Youngwoo Ji

List of Publications by Year
in descending order

86 papers	1,951 citations	331670 21 h-index	276875 41 g-index
86 all docs	86 docs citations	86 times ranked	1937 citing authors

#	Article	IF	Citations
1	Wireless smart contact lens for diabetic diagnosis and therapy. Science Advances, 2020, 6, eaba3252.	10.3	255
2	A Fully-Integrated 71 nW CMOS Temperature Sensor for Low Power Wireless Sensor Nodes. IEEE Journal of Solid-State Circuits, 2014, 49, 1682-1693.	5.4	159
3	A 21 fJ/Conversion-Step 100 kS/s 10-bit ADC With a Low-Noise Time-Domain Comparator for Low-Power Sensor Interface. IEEE Journal of Solid-State Circuits, 2011, 46, 651-659.	5.4	139
4	Biomimetic anti-reflective triboelectric nanogenerator for concurrent harvesting of solar and raindrop energies. Nano Energy, 2019, 57, 424-431.	16.0	127
5	A 1 GHz ADPLL With a 1.25 ps Minimum-Resolution Sub-Exponent TDC in 0.18 μm CMOS. IEEE Journal of Solid-State Circuits, 2010, 45, 2874-2881.	5.4	118
6	A Digital-Domain Calibration of Split-Capacitor DAC for a Differential SAR ADC Without Additional Analog Circuits. IEEE Transactions on Circuits and Systems I: Regular Papers, 2013, 60, 2845-2856.	5.4	83
7	A 1.25 ps Resolution 8b Cyclic TDC in 0.13 μm CMOS. IEEE Journal of Solid-State Circuits, 2012, 47, 736-743.	5.4	68
8	A 300-MS/s, 1.76-ps-Resolution, 10-b Asynchronous Pipelined Time-to-Digital Converter With on-Chip Digital Background Calibration in 0.13-Åµm CMOS. IEEE Journal of Solid-State Circuits, 2013, 48, 516-526.	5.4	50
9	5.7 A 29nW bandgap reference circuit. , 2015, , .		49
10	A 192-pW Voltage Reference Generating Bandgapâ€“$V_{ext{th}}$ With Process and Temperature Dependence Compensation. IEEE Journal of Solid-State Circuits, 2019, 54, 3281-3291.	5.4	46
11	Hyaluronateâ€“Gold Nanoparticle/Glucose Oxidase Complex for Highly Sensitive Wireless Noninvasive Glucose Sensors. ACS Applied Materials & Interfaces, 2019, 11, 37347-37356.	8.0	42
12	A Spherical Hybrid Triboelectric Nanogenerator for Enhanced Water Wave Energy Harvesting. Micromachines, 2018, 9, 598.	2.9	39
13	Serpentine Microstrip Lines With Zero Far-End Crosstalk for Parallel High-Speed DRAM Interfaces. IEEE Transactions on Advanced Packaging, 2010, 33, 552-558.	1.6	37
14	A 2 GHz Fractional-N Digital PLL with 1b Noise Shaping $DeltaSigma$ TDC. IEEE Journal of Solid-State Circuits, 2012, 47, 875-883.	5.4	34
15	A FIR-Embedded Phase Interpolator Based Noise Filtering for Wide-Bandwidth Fractional-N PLL. IEEE Journal of Solid-State Circuits, 2013, 48, 2795-2804.	5.4	31
16	A 4 Gb/s 3-bit Parallel Transmitter With the Crosstalk-Induced Jitter Compensation Using TX Data Timing Control. IEEE Journal of Solid-State Circuits, 2009, 44, 2891-2900.	5.4	30
17	A high-gain wide-input-range time amplifier with an open-loop architecture and a gain equal to current bias ratio. , 2011, , .		29
18	Inactivation of <i>S. mutans</i> Using an Atmospheric Plasma Driven by a Palm-Size-Integrated Microwave Power Module. IEEE Transactions on Plasma Science, 2010, 38, 1956-1962.	1.3	28

