	A CMOS Image Sensor With On-Chip Image Compression Based on Predictive Boundary Adaptation and Memoryless QTD Algorithm. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2011, 19, 538-547.	3.1	43
29	A Low-Power Pilot-DAC Based Column Parallel 8b SAR ADC With Forward Error Correction for CMOS Image Sensors. IEEE Transactions on Circuits and Systems I: Regular Papers, 2013, 60, 2572-2583.	5.4	43
30	A 64 fJ/step 9-bit SAR ADC Array With Forward Error Correction and Mixed-Signal CDS for CMOS Image Sensors. IEEE Transactions on Circuits and Systems I: Regular Papers, 2014, 61, 3085-3093.	5.4	40
31	A Block-Matching and 3-D Filtering Algorithm for Gaussian Noise in DoFP Polarization Images. IEEE Sensors Journal, 2018, 18, 7429-7435.	4.7	39
32	Compressive Acquisition CMOS Image Sensor: From the Algorithm to Hardware Implementation. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2010, 18, 490-500.	3.1	36
33	A Low-Power Energy-Harvesting Logarithmic CMOS Image Sensor With Reconfigurable Resolution Using Two-Level Quantization Scheme. IEEE Transactions on Circuits and Systems II: Express Briefs, 2011, 58, 80-84.	3.0	36
34	A Novel Asynchronous Pixel for an Energy Harvesting CMOS Image Sensor. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2011, 19, 118-129.	3.1	34
35	Heuristic Random Forests (HRF) for Drift Compensation in Electronic Nose Applications. IEEE Sensors Journal, 2019, 19, 1443-1453.	4.7	34
36	Adaptive-Quantization Digital Image Sensor for Low-Power Image Compression. IEEE Transactions on Circuits and Systems Part 1: Regular Papers, 2007, 54, 13-25.	0.1	33

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37	An Efficient Digital VLSI Implementation of Gaussian Mixture Models-Based Classifier. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2006, 14, 962-974.	3.1	31
38	An Efficient Memristor-Based Circuit Implementation of Squeeze-and-Excitation Fully Convolutional Neural Networks. IEEE Transactions on Neural Networks and Learning Systems, 2022, 33, 1779-1790.	11.3	31
39	Solar Harvested energy prediction algorithm for wireless sensors. , 2012, , .		29
40	A Bio-Inspired Pattern Recognition System for Tin-Oxide Gas Sensor Applications. IEEE Sensors Journal, 2009, 9, 713-722.	4.7	28
41	Patterned dual-layer achromatic micro-quarter-wave-retarder array for active polarization imaging. Optics Express, 2014, 22, 8024.	3.4	28
42	Dual Transduction Surface Acoustic Wave Gas Sensor for VOC Discrimination. IEEE Electron Device Letters, 2018, 39, 1920-1923.	3.9	28
43	Dual transduction on a single sensor for gas identification. Sensors and Actuators B: Chemical, 2019, 278, 21-27.	7.8	28
44	A Low-Power Hardware-Friendly Binary Decision Tree Classifier for Gas Identification. Journal of Low Power Electronics and Applications, 2011, 1, 45-58.	2.0	26
45	Low power dynamic logic circuit design using a pseudo dynamic buffer. The Integration VLSI Journal, 2012, 45, 395-404.	2.1	26
46	Robust Bayesian Inference for Gas Identification in Electronic Nose Applications by Using Random Matrix Theory. IEEE Sensors Journal, 2016, 16, 2036-2045.	4.7	26
47	A Fast and Robust Gas Recognition Algorithm Based on Hybrid Convolutional and Recurrent Neural Network. IEEE Access, 2019, 7, 100954-100963.	4.2	26
48	Multi-Classifier Tree With Transient Features for Drift Compensation in Electronic Nose. IEEE Sensors Journal, 2021, 21, 6564-6574.	4.7	26
49	An 84 pW/Frame Per Pixel Current-Mode CMOS Image Sensor With Energy Harvesting Capability. IEEE Sensors Journal, 2012, 12, 720-726.	4.7	25
50	A 12 pJ/Pixel Analog-to-Information Converter Based 816 × 640 Pixel CMOS Image Sensor. IEEE Journal of Solid-State Circuits, 2014, 49, 1210-1222.	5.4	25
51	Gas identification using density models. Pattern Recognition Letters, 2005, 26, 699-706.	4.2	24
52	A Column-Parallel Inverter-Based Cyclic ADC for CMOS Image Sensor With Capacitance and Clock Scaling. IEEE Transactions on Electron Devices, 2016, 63, 162-167.	3.0	24
53	A K Times Singular Value Decomposition Based Image Denoising Algorithm for DoFP Polarization Image Sensors With Gaussian Noise. IEEE Sensors Journal, 2018, 18, 6138-6144.	4.7	24
54	A Precision CMOS Voltage Reference Exploiting Silicon Bandgap Narrowing Effect. IEEE Transactions on Electron Devices, 2015, 62, 2128-2135.	3.0	23

