

Youngcheol Chae

List of Publications by Year in descending order

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Version: 2024-02-01

74
papers

2,474
citations

279701

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48
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76
all docs

76
docs citations

76
times ranked

2633
citing authors

#	ARTICLE	IF	CITATIONS
1	A 0.9-V 28-MHz Highly Digital CMOS Dual-RC Frequency Reference With ± 200 ppm Inaccuracy From ~ 40 $^{\circ}\text{C}$ to 85 $^{\circ}\text{C}$. IEEE Journal of Solid-State Circuits, 2022, 57, 2418-2428.	3.5	11
2	Wireless graphene-based thermal patch for obtaining temperature distribution and performing thermography. Science Advances, 2022, 8, eabm6693.	4.7	27
3	A 0.033-mm ² 21.5-aF to 114.9-aF Resolution Continuous-Time $\Sigma\Delta$ Capacitance-to-Digital Converter Achieving Parasitic Capacitance Immunity Up to 480 pF. IEEE Journal of Solid-State Circuits, 2022, 57, 3048-3057.	3.5	4
4	A 134- μW 99.4-dB SNDR Audio Continuous-Time Delta-Sigma Modulator With Chopped Negative-R and Tri-Level FIR-DAC. IEEE Journal of Solid-State Circuits, 2021, 56, 1761-1771.	3.5	16
5	A Negative R-Assisted Amplifier on the Virtual Ground and Its Applications. , 2021, , .		3
6	MoS ₂ /Graphene Photodetector Array with Strain-Modulated Photoresponse up to the Near-Infrared Regime. ACS Nano, 2021, 15, 12836-12846.	7.3	56
7	A 51-pJ/Pixel 33.7-dB PSNR 4 \times Compressive CMOS Image Sensor With Column-Parallel Single-Shot Compressive Sensing. IEEE Journal of Solid-State Circuits, 2021, 56, 2503-2515.	3.5	18
8	A 64 μW 64 SPAD-Based Indirect Time-of-Flight Image Sensor With 2-Tap Analog Pulse Counters. IEEE Journal of Solid-State Circuits, 2021, 56, 2956-2967.	3.5	7
9	A 2.1 mW 2 MHz-BW 73.8 dB-SNDR Buffer-Embedded Noise-Shaping SAR ADC. IEEE Transactions on Circuits and Systems I: Regular Papers, 2021, 68, 5029-5037.	3.5	3
10	A 348- μW 68.8-dB SNDR 20-MS/s Pipelined SAR ADC With a Closed-Loop Two-Stage Dynamic Amplifier. IEEE Solid-State Circuits Letters, 2021, 4, 166-169.	1.3	10
11	A 0.6-V 86.5-dB DR 40-kHz BW Inverter-Based Continuous-Time $\Sigma\Delta$ Modulator With PVT-Robust Body-Biasing. IEEE Solid-State Circuits Letters, 2021, 4, 178-181.	1.3	7
12	A 0.033-mm ² 21.5-aF Resolution Continuous-Time Delta-Sigma Capacitance-to-Digital Converter with Parasitic Capacitance Immunity up to 480pF. , 2021, , .		1
13	A 640 \times 640 Fully Dynamic CMOS Image Sensor for Always-On Operation. IEEE Journal of Solid-State Circuits, 2020, 55, 898-907.	3.5	33
14	An Always-on 4 \times Compressive VGA CMOS Imager with 51pJ/Pixel and >32 dB PSNR. , 2020, , .		2
15	Plasmon-stimulated biophotovoltaic cells based on thylakoid AuNR conjugates. Journal of Materials Chemistry A, 2020, 8, 24192-24203.	5.2	9
16	A 5.2-Mpixel 88.4-dB DR 12-in CMOS X-Ray Detector With 16-bit Column-Parallel Continuous-Time Incremental $\Sigma\Delta$ ADCs. IEEE Journal of Solid-State Circuits, 2020, 55, 2878-2888.	3.5	11
17	A 40-m Range 90-frames/s CMOS Time-of-Flight Sensor Using SPAD and In-Pixel Time-Gated Pulse Counter. IEEE Solid-State Circuits Letters, 2020, 3, 422-425.	1.3	3
18	A 6.5- μW 10-kHz BW 80.4-dB SNDR G _m -C-Based CT $\Sigma\Delta$ Modulator With a Feedback-Assisted G _m Linearization for Artifact-Tolerant Neural Recording. IEEE Journal of Solid-State Circuits, 2020, 55, 2889-2901.	3.5	45