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19	A 110 MHz to 1.4 GHz Locking 40-Phase All-Digital DLL. IEEE Journal of Solid-State Circuits, 2011, 46, 435-444.	5.4	28
20	Current-Mode Transceiver for Silicon Interposer Channel. IEEE Journal of Solid-State Circuits, 2014, 49, 2044-2053.	5.4	27
21	A Single-Loop SS-LMS Algorithm With Single-Ended Integrating DFE Receiver for Multi-Drop DRAM Interface. IEEE Journal of Solid-State Circuits, 2011, 46, 2053-2063.	5.4	24
22	An 84.6-dB-SNDR and 98.2-dB-SFDR Residue-Integrated SAR ADC for Low-Power Sensor Applications. IEEE Journal of Solid-State Circuits, 2018, 53, 404-417.	5.4	24
23	A Low-Power Wide Dynamic-Range Current Readout Circuit for Ion-Sensitive FET Sensors. IEEE Transactions on Biomedical Circuits and Systems, 2017, 11, 523-533.	4.0	23
24	Smart Wireless Near‐Infrared Light Emitting Contact Lens for the Treatment of Diabetic Retinopathy. Advanced Science, 2022, 9, e2103254.	11.2	22
25	Analysis of an Open-Loop Time Amplifier With a Time Gain Determined by the Ratio of Bias Current. IEEE Transactions on Circuits and Systems II: Express Briefs, 2014, 61, 481-485.	3.0	21
26	Increased Interfacial Area between Dielectric Layer and Electrode of Triboelectric Nanogenerator toward Robustness and Boosted Energy Output. Nanomaterials, 2019, 9, 71.	4.1	21
27	Extremely high and elongated power output from a mechanical mediator-assisted triboelectric nanogenerator driven by the biomechanical energy. Nano Energy, 2019, 56, 851-858.	16.0	21
28	A 0.65-to-10.5 Gb/s Reference-Less CDR With Asynchronous Baud-Rate Sampling for Frequency Acquisition and Adaptive Equalization. IEEE Transactions on Circuits and Systems I: Regular Papers, 2016, 63, 276-287.	5.4	19
29	A 1-Gb/s bidirectional I/O buffer using the current-mode scheme. IEEE Journal of Solid-State Circuits, 1999, 34, 529-535.	5.4	16
30	Ozone-Free Portable Microwave Atmospheric Air Plasma Jet. IEEE Transactions on Plasma Science, 2014, 42, 2788-2789.	1.3	16
31	A 0.0043-mm^2 0.3–1.2-V Frequency-Scalable Synthesized Fractional-N Digital PLL With a Speculative Dual-Referenced Interpolating TDC. IEEE Journal of Solid-State Circuits, 2019, 54, 99-108.	5.4	16
32	A 2-Gb/s CMOS Integrating Two-Tap DFE Receiver for Four-Drop Single-Ended Signaling. IEEE Transactions on Circuits and Systems I: Regular Papers, 2009, 56, 1645-1656.	5.4	14
33	A 0.5-V, 1.47- $\mu\mbox{W}$ 40-kS/s 13-bit SAR ADC With Capacitor Error Compensation. IEEE Transactions on Circuits and Systems II: Express Briefs, 2014, 61, 840-844.	3.0	14
34	A 490-pW SAR Temperature Sensor With a Leakage-Based Bandgap-Vth Reference. IEEE Transactions on Circuits and Systems II: Express Briefs, 2020, 67, 1549-1553.	3.0	14
35	A Time-Based Receiver With 2-Tap Decision Feedback Equalizer for Single-Ended Mobile DRAM Interface. IEEE Journal of Solid-State Circuits, 2018, 53, 144-154.	5.4	13
36	5-Gb/s Peak Detector Using a Current Comparator and a Three-State Charge Pump. IEEE Transactions on Circuits and Systems II: Express Briefs, 2011, 58, 269-273.	3.0	12