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55	Drift-Insensitive Features for Learning Artificial Olfaction in E-Nose System. IEEE Sensors Journal, 2018, 18, 7173-7182.	4.7	23
56	Fully Integrated Bidirectional CMOS-MEMS Flow Sensor With Low Power Pulse Operation. IEEE Sensors Journal, 2019, 19, 3415-3424.	4.7	23
57	CMOS Image Sensor with On-Chip Image Compression: A Review and Performance Analysis. Journal of Sensors, 2010, 2010, 1-17.	1.1	22
58	Biologically Inspired Feature Rank Codes for Hardware Friendly Gas Identification With the Array of Gas Sensors. IEEE Sensors Journal, 2016, 16, 5776-5784.	4.7	22
59	Robust Intermediate Read-Out for Deep Submicron Technology CMOS Image Sensors. IEEE Sensors Journal, 2008, 8, 286-294.	4.7	21
60	Glomerular Latency Coding in Artificial Olfaction. Frontiers in Neuroengineering, 2011, 4, 18.	4.8	21
61	32 Bit \$imes,\$32 Bit Multiprecision Razor-Based Dynamic Voltage Scaling Multiplier With Operands Scheduler. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2014, 22, 759-770.	3.1	21
62	A Humidity-Insensitive NO <sub>2</sub> Gas Sensor With High Selectivity. IEEE Electron Device Letters, 2016, 37, 92-95.	3.9	20
63	A wafer-level encapsulated CMOS MEMS thermoresistive calorimetric flow sensor with integrated packaging design. , 2017, , .		20
64	A â^12.3 dBm UHF Passive RFID Sense Tag for Grid Thermal Monitoring. IEEE Transactions on Industrial Electronics, 2019, 66, 8811-8820.	7.9	20
65	Developing Conductive Fabric Threads for Human Respiratory Rate Monitoring. IEEE Sensors Journal, 2021, 21, 4350-4356.	4.7	20
66	Fabrication of circuits by multi-nozzle electrohydrodynamic inkjet printing for soft wearable electronics. Journal of Materials Research, 2021, 36, 3568-3578.	2.6	20
67	An improved recycling folded cascode amplifier with gain boosting and phase margin enhancement. , $2015, \ldots$		19
68	A 124 fJ/Bit Cascode Current Mirror Array Based PUF With 1.50% Native Unstable Bit Ratio. IEEE Transactions on Circuits and Systems I: Regular Papers, 2019, 66, 3494-3503.	5.4	19
69	Substrate Dependent Analysis of Printed Sensors for Detection of Volatile Organic Compounds. IEEE Access, 2019, 7, 134047-134054.	4.2	19
70	A Three-Dimensional Integrated Micro Calorimetric Flow Sensor in CMOS MEMS Technology. , 2019, 3, 1-4.		19
71	A Fully Dynamic Multi-Mode CMOS Vision Sensor With Mixed-Signal Cooperative Motion Sensing and Object Segmentation for Adaptive Edge Computing. IEEE Journal of Solid-State Circuits, 2020, , 1-14.	5.4	19
72	DESIGN AND CHARACTERIZATION OF AUTOMATED COLOR SENSOR SYS. International Journal on Smart Sensing and Intelligent Systems, 2014, 7, 1-12.	0.7	19

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73	A low power CMOS image sensor design for wireless endoscopy capsule. , 2008, , .		18
74	A low-power dynamic comparator with digital calibration for reduced offset mismatch. , 2012, , .		18
75	Probabilistic Rank Score Coding: A Robust Rank-Order Based Classifier for Electronic Nose Applications. IEEE Sensors Journal, 2015, 15, 3934-3946.	4.7	18
76	Integrated CMOS-MEMS Flow Sensor With High Sensitivity and Large Flow Range. IEEE Sensors Journal, 2017, 17, 2318-2319.	4.7	18
77	Acoustic radiation-free surface phononic crystal resonator for in-liquid low-noise gravimetric detection. Microsystems and Nanoengineering, 2021, 7, 8.	7.0	18
78	Natural Hierarchically Structured Highly Porous Tomato Peel Based Tribo―and Piezoâ€Electric Nanogenerator for Efficient Energy Harvesting. Advanced Sustainable Systems, 2021, 5, 2100066.	5.3	18
79	Characterization of Integrated Tin Oxide Gas Sensors With Metal Additives and Ion Implantations. IEEE Sensors Journal, 2008, 8, 1397-1398.	4.7	17
80	A WLAN 2.4-GHz RF energy harvesting system with reconfigurable rectifier for wireless sensor network. , 2016, , .		17
81	All-Printed Human Activity Monitoring and Energy Harvesting Device for Internet of Thing Applications. Sensors, 2019, 19, 1197.	3.8	17
82	Study of piezoresistance effect of carbon nanotube-PDMS composite materials for nanosensors. , 2007, , .		16
83	Gradient magnitude similarity deviation on multiple scales for color image quality assessment. , 2017, ,		16
84	A Low-Cost Strain Gauge Displacement Sensor Fabricated via Shadow Mask Printing. Sensors, 2019, 19, 4713.	3.8	16
85	Advanced Statistical Metrics for Gas Identification System With Quantification Feedback. IEEE Sensors Journal, 2015, 15, 1705-1715.	4.7	14
86	Recursive DBPSO for Computationally Efficient Electronic Nose System. IEEE Sensors Journal, 2018, 18, 320-327.	4.7	14
87	Embedded Platform for Gas Applications Using Hardware/Software Co-Design and RFID. IEEE Sensors Journal, 2018, 18, 4633-4642.	4.7	14
88	A 160 m visible light communication link using hybrid undersampled phase-frequency shift on-off keying and CMOS image sensor. Optics Express, 2019, 27, 2478.	3.4	14
89	A High-speed 32-bit Signed/Unsigned Pipelined Multiplier. , 2010, , .		13
90	A 1.1 νW CMOS Smart Temperature Sensor with an Inaccuracy of $\hat{A}\pm0.2\hat{A}^{\circ}C$ (3 $\hat{I}f$ ) for Clinical Temperature Monitoring. IEEE Sensors Journal, 2016, , 1-1.	4.7	13