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19	Incremental Delta-Sigma ADCs: A Tutorial Review. IEEE Transactions on Circuits and Systems I: Regular Papers, 2020, 67, 4161-4173.	3.5	40
20	9.2 a 134Åµw 24khz-bw 103.5db-dr ct Î”Î£ modulator with chopped negative-r and tri-level fir dac. , 2020, , .		3
21	Long-term Intracellular Recording of Optogenetically-induced Electrical Activities using Vertical Nanowire Multi Electrode Array. Scientific Reports, 2020, 10, 4279.	1.6	27
22	28.3 A 5.2Mpixel 88.4dB-DR 12in CMOS X-Ray Detector with 16b Column-Parallel Continuous-Time Î”Î£ ADCs. , 2020, , .		3
23	Harmonic Based Diagnostics for Aging Lithium-Ion Battery. , 2019, , .		1
24	A 64Å–64 APD-Based ToF Image Sensor with Background Light Suppression up to 200 klx Using In-Pixel Auto-Zeroing and Chopping. , 2019, , .		10
25	The Effect of a Deep Virtual Guard Ring on the Device Characteristics of Silicon Single Photon Avalanche Diodes. IEEE Transactions on Electron Devices, 2019, 66, 2986-2991.	1.6	23
26	A 5800-\$mu\$ m₂ Resistor-Based Temperature Sensor With a One-Point Trimmed Inaccuracy of $\pm 1.2 \text{ }^\circ\text{C}$ (σ) From $\sim 50 \text{ }^\circ\text{C}$ to $105 \text{ }^\circ\text{C}$ in 65-nm CMOS. IEEE Solid-State Circuits Letters, 2019, 2, 67-70.	1.3	18
27	A 2MHz BW Buffer-Embedded Noise-Shaping SAR ADC Achieving 73.8dB SNDR and 87.3dB SFDR. , 2019, , .		16
28	Real-Time Detection of Markers in Blood. Nano Letters, 2019, 19, 2291-2298.	4.5	9
29	Energy-Efficient Inverter-Based Amplifiers. , 2019, , 297-314.		3
30	A 185 Î¼W $\sim 105.1 \text{ dB}$ THD 88.6 dB SNDR Negative-R Stabilized Audio Preamplifier. , 2019, , .		3
31	A CMOS VEGF Sensor for Cancer Diagnosis Using a Peptide Aptamer-Based Functionalized Microneedle. IEEE Transactions on Biomedical Circuits and Systems, 2019, 13, 1288-1299.	2.7	27
32	Introduction to the Special Issue on the 2019 IEEE International Solid-State Circuits Conference (ISSCC). IEEE Journal of Solid-State Circuits, 2019, 54, 3243-3246.	3.5	0
33	A 5800-Î¼m ² Resistor-Based Temperature Sensor With a One-Point Trimmed Inaccuracy of $\pm 1.2 \text{ }^\circ\text{C}$ (σ) From $\sim 50 \text{ }^\circ\text{C}$ to $105 \text{ }^\circ\text{C}$ in 65-nm CMOS. , 2019, , .		4
34	Analysis and Design of Low-Power Continuous-Time Delta-Sigma Modulator Using Negative-R Assisted Integrator. IEEE Journal of Solid-State Circuits, 2019, 54, 277-287.	3.5	37
35	Transparent, Flexible, Conformal Capacitive Pressure Sensors with Nanoparticles. Small, 2018, 14, 1703432.	5.2	112
36	Prolonged and highly efficient intracellular extraction of photosynthetic electrons from single algal cells by optimized nanoelectrode insertion. Nano Research, 2018, 11, 397-409.	5.8	17

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37	A 1.8-V 6.9-mW 120-fps 50-Channel Capacitive Touch Readout With Current Conveyor AFE and Current-Driven $\Delta\sigma$ ADC. IEEE Journal of Solid-State Circuits, 2018, 53, 204-218.	3.5	41
38	A 1.35 m Long 0.18 gf Resolution Differential Capacitive Force Sensor for Contact Force Monitoring. , 2018, , . A Compact Resistor-Based CMOS Temperature Sensor With an Inaccuracy of 0.12 $^{\circ}\text{C}$		0
39	(3 \times inline-formula σ <math>\sigma</math>) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 notation="LaTeX">\$\cdot\$ </tex-math> </inline-formula>&K<inline-formula> <math>\sigma^2</math> </tex-math>. IEEE Journal of Solid-State Circuits. 2018, 53, 3356-3367.	3.5	33
40	A 300-pW audio $\hat{\mu}\text{N}$ modulator with 100.5-dB DR using dynamic bias inverter. , 2018, , .		0
41	A Parasitic Insensitive Catheter-Based Capacitive Force Sensor for Cardiovascular Diagnosis. IEEE Transactions on Biomedical Circuits and Systems, 2018, 12, 812-823.	2.7	15
42	Structure variation effects on device reliability of single photon avalanche diodes. Microelectronics Reliability, 2017, 76-77, 610-613.	0.9	2
43	Graphene-Based Three-Dimensional Capacitive Touch Sensor for Wearable Electronics. ACS Nano, 2017, 11, 7950-7957.	7.3	270
44	Patterned Nanowire Electrode Array for Direct Extraction of Photosynthetic Electrons from Multiple Living Algal Cells. Advanced Functional Materials, 2016, 26, 7679-7689.	7.8	23
45	A 300- μW Audio $\Delta\sigma$ Modulator With 100.5-dB DR Using Dynamic Bias Inverter. IEEE Transactions on Circuits and Systems I: Regular Papers, 2016, 63, 1866-1875.	3.5	34
46	Ultrafast single-droplet bouncing actuator with electrostatic force on superhydrophobic electrodes. RSC Advances, 2016, 6, 66729-66737.	1.7	19
47	Conformal, graphene-based triboelectric nanogenerator for self-powered wearable electronics. Nano Energy, 2016, 27, 298-305.	8.2	152
48	A 0.02mm ² embedded temperature sensor with $\pm 0.2^{\circ}\text{C}$ inaccuracy for self-refresh control in 25nm mobile DRAM. , 2015, , .		3
49	Bulk Switching Instrumentation Amplifier for a High-Impedance Source in Neural Signal Recording. IEEE Transactions on Circuits and Systems II: Express Briefs, 2015, 62, 194-198.	2.2	28
50	Enhanced Neurite Outgrowth by Intracellular Stimulation. Nano Letters, 2015, 15, 5414-5419.	4.5	19
51	Electrostatically-induced trajectory switching system on a multi-inlet-multi-outlet superhydrophobic droplet guiding track. RSC Advances, 2015, 5, 5754-5761.	1.7	9
52	A 2 mW, 50 dB DR, 10 MHz BW $\Delta\sigma$ Interleaved Bandpass $\Delta\sigma$ Modulator at 50 MHz IF. IEEE Transactions on Circuits and Systems I: Regular Papers, 2015, 62, 80-89.	3.5	10
53	A Two-Step A/D Conversion and Column Self-Calibration Technique for Low Noise CMOS Image Sensors. Sensors, 2014, 14, 11825-11843.	2.1	9
54	A Current Regulator for Inverter-Based Massively Column-Parallel $\Delta\sigma$ ADCs. IEEE Transactions on Circuits and Systems II: Express Briefs, 2014, 61, 224-228.	2.2	8