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37	An Approximate Closed-Form Transfer Function Model for Diverse Differential Interconnects. IEEE Transactions on Circuits and Systems I: Regular Papers, 2015, 62, 1335-1344.	5.4	12
38	An FFE Transmitter Which Automatically and Adaptively Relaxes Impedance Matching. IEEE Journal of Solid-State Circuits, 2018, 53, 1780-1792.	5.4	12
39	A Quadrature RC Oscillator With Noise Reduction by Voltage Swing Control. IEEE Transactions on Circuits and Systems I: Regular Papers, 2019, 66, 3077-3088.	5.4	12
40	A CMOS transceiver for DRAM bus system with a demultiplexed equalization scheme. IEEE Journal of Solid-State Circuits, 2002, 37, 245-250.	5.4	11
41	An Approximate Closed-Form Channel Model for Diverse Interconnect Applications. IEEE Transactions on Circuits and Systems I: Regular Papers, 2014, 61, 3034-3043.	5.4	11
42	A Study on Bandgap Reference Circuit With Leakage-Based PTAT Generation. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2018, 26, 2310-2321.	3.1	11
43	Digitally Controlled Leakage-Based Oscillator and Fast Relocking MDLL for Ultra Low Power Sensor Platform. IEEE Journal of Solid-State Circuits, 2015, 50, 1263-1274.	5.4	10
44	A 2-Gb/s Intrapanel Interface for TFT-LCD With a VSYNC-Embedded Subpixel Clock and a Cascaded Deskew and Multiphase DLL. IEEE Transactions on Circuits and Systems II: Express Briefs, 2011, 58, 687-691.	3.0	9
45	Digital-domain calibration of split-capacitor DAC with no extra calibration DAC for a differential-type SAR ADC. , 2011, , .		9
46	A Transmitter to Compensate for Crosstalk-Induced Jitter by Subtracting a Rectangular Crosstalk Waveform From Data Signal During the Data Transition Time in Coupled Microstrip Lines. IEEE Journal of Solid-State Circuits, 2012, 47, 2068-2079.	5.4	9
47	Arrangement optimization of water-driven triboelectric nanogenerators considering capillary phenomenon between hydrophobic surfaces. Scientific Reports, 2020, 10, 1126.	3.3	8
48	A BER-Suppressed PUF With an Amplification of Process Mismatch Effect in an Oscillator Collapse Topology. IEEE Journal of Solid-State Circuits, 2022, 57, 2208-2219.	5.4	8
49	Reduction of Transient Far-End Crosstalk Voltage and Jitter in DIMM Connectors for DRAM Interface. IEEE Microwave and Wireless Components Letters, 2009, 19, 15-17.	3.2	7
50	A 250- $\mu ext{W}$ 2.4-GHz Fast-Lock Fractional-N Frequency Generation for Ultralow-Power Applications. IEEE Transactions on Circuits and Systems II: Express Briefs, 2017, 64, 106-110.	3.0	7
51	A Self-Biased Current-Mode Amplifier With an Application to 10-bit Pipeline ADC. IEEE Transactions on Circuits and Systems I: Regular Papers, 2017, 64, 1706-1717.	5.4	7
52	A 10-bit 25-MS/s 1.25-mW Pipelined ADC With a Semidigital Gm-Based Amplifier. IEEE Transactions on Circuits and Systems II: Express Briefs, 2013, 60, 142-146.	3.0	6
53	A 40-mV-Swing Single-Ended Transceiver for TSV with a Switched-Diode RX Termination. IEEE Transactions on Circuits and Systems II: Express Briefs, 2014, 61, 987-991.	3.0	6
54	Investigation on the Worst Read Scenario of a ReRAM Crossbar Array. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2017, 25, 2402-2410.	3.1	6