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91	A 2PJ/Pixel/Direction MIMO Processing Based CMOS Image Sensor for Omnidirectional Local Binary Pattern Extraction and Edge Detection. , 2018, , .		13
92	A wireless dual-mode micro thermal flow sensor system with extended flow range by using CMOS-MEMS process. , $2018,  ,  .$		13
93	An Optical and Temperature Assisted CMOS ISFET Sensor Array for Robust E. Coli Detection. IEEE Transactions on Biomedical Circuits and Systems, 2021, 15, 497-508.	4.0	13
94	A Spiking Neural Network for Gas Discrimination Using a Tin Oxide Sensor Array. , 2008, , .		12
95	A Linear 126-dB Dynamic Range Light-to-Frequency Converter With Dark Current Suppression Upto 125 $\hat{A}^{\circ}$ C for Blood Oxygen Concentration Detection. IEEE Transactions on Electron Devices, 2016, 63, 3983-3988.	3.0	12
96	Breath Level Acetone Discrimination Through Temperature Modulation of a Hierarchical ZnO Gas Sensor., 2017, 1, 1-4.		12
97	A Polarization-Based Interference-Tolerant VLC Link for Low Data Rate Applications. IEEE Photonics Journal, 2018, 10, 1-11.	2.0	12
98	A 10.6 pJ·K <sup>2</sup> Resolution FoM Temperature Sensor Using Astable Multivibrator. IEEE Transactions on Circuits and Systems II: Express Briefs, 2018, 65, 869-873.	3.0	12
99	Shuffled Frog-Leaping and Weighted Cosine Similarity for Drift Correction in Gas Sensors. IEEE Sensors Journal, 2019, 19, 12126-12136.	4.7	12
100	Microshift: An Efficient Image Compression Algorithm for Hardware. IEEE Transactions on Circuits and Systems for Video Technology, 2019, 29, 3430-3443.	8.3	12
101	A Hybrid Denoising Algorithm of BM3D and KSVD for Gaussian Noise in DoFP Polarization Images. IEEE Access, 2020, 8, 57451-57459.	4.2	12
102	Towards Acoustic Radiation Free Lamb Wave Resonators for High-Resolution Gravimetric Biosensing. IEEE Sensors Journal, 2021, 21, 2725-2733.	4.7	12
103	Bioinspired Soft Multistate Resistive Memory Device Based on Silk Fibroin Gel for Neuromorphic Computing. Advanced Engineering Materials, 2022, 24, .	3.5	12
104	Predicting YouTube content popularity via Facebook data: A network spread model for optimizing multimedia delivery. , 2013, , .		11
105	A novel method for the fabrication of a high-density carbon nanotube microelectrode array. Sensing and Bio-Sensing Research, 2015, 5, 1-7.	4.2	11
106	Four-Directional Adaptive Residual Interpolation Technique for DoFP Polarimeters With Different Micro-Polarizer Patterns. IEEE Sensors Journal, 2018, 18, 7990-7997.	4.7	11
107	DoFP-ML: A Machine Learning Approach to Food Quality Monitoring Using a DoFP Polarization Image Sensor. IEEE Access, 2020, 8, 150282-150290.	4.2	11
108	Printing Sensors on Biocompatible Substrates for Selective Detection of Glucose. IEEE Sensors Journal, 2021, 21, 4167-4175.	4.7	11