#	ARTICLE	IF	CITATIONS
55	A 1.2-V 8.3-nJ CMOS Humidity Sensor for RFID Applications. IEEE Journal of Solid-State Circuits, 2013, 48, 2469-2477.	3.5	112
56	A CMOS Temperature Sensor With a Voltage-Calibrated Inaccuracy of $\pm 0.15\%$ (3σ) From -55°C to 125°C . IEEE Journal of Solid-State Circuits, 2013, 48, 292-301.	3.5	198
57	A 6.3 μW 20 bit Incremental Zoom-ADC with 6 ppm INL and 1 μV Offset. IEEE Journal of Solid-State Circuits, 2013, 48, 3019-3027.	3.5	148
58	A 20bit continuous-time $\Delta\Sigma$ modulator with a Gm-C integrator, 120dB CMRR and 15 ppm INL. , 2012, , .		4
59	A 20-b $\pm 40\text{-mV}$ Range Read-Out IC With 50-nV Offset and 0.04% Gain Error for Bridge Transducers. IEEE Journal of Solid-State Circuits, 2012, 47, 2152-2163.	3.5	73
60	Column-Parallel Single Slope ADC with Digital Correlated Multiple Sampling for Low Noise CMOS Image Sensors. Procedia Engineering, 2011, 25, 1265-1268.	1.2	1
61	A 2.1 M Pixels, 120 Frame/s CMOS Image Sensor With Column-Parallel $\Delta\Sigma$ ADC Architecture. IEEE Journal of Solid-State Circuits, 2011, 46, 236-247.	3.5	144
62	A 240-frames/s 2.1-Mpixel CMOS Image Sensor With Column-Shared Cyclic ADCs. IEEE Journal of Solid-State Circuits, 2011, 46, 2073-2083.	3.5	101
63	Wide dynamic range CMOS active pixel sensor with sensitivity control gate. , 2009, , .		0
64	Smart CMOS Image Sensor With High SBR and Subpixel Resolution for Light-Section-Based Range Finding. IEEE Transactions on Electron Devices, 2009, 56, 2546-2555.	1.6	4
65	A Single-Chip CMOS Smoke and Temperature Sensor for an Intelligent Fire Detector. IEEE Sensors Journal, 2009, 9, 914-921.	2.4	45
66	Low Voltage, Low Power, Inverter-Based Switched-Capacitor Delta-Sigma Modulator. IEEE Journal of Solid-State Circuits, 2009, 44, 458-472.	3.5	265
67	A Dual-Capture Wide Dynamic Range CMOS Image Sensor Using Floating-Diffusion Capacitor. IEEE Transactions on Electron Devices, 2008, 55, 2590-2594.	1.6	23
68	An analog front-end of a fire detection SoC for a fire alarm system. , 2008, , .		1
69	A 1.5V mixed signal biomedical SOC for implantable cardioverter defibrillators. , 2007, , .		0
70	A Low Power Dual-Mode Sigma-Delta Modulator for GSM/WCDMA Receivers. , 2007, , .		0
71	Sensitivity Controllable CMOS Image Sensor Pixel Using Control Gate Overlaid on Photodiode. IEEE Electron Device Letters, 2007, 28, 495-498.	2.2	8
72	A Low Power Sigma-Delta Modulator Using Class-C Inverter. , 2007, , .		27

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73	A 0.8- μ W switched-capacitor sigma-delta modulator using a class-C inverter. , 0, , .		4
74	CMOS Image Sensor with Analog Gamma Correction using Nonlinear Single-Slope ADC. , 0, , .		9