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55	A PVT-Tolerant Oscillation-Collapse-Based True Random Number Generator With an Odd Number of Inverter Stages. IEEE Transactions on Circuits and Systems II: Express Briefs, 2022, 69, 4058-4062.	3.0	6
56	A single-chip time-interleaved 32-channel analog beamformer for ultrasound medical imaging. , 2012, , .		5
57	A fractional-N frequency divider for SSCG using a single dual-modulus integer divider and a phase interpolator. , 2012, , .		5
58	A Coefficient-Error-Robust Feed-Forward Equalizing Transmitter for Eye-Variation and Power Improvement. IEEE Journal of Solid-State Circuits, 2016, 51, 1902-1914.	5.4	5
59	A Low-Power Class-AB Gm-Based Amplifier With Application to an 11-bit Pipelined ADC. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2016, 24, 2562-2569.	3.1	5
60	A 10-GHz multi-purpose reconfigurable built-in self-test circuit for high-speed links. , 2017, , .		5
61	A 9.3 nW all-in-one bandgap voltage and current reference circuit using leakage-based PTAT generation and DIBL characteristic. , 2018, , .		5
62	840 Mb/s CMOS demultiplexed equalizing transceiver for DRAM-to-processer communication. , 0, , .		4
63	A QDR-Based 6-GB/s Parallel Transceiver With Current-Regulated Voltage-Mode Output Driver and Byte CDR for Memory Interface. IEEE Transactions on Circuits and Systems II: Express Briefs, 2013, 60, 91-95.	3.0	4
64	All-Synthesizable Current-Mode Transmitter Driver for USB2.0 Interface. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2017, 25, 788-792.	3.1	4
65	Low-Noise Distributed *RC* Oscillator. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2022, 30, 143-152.	3.1	4
66	A 1.9-GHz Fractional-N Digital PLL With Subexponent $\Delta\Sigma$ TDC and IIR-Based Noise Cancellation. IEEE Transactions on Circuits and Systems II: Express Briefs, 2012, 59, 721-725.	3.0	3
67	Analytical Formulas for Tradeoff Among Channel Loss, Length, and Frequency of RC- and LC-Dominant Single-Ended Interconnects for Fast Equalized Link Tradeoff Estimation. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2015, 5, 1497-1506.	2.5	3
68	An ECG monitoring system using android smart phone. , 2016, , .		3
69	A low-power LDO circuit with a fast load regulation. , 2016, , .		3
70	A Search Algorithm for the Worst Operation Scenario of a Cross-Point Phase-Change Memory Utilizing Particle Swarm Optimization. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2018, 26, 2591-2598.	3.1	3
71	An Approximate Transfer Function Model of Two Serially Connected Heterogeneous Transmission Lines. IEEE Transactions on Circuits and Systems II: Express Briefs, 2017, 64, 1067-1071.	3.0	2
72	Microwave Plasma Generation With Resonance Frequency Tracking and Power Regulation. IEEE Transactions on Plasma Science, 2017, 45, 925-931.	1.3	2

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73	An Estimation Method of an Electrical Equivalent Circuit Considering Acoustic Radiation Efficiency for a Multiple Resonant Transducer. Electronics (Switzerland), 2021, 10, 2416.	3.1	2
74	An 8.9–71.3 TOPS/W Deep Learning Accelerator for Arbitrarily Quantized Neural Networks. IEEE Transactions on Circuits and Systems II: Express Briefs, 2022, 69, 4148-4152.	3.0	2
75	A transmitter with different output timing to compensate for the crosstalk-induced jitter of coupled microstrip lines. , 2010, , .		1
76	Time-interleaved sample clock generator for ultrasound beamformer application. , 2011, , .		1
77	A reduced-size look-up-table for ADC sample-times of a single-chip non-uniform-sampling digital-beamformer for ultrasound medical imaging. , 2015, , .		1
78	Optimized Design of a Sonar Transmitter for the High-Power Control of Multichannel Acoustic Transducers. Electronics (Switzerland), 2021, 10, 2682.	3.1	1
79	A 20.5-nW Resistor-Less Bandgap Voltage Reference With Self-Biased Compensation for Process Variations. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2022, 30, 840-843.	3.1	1
80	An Auto-Configurable Dual-Mode MPPT for Energy Harvesting With 12 nW–180 mW Conversion Range. IEEE Transactions on Circuits and Systems II: Express Briefs, 2022, 69, 4053-4057.	3.0	1
81	A spread spectrum clock generator using phase/frequency boosting with a peak power reduction 14.9dB, RMS jitter 1.40ps and power 4.8mW/GHz for USB 3.0. , 2012, , .		0
82	An open-loop differential time amplifier. , 2014, , .		0
83	All-synthesizable 6Gbps voltage-mode transmitter for serial link. , 2016, , .		0
84	A low-power wide dynamic-range current readout circuit for biosensors. , 2018, , .		0
85	A 62.6-pJ/Conversion Temperature Sensor with a Capacitor Voltage Division. Journal of Semiconductor Technology and Science, 2021, 21, 73-79.	0.4	0
86	A 384G Output NonZeros/J Graph Convolutional Neural Network Accelerator. IEEE Transactions on Circuits and Systems II: Express Briefs, 2022, 69, 4158-4162.	3.0	0