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109	Fabrication of Ag2O/WO3 based sensors for detection of hydrogen sulfide. Sensors and Actuators A: Physical, 2022, 333, 113256.	4.1	11
110	An ultra-low power current-mode CMOS image sensor with energy harvesting capability. , 2010, , .		10
111	Gas classification using binary decision tree classifier. , 2014, , .		10
112	Computationally Efficient Weighted Binary Decision Codes for Gas Identification With Array of Gas Sensors. IEEE Sensors Journal, 2017, 17, 487-497.	4.7	10
113	A low-cost micro BTU sensor system fabricated by CMOS MEMS technology. , 2017, , .		10
114	A 102.2-dB, 181.1-dB FoM Extended Counting Analog-to-Digital Converter With Capacitor Scaling. IEEE Journal of Solid-State Circuits, 2020, 55, 1351-1360.	<b>5.</b> 4	10
115	A High Offset Distribution Tolerance High Resolution ISFET Array with Auto-Compensation for Long-Term Bacterial Metabolism Monitoring. IEEE Transactions on Biomedical Circuits and Systems, 2020, 14, 1-1.	4.0	10
116	Memristor Fabrication Through Printing Technologies: A Review. IEEE Access, 2021, 9, 95970-95985.	4.2	10
117	Quadrant-Based Online Spatial and Temporal Compressive Acquisition for CMOS Image Sensor. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2011, 19, 1525-1534.	3.1	9
118	A Low Power Class-AB Audio Power Amplifier With Dynamic Transconductance Compensation in 55 nm CMOS Process. IEEE Transactions on Circuits and Systems I: Regular Papers, 2016, 63, 1360-1369.	5.4	9
119	Swarm Intelligence and Similarity Measures for Memory Efficient Electronic Nose System. IEEE Sensors Journal, 2018, 18, 2471-2482.	4.7	9
120	A Compact 31.47 fJ/Conversion Subthreshold Level Shifter With Wide Conversion Range in 65 nm MTCMOS. IEEE Access, 2018, 6, 54976-54981.	4.2	9
121	Flexible coplanar waveguide strain sensor based on printed silver nanocomposites. SN Applied Sciences, 2019, 1, 1.	2.9	9
122	A Low Power and Fast Tracking Light-to-Frequency Converter With Adaptive Power Scaling for Blood SpO <inline-formula> <tex-math notation="LaTeX">\$_2\$</tex-math> </inline-formula> Sensing. IEEE Transactions on Biomedical Circuits and Systems, 2019, 13, 26-37.	4.0	9
123	A low power oscillator based temperature sensor for RFID applications. , 2013, , .		8
124	Low-Power CMOS Laser Doppler Imaging Using Non-CDS Pixel Readout and 13.6-bit SAR ADC. IEEE Transactions on Biomedical Circuits and Systems, 2016, 10, 186-199.	4.0	8
125	Electronic nose system on the Zynq SoC platform. Microprocessors and Microsystems, 2017, 53, 145-156.	2.8	8
126	A Low-Power Compression-Based CMOS Image Sensor With Microshift-Guided SAR ADC. IEEE Transactions on Circuits and Systems II: Express Briefs, 2018, 65, 1350-1354.	3.0	8

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127	Smart Manufacturing Technologies for Printed Electronics. , 2020, , .		8
128	A robust architecture of physical unclonable function based on Memristor crossbar array. Microelectronics Journal, 2021, 116, 105238.	2.0	8
129	A Sub-1 ppm/°C Bandgap Voltage Reference With High-Order Temperature Compensation in 0.18-μm CMOS Process. IEEE Transactions on Circuits and Systems I: Regular Papers, 2022, 69, 1408-1416.	5.4	8
130	Dynamic voltage and frequency scaling for low-power multi-precision reconfigurable multiplier. , 2010, , .		7
131	80dB dynamic range 100KHz bandwidth inverter-based & amp; #x03A3; & amp; #x0394; ADC for CMOS image sensor., 2012,,.		7
132	CMOS On-Chip Stable True-Random ID Generation Using Antenna Effect. IEEE Electron Device Letters, 2014, 35, 54-56.	3.9	7
133	Radiation-Hardened CMOS Negative Voltage Reference for Aerospace Application. IEEE Transactions on Nuclear Science, 2017, 64, 2505-2510.	2.0	7
134	A Noise-Reduced Light-to-Frequency Converter for Sub-0.1% Perfusion Index Blood SpO\$_{ext 2}\$ Sensing. IEEE Transactions on Biomedical Circuits and Systems, 2020, 14, 931-941.	4.0	7
135	Self-Repairing Hybrid Adder With Hot-Standby Topology Using Fault-Localization. IEEE Access, 2020, 8, 150051-150058.	4.2	7
136	Fast Detection and Tracking of a Moving Transmitter via Visible Light Communication Link. IEEE Photonics Journal, 2020, 12, 1-11.	2.0	7
137	A Wafer-Level Packaged CMOS MEMS Pirani Vacuum Gauge. IEEE Transactions on Electron Devices, 2021, 68, 5155-5161.	3.0	7
138	A 5–13.5 Gb/s Multistandard Receiver With High Jitter Tolerance Digital CDR in 40-nm CMOS Process. IEEE Transactions on Circuits and Systems I: Regular Papers, 2020, 67, 3378-3388.	5.4	7
139	FPGA implementation of compressive sampling for sensor network applications. , 2010, , .		6
140	Block-based compressive sampling for digital pixel sensor array. , 2010, , .		6
141	A Compact Digital Pixel Sensor (DPS) Using 2T-DRAM. Journal of Low Power Electronics and Applications, 2011, 1, 77-96.	2.0	6
142	Two-Step Single Slope/SAR ADC with Error Correction for CMOS Image Sensor. Scientific World Journal, The, 2014, 2014, 1-6.	2.1	6
143	Gas identification with spike codes in wireless electronic nose: A potential application for smart green buildings. , 2015, , .		6
144	A power-efficient current-feedback instrumentation amplifier for precision bridge readout. , 2015, , .		6

