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	Low-Noise Distributed RC Oscillator. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2022, 30, 143-152.	3.1	4
2	Smart Wireless Nearâ€Infrared Light Emitting Contact Lens for the Treatment of Diabetic Retinopathy. Advanced Science, 2022, 9, e2103254.	11.2	22
3	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
4	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
5	An 8.9â€“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
6	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
7	An Auto-Configurable Dual-Mode MPPT for Energy Harvesting With 12 nWâ€“180 mW Conversion Range. IEEE Transactions on Circuits and Systems II: Express Briefs, 2022, 69, 4053-4057.	3.0	1
8	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
9	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
10	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
11	Optimized Design of a Sonar Transmitter for the High-Power Control of Multichannel Acoustic Transducers. Electronics (Switzerland), 2021, 10, 2682.	3.1	1
12	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
13	Arrangement optimization of water-driven triboelectric nanogenerators considering capillary phenomenon between hydrophobic surfaces. Scientific Reports, 2020, 10, 1126.	3.3	8
14	Wireless smart contact lens for diabetic diagnosis and therapy. Science Advances, 2020, 6, eaba3252.	10.3	255
15	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
16	Hyaluronateâ€“Gold Nanoparticle/Glucose Oxidase Complex for Highly Sensitive Wireless Noninvasive Glucose Sensors. ACS Applied Materials & Interfaces, 2019, 11, 37347-37356.	8.0	42
17	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
18	Increased Interfacial Area between Dielectric Layer and Electrode of Triboelectric Nanogenerator toward Robustness and Boosted Energy Output. Nanomaterials, 2019, 9, 71.	4.1	21

#	Article	IF	Citations
19	Biomimetic anti-reflective triboelectric nanogenerator for concurrent harvesting of solar and raindrop energies. Nano Energy, 2019, 57, 424-431.	16.0	127
20	A 0.0043-mm² 0.3â€“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
21	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
22	A 9.3 nW all-in-one bandgap voltage and current reference circuit using leakage-based PTAT generation and DIBL characteristic. , 2018, , .		5
23	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
24	A low-power wide dynamic-range current readout circuit for biosensors. , 2018, , .		0
25	An FFE Transmitter Which Automatically and Adaptively Relaxes Impedance Matching. IEEE Journal of Solid-State Circuits, 2018, 53, 1780-1792.	5.4	12
26	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
27	A Spherical Hybrid Triboelectric Nanogenerator for Enhanced Water Wave Energy Harvesting. Micromachines, 2018, 9, 598.	2.9	39
28	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
29	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
30	A 250- $muext{W}$ 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
31	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
32	Microwave Plasma Generation With Resonance Frequency Tracking and Power Regulation. IEEE Transactions on Plasma Science, 2017, 45, 925-931.	1.3	2
33	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
34	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
35	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
36	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

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37	A 10-GHz multi-purpose reconfigurable built-in self-test circuit for high-speed links. , 2017, , .		5
38	All-synthesizable 6Gbps voltage-mode transmitter for serial link. , 2016, , .		0
39	An ECG monitoring system using android smart phone. , 2016, , .		3
40	A low-power LDO circuit with a fast load regulation. , 2016, , .		3
41	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
42	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
43	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
44	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
45	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
46	5.7 A 29nW bandgap reference circuit. , 2015, , .		49
47	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
48	Analytical Formulas for Tradeoff Among Channel Loss, Length, and Frequency of <inline-formula> <tex-math notation="LaTeX">RC </tex-math></inline-formula>- and <inline-formula> <tex-math notation="LaTeX">LC </tex-math></inline-formula>-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
49	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
50	An open-loop differential time amplifier. , 2014, , .		0
51	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
52	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
53	Ozone-Free Portable Microwave Atmospheric Air Plasma Jet. IEEE Transactions on Plasma Science, 2014, 42, 2788-2789.	1.3	16
54	A 0.5-V, 1.47- $muhbox{W}$ 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

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55	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
56	Current-Mode Transceiver for Silicon Interposer Channel. IEEE Journal of Solid-State Circuits, 2014, 49, 2044-2053.	5.4	27
57	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-Âµm CMOS. IEEE Journal of Solid-State Circuits, 2013, 48, 516-526.	5.4	50
58	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
59	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
60	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
61	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
62	A single-chip time-interleaved 32-channel analog beamformer for ultrasound medical imaging. , 2012, , .		5
63	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
64	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
65	A 1.9-GHz Fractional-N Digital PLL With Subexponent $ DeltaSigma$ TDC and IIR-Based Noise Cancellation. IEEE Transactions on Circuits and Systems II: Express Briefs, 2012, 59, 721-725.	3.0	3
66	A fractional-N frequency divider for SSCG using a single dual-modulus integer divider and a phase interpolator. , 2012, , .		5
67	A 1.25 ps Resolution 8b Cyclic TDC in 0.13 mum CMOS. IEEE Journal of Solid-State Circuits, 2012, 47, 736-743.	5.4	68
68	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
69	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
70	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
71	A high-gain wide-input-range time amplifier with an open-loop architecture and a gain equal to current bias ratio. , 2011, , .		29
72	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

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73	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
74	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
75	Digital-domain calibration of split-capacitor DAC with no extra calibration DAC for a differential-type SAR ADC. , 2011, , .		9
76	Time-interleaved sample clock generator for ultrasound beamformer application. , 2011, , .		1
77	Inactivation of S. mutans 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
78	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
79	A 1 GHz ADPLL With a 1.25 ps Minimum-Resolution Sub-Exponent TDC in 0.18 mum CMOS. IEEE Journal of Solid-State Circuits, 2010, 45, 2874-2881.	5.4	118
80	A transmitter with different output timing to compensate for the crosstalk-induced jitter of coupled microstrip lines. , 2010, , .		1
81	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
82	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
83	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
84	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
85	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
86	840 Mb/s CMOS demultiplexed equalizing transceiver for DRAM-to-processer communication. , 0, , .		4