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145	A low-offset dynamic comparator with area-efficient and low-power offset cancellation. , 2017, , .		6
146	An Area-Efficient Column-Parallel Digital Decimation Filter With Pre-BWI Topology for CMOS Image Sensor. IEEE Transactions on Circuits and Systems I: Regular Papers, 2018, 65, 2524-2533.	5 <b>.</b> 4	6
147	Review and Analysis of Instrumentation Amplifier for IoT Applications. , 2018, , .		6
148	A CMOS Transimpedence Amplifier With Ambient Light Rejection for Visible Light Communication in Intelligent Transport Systems. , 2019, , .		6
149	Near-Optimal Decoding of Incremental Delta-Sigma ADC Output. IEEE Transactions on Circuits and Systems I: Regular Papers, 2020, 67, 3670-3680.	5.4	6
150	A VLSI architecture for a Run-time Multi-precision Reconfigurable Booth Multiplier. , 2007, , .		5
151	Architecture of a digital pixel sensor array using 1-bit Hilbert predictive coding. , 2009, , .		5
152	Lower-power TSPC-based Domino Logic Circuit Design with 2/3 Clock Load. Energy Procedia, 2012, 14, 1168-1174.	1.8	5
153	A 191 mV/pH Sensitivity and 2219 FPS Frame Rate CMOS Ion Image Sensor. , 2020, , .		5
154	Optimization of Memristive Crossbar Array for Physical Unclonable Function Applications. IEEE Access, 2021, 9, 84480-84489.	4.2	5
155	Nonlinear effects in locally resonant nanostrip phononic metasurface at GHz frequencies. Applied Physics Letters, 2021, 118, .	3.3	5
156	Rapid Fabrication of Soft Strain Sensors by Multi-Nozzle Electrohydrodynamic Inkjet Printing for Wearable Electronics. , $2021$ , , .		5
157	A Low-Area and Low-Power Comma Detection and Word Alignment Circuits for JESD204B/C Controller. IEEE Transactions on Circuits and Systems I: Regular Papers, 2021, 68, 2925-2935.	<b>5.</b> 4	5
158	Hydrogen Sulfide (Hâ,,S) Sensor: A Concept of Physical Versus Virtual Sensing. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-13.	4.7	5
159	Developing pressure sensors from impregnated textile sandwiched in inkjet-printed electrodes. Journal of Materials Science: Materials in Electronics, 2022, 33, 541-553.	2.2	5
160	State-of-the-Art Light to Digital Converter Circuits Applicable in Non-Invasive Health Monitoring Devices to Combat COVID-19 and Other Respiratory Illnesses: A Review. IEEE Sensors Journal, 2022, 22, 9189-9197.	4.7	5
161	A 4 $ ilde{A}-4$ Logarithmic Spike Timing Encoding Scheme for Olfactory Sensor Applications. , 2007, , .		4
162	A CMOS Image Sensor with on Chip Image Compression based on Predictive Boundary Adaptation and QTD Algorithm. , 2007, , .		4

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163	Fabrication technology of piezoresistive conductive PDMS for micro fingerprint sensors., 2007,,.		4
164	Configurable Blocks for Multi-precision Multiplication. , 2008, , .		4
165	A Smart CMOS Image Sensor with On-chip Hot Pixel Correcting Readout Circuit for Biomedical Applications. , 2010, , .		4
166	An analog gamma correction method for high dynamic range applications. , 2011, , .		4
167	A low-complexity image compression algorithm for Address-Event Representation (AER) PWM image sensors. , 2011, , .		4
168	A low-cost capacitive relative humidity sensor for food moisture monitoring application. , 2012, , .		4
169	Threshold detection of carcinogenic odor of formaldehyde with wireless electronic nose. , 2014, , .		4
170	A high voltage zero-static current voltage scaling ADC interface circuit for micro-stimulator. , 2014, , .		4
171	A multi-sensing reconfigurable platform for gas applications. , 2014, , .		4
172	A 14-bit 70MS/s pipeline ADC with power-efficient back-end stages. , 2015, , .		4
173	A hierarchical ZnO nanostructure gas sensor for human breath-level acetone detection. , 2016, , .		4
174	Channel Length Modeling and Experimental Demonstration of Adaptive Threshold Under-Sampled CamCom for Low-SNR Transmitters. IEEE Photonics Journal, 2018, 10, 1-12.	2.0	4
175	A Dual-mode Flow Measurement System for Large Sensing Range with High Accuracy. , 2018, , .		4
176	Recursive Feature Elimination with Random Forest Classifier for Compensation of Small Scale Drift in Gas Sensors. , 2020, , .		4
177	A 32-Step Phase-Compensated Spread-Spectrum RF-PLL With 19.44-dB EMI Reduction and 10-fs Extra RMS Jitter. IEEE Transactions on Microwave Theory and Techniques, 2020, 68, 1564-1575.	4.6	4
178	Ripple Suppression in Capacitive-Gain Chopper Instrumentation Amplifier Using Amplifier Slicing. IEEE Transactions on Circuits and Systems I: Regular Papers, 2021, 68, 3991-4000.	5.4	4
179	Efficient event-drivern frame capture for CMOS imagers. , 2007, , .		3
180	Compact Gray-Code Counter/Memory Circuits for Spiking Pixels. , 2008, , .		3

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181	A high-resolution micro-circular-polarization-analyzer array for real-time active circular polarization imaging., 2009,,.		3
182	Characterization of a logarithmic spike timing encoding scheme for a $4\&\#x00D7;4$ tin oxide gas sensor array., $2009, , .$		3
183	A 4T Low-Power Linear-Output Current-Mediated CMOS Image Sensor. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2011, 19, 1559-1568.	3.1	3
184	A reconfigurable time-domain comparator for multi-sensing applications. , 2015, , .		3
185	BJT Process Spread Compensation Utilizing Base Recombination Current in Standard CMOS. IEEE Electron Device Letters, 2015, 36, 1111-1113.	3.9	3
186	A nested-chopped current-feedback instrumentation amplifier for MEMS flow sensors. , 2016, , .		3
187	Wide dynamic range PSD algorithms and their implementation for compressive imaging. , 2016, , .		3
188	A Multichannel Power-Supply-Modulated Microstimulator With Energy Recycling. IEEE Design and Test, 2016, 33, 61-73.	1.2	3
189	Performance Evaluation of Interpolation Algorithms for Division of Focal Plane Polarization Image Sensors., 2017,,.		3
190	An ultra low-power capacitively-coupled chopper instrumentation amplifier for wheatstone-bridge readout circuits. , $2017, \ldots$		3
191	High Performance High Density Gas-FET Array in Standard CMOS. , 2018, , .		3
192	Power Bounds and Energy Efficiency in Incremental <inline-formula> <tex-math notation="LaTeX">\$DeltaSigma\$ </tex-math> </inline-formula> Analog-to-Digital Converters. IEEE Transactions on Circuits and Systems I: Regular Papers, 2018, 65, 4110-4120.	5.4	3
193	A flexible differential temperature sensor for wearable electronics applications. , 2019, , .		3
194	A CMOS Multi-Sensor Array for High Accuracy On-Chip Bacterial Growth Monitoring. , 2020, , .		3
195	Live Demonstration: A Polarization-Based Interference-Tolerant Visible Light Communication Link. , 2020, , .		3
196	Investigation of Filtering Algorithm for Noise Reduction in Displacement Sensing Signal. IEEE Sensors Journal, 2021, 21, 7808-7812.	4.7	3
197	Shear Horizontal Phononic Metasurface for In-Liquid Gravimetric Biosensing. IEEE Electron Device Letters, 2021, 42, 915-918.	3.9	3
198	Design and calibration of a wireless laser-based optical sensor for crack propagation monitoring. Smart Structures and Systems, 2015, 15, 1543-1567.	1.9	3

#	Article	IF	CITATIONS
199	FPGA Implementation of Image Compression using DPCM and FBAR. , 2007, , .		2
200	Architecture of a Digital Pixel Sensor Array with Tile-Based Vector Quantization Image Compression Algorithm. , $2007$ , , .		2
201	A compact digital pixel sensor architecture using predictive coding scheme. , 2008, , .		2
202	A robust spike-based gas identification technique for SnO <inf>2</inf> gas sensors. , 2009, , .		2
203	A frequency-based signature gas identification circuit for S <inf>n</inf> O <inf>2</inf> gas sensors. , 2010, , .		2
204	Liquid-crystal micropolarimeter array for visible linear and circular polarization imaging. , 2010, , .		2
205	Reduced dimension Vector Quantization encoding method for image compression. , 2011, , .		2
206	Bio-inspired gas recognition based on the organization of the olfactory pathway. , 2012, , .		2
207	A low power temperature sensor based on a voltage to time converter cell. , 2013, , .		2
208	Two-Stage Interface Circuit Design for a 32-Color Resolution Optical Sensor. IEEE Sensors Journal, 2013, 13, 610-617.	4.7	2
209	Computationally efficient environmental monitoring with electronic nose: A potential technology for ambient assisted living. , 2016, , .		2
210	Novel micro-polarizer array patterns for CMOS polarization image sensors. , 2016, , .		2
211	High Level Synthesis Based E-Nose System for Gas Applications. , 2016, , .		2
212	Polarization imaging for remote sensing. , 2017, , .		2
213	Channel Length Modeling for a Multiple-Input-Multiple-Output CamCom Link. , 2018, , .		2
214	Concentration Estimation of Industrial Gases for Electronic Nose Applications. , 2018, , .		2
215	Integration of Multisensor data and Deep Learning for realtime Occupancy Detection for Building Environment Control Strategies. , 2018, , .		2
216	Discriminant Analysis of Industrial Gases for Electronic Nose Applications. , 2018, , .		2

#	Article	IF	CITATIONS
217	Room-Temperature Dual-mode CMOS Gas-FET Sensor for Diabetes Detection. , 2018, , .		2
218	A Chopper Instrumentation Amplifier with Amplifier Slicing Technique for Offset Reduction., 2020,,.		2
219	A 120-MHz Broadband Differential Linear Driver With Channel Mismatch Cancellation and Bandwidth Extension for B-PLC Applications. IEEE Transactions on Circuits and Systems I: Regular Papers, 2022, 69, 128-138.	5.4	2
220	A High-Speed Parallel Architecture for Ripple Carry Adder with Fault Detection and Localization. Electronics (Switzerland), 2021, 10, 1791.	3.1	2
221	Self-Repairing Carry-Lookahead Adder With Hot-Standby Topology Using Fault-Localization and Partial Reconfiguration. IEEE Open Journal of Circuits and Systems, 2022, 3, 50-58.	1.9	2
222	Multidomain Suppression of Ambient Light in Visible Light Communication Transceivers. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 18145-18154.	8.0	2
223	A New Video Compression Scheme Combining Conditional Replenishment and Address Event Representation. Signal Processing Systems Design and Implementation (siPS), IEEE Workshop on, 2007, ,	0.0	1
224	Novel VLSI implementation of Peano-Hilbert curve address generator. , 2008, , .		1
225	A CMOS image sensor with reconfigurable resolution for energy harvesting applications. , 2009, , .		1
226	Read-out Circuit Analysis for High-speed Low-noise VCO Based APS CMOS Image Sensor. , 2010, , .		1
227	Two-transistor active pixel image sensor with active diode reset. , 2010, , .		1
228	A single bit memory per pixel time domain DPS using multi-reset integration scheme. , 2010, , .		1
229	Correction to "A Sub-\$mu\$W Embedded CMOS Temperature Sensor for RFID Food Monitoring Application―[Jun 10 1246-1255. IEEE Journal of Solid-State Circuits, 2010, 45, 2210-2210.	5.4	1
230	A 1.2-V reconfigurable resolution CMOS image sensor with energy harvesting capability. , 2010, , .		1
231	Low-power and high-speed current-mode CMOS imager with 1T biasing scheme. , 2010, , .		1
232	Development of Energy Harvested Wireless Sensing Node for Structural Health Monitoring. , 2012, , .		1
233	Continuous-Time <mml:math id="M1" xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mimathvariant="normal">Σ<mml:mi mathvariant="normal">ΰ</mml:mi></mml:mimathvariant="normal"></mml:math> ADC with Implicit Variable Gain Amplifier for CMOS Image Sensor. Scientific World Journal, The, 2014, 2014, 1-7.	2.1	1
234	Gas identification in electronic nose by using similarity measure between latency patterns. , 2014, , .		1

#	Article	IF	CITATIONS
235	Optical wireless receiver for data delivery to retinal implant. , 2014, , .		1
236	Versatile Gas Monitoring System on the Heterogeneous Zynq SoC Platform., 2015,, 213-221.		1
237	A low power relaxation oscillator with process insensitive auto-calibration scheme., 2016,,.		1
238	A background subtraction based column-parallel analog-to-information converter for motion-triggered vision sensor. , 2016, , .		1
239	Noninvasive Diabetes Monitoring with Electronic Nose. , 2016, , .		1
240	A 2.2 $\hat{A}\mu W$ 15b incremental delta-sigma ADC with output-driven input segmentation. , 2016, , .		1
241	Global digital controller for multi-channel micro-stimulator with 5-wire interface featuring on-the-fly power-supply modulation and tissue impedance monitoring. Microelectronics Journal, 2017, 60, 21-29.	2.0	1
242	Registration based retargeted image quality assessment. , 2017, , .		1
243	Dual transduction Gas sensor based on a surface acoustic wave resonator., 2017,,.		1
244	A power minimized 74 fJ/conversion-step 88.6 dB SNR incremental $\hat{l}\hat{\mathfrak{L}}\hat{l}$ " ADC with an asynchronous SAR quantizer. , 2017, , .		1
245	A Radiation-Hardened and ESD-Optimized Wireline Driver With Wide Terminal Common-Mode Voltage Range. IEEE Transactions on Nuclear Science, 2018, 65, 566-572.	2.0	1
246	Parametric Analysis and Efficient Optimization of Micro Thermal Convective Accelerometers with Excellent Sensitivity Using a Validated 1-D Model., 2018,,.		1
247	Power Reduction in Incremental î"Σ ADCs Using a Capacitor Scaling Technique. , 2018, , .		1
248	A Hybrid Denoising Algorithm for DoFP Polarization Image Sensors. , 2019, , .		1
249	A 10-GHz Low-Power Serial Digital Majority Voter Based on Moving Accumulative Sign Filter in a PS-/PI-Based CDR. IEEE Transactions on Microwave Theory and Techniques, 2020, 68, 5432-5442.	4.6	1
250	Early Image Detection Using Event Based Vision. , 2020, , .		1
251	Ambient Light Suppression in Visible Light Transceivers: A Review. , 2021, , .		1
252	Modelingof the Effect of Skin Temperature on Hydration Assessment. , 2021, , .		1

#	Article	IF	CITATIONS
253	Prediction of Heart Rate and Blood Oxygen from Physiological Signals., 2021,,.		1
254	Analysis of Output Ripple Shape and Amplitude in Chopper Instrumentation Amplifier. IEEE Transactions on Circuits and Systems II: Express Briefs, 2022, 69, 299-303.	3.0	1
255	Design and Characterization of Low Power and Low Noise Truly All-Digital Clock and Data Recovery Circuit for SERDES Devices. Journal of Low Power Electronics, 2013, 9, 63-72.	0.6	1
256	Substrate Treatment Evaluation and Their Impact on Printing Results for Wearable Electronics. Frontiers in Electronics, $2021, 2, .$	3.2	1
257	A 28 nm CMOS 10 bit 100 MS/s Asynchronous SAR ADC with Low-Power Switching Procedure and Timing-Protection Scheme. Electronics (Switzerland), 2021, 10, 2856.	3.1	1
258	Machine Learning-Based Estimation of PM <sub>2.5</sub> Concentration Using Ground Surface DoFP Polarimeters. IEEE Access, 2022, 10, 23489-23496.	4.2	1
259	A Low-Power Column-Parallel ΣΔ ADC With Shared OTAs and Single-Bit-BWI Decimation Filter for CMOS Image Sensor. IEEE Transactions on Electron Devices, 2022, 69, 2979-2985.	3.0	1
260	Programmable Nanoarchitectonics of Pore Array for Electronic-Nose-Based Early Disease Diagnose. IEEE Transactions on Electron Devices, 2022, 69, 4514-4520.	3.0	1
261	Forecasting cooling load and water demand of a semi-closed greenhouse using a hybrid modelling approach. International Journal of Ambient Energy, 0, , 1-50.	2.5	1
262	A $4\tilde{A}$ —4 Tin Oxide Gas Sensor Array with Surface Micro-machined Convex Micro-hotplates. , 2006, , .		0
263	A $4 ilde{A}$ —4 Tin Oxide Gas Sensor Array with On-chip Signal Pre-processing. , 2006, , .		0
264	A 4×4 tin oxide gas sensor array based on spike sequence matching. , 2008, , .		0
265	Architecture of a Low Storage Digital Pixel Sensor Array with an On-Line Block-Based Compression. , 2008, , .		0
266	A low power linear output current-mediated CMOS imager. , 2009, , .		0
267	Guest Editorialâ€"Special Issue on Selected Papers From BioCAS2009. IEEE Transactions on Biomedical Circuits and Systems, 2010, 4, 417-418.	4.0	0
268	An integrated wireless electronic nose system integrating sensing and recognition functions. , 2010, , .		0
269	A Hybrid CMOS DPS with Conditional Data Readout Scheme. , 2010, , .		0
270	Architecture of three dimensional compressive acquisition CMOS image sensor. , 2010, , .		0

#	Article	IF	Citations
271	A low cost CMOS polarimetric ophthalmoscope scheme for cerebral malaria diagnostics., 2011,,.		0
272	Achromatic micropolarizing filters for visible circular polarization bio-imaging., 2011,,.		0
273	Robust gas recognition using adaptive thresholding., 2011,,.		O
274	VPIC-based image compression technique for sensor network applications. , 2011, , .		0
275	1-bit heuristic adaptive quantizer (HAQ) for on chip image compression in CMOS image sensors. , $2011, , .$		O
276	Wireless microelectronic nose network for gas classification. , 2012, , .		0
277	Fabrication of a low power CMOS-compatible ZnO nanocomb-based gas sensor. , 2012, , .		O
278	A sub-1V BJT-based CMOS temperature sensor from & amp; #x2212;55 & amp; #x00B0; C to 125 & amp; #x00B0; C. , 2012, , .		0
279	A preliminary study on the use of optical navigation sensor for two dimensional crack propagation monitoring. , 2012, , .		O
280	Implementation of a wireless image motion estimation method for two-dimensional crack monitoring. Proceedings of SPIE, 2013, , .	0.8	0
281	Experimental evaluation of latency coding for gas recognition. , 2013, , .		O
282	Discriminative metrics for gas classification with spike latency coding. , 2014, , .		0
283	Invariant image recognition under projective deformations: An image normalization approach. , 2015, , .		O
284	Quantification of carcinogenic odor of formaldehyde with electronic nose technologyd., 2016,,.		0
285	A Self-Calibrated Gas Sensing System for Breath Analysis. , 2016, , .		O
286	HW/SW co-design based implementation of Gas discrimination. , 2016, , .		0
287	Novel structure of carbon nanotube micro electrode for high-resolution stimulation of neurons. , 2016, 2016, 6170-6173.		O
288	Design and analysis of energy recyclable bidirectional converter with digital controller for multichannel microstimulators. Analog Integrated Circuits and Signal Processing, 2017, 91, 417-431.	1.4	0

#	Article	IF	CITATIONS
289	BM3D Filtering Algorithm for DoFP Polarization Image Sensors. , 2018, , .		О
290	Performance Evaluation of Gaussian Noise Denoising Algorithms for DoFP Polarization Image Sensors. , 2019, , .		0
291	Novel Extended Circular Color Shift Keying Constellation in VLC Systems with Camera-based Receivers. , 2019, , .		0
292	A 10-bit Pulse Width Modulation Based Analog to Digital Converter., 2021,,.		0
293	Sensors on Nonconventional Substrates Developed through Printing Technologies. , 2021, , .		0
294	An Adaptive Denoising Algorithm for Speckle Noise in DoFP Polarization Images. , 2021, , .		0
295	Developing a Printed Respiration Rate Sensor for E-textile Applications. , 2021, , .		0
296	Effect of Ag2O Doping on the H2S Gas Sensing Properties of WO3 Nanosensor. , 2021, , .		0
297	Recent Liquid Crystal Photonics Research in HKUST. Photonics Letters of Poland, 2011, 3, .	0.4	0
298	Artificial Olfactory Systems. , 2015, , 1-20.		0
299	CMOS Integrated Circuits for DNA Sensing. , 2016, , .		0
300	A Robust Unified Framework of Vehicle Detection and Tracking for Driving Assistance System with High Efficiency. , $2016, \ldots$		0
301	Design and Performance Analysis of VLC-based Transceiver. , 2016, , .		0
302	Design and Performance Evaluation of a Committee Machine for Gas Identification. Lecture Notes in Networks and Systems, 2018, , 936-945.	0.7	0
303	Residual interpolation for 3-micropolarizer design of division of focal plane polarization image sensors. , 2018, , .		0
304	Editorial on the Special Section on Algorithms, Circuits, and Systems for Signal Processing at the Edge. IEEE Open Journal of Circuits and Systems, 2021, 2, 766-768.	1.9	0
305	Artificial Olfactory Systems. , 2022, , 343-362.		0