

# Sang-Gug Lee

## List of Publications by Year in descending order

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115  
papers

1,594  
citations

516215

16  
h-index

344852

36  
g-index

116  
all docs

116  
docs citations

116  
times ranked

1334  
citing authors

#	ARTICLE	IF	CITATIONS
1	CMOS Low-Noise Amplifier Design Optimization Techniques. IEEE Transactions on Microwave Theory and Techniques, 2004, 52, 1433-1442.	2.9	464
2	An Integrated High-Performance Active Rectifier for Piezoelectric Vibration Energy Harvesting Systems. IEEE Transactions on Power Electronics, 2012, 27, 623-627.	5.4	80
3	Energy-Efficient Low-Complexity CMOS Pulse Generator for Multiband UWB Impulse Radio. IEEE Transactions on Circuits and Systems I: Regular Papers, 2008, 55, 3552-3563.	3.5	74
4	A High-Sensitivity and Low-Walk Error LADAR Receiver for Military Application. IEEE Transactions on Circuits and Systems I: Regular Papers, 2014, 61, 3007-3015.	3.5	67
5	A Low-Noise Four-Stage Voltage-Controlled Ring Oscillator in Deep-Submicrometer CMOS Technology. IEEE Transactions on Circuits and Systems II: Express Briefs, 2013, 60, 71-75.	2.2	63
6	A Colpitts Oscillator-Based Self-Starting Boost Converter for Thermoelectric Energy Harvesting With 40-mV Startup Voltage and 75% Maximum Efficiency. IEEE Journal of Solid-State Circuits, 2018, 53, 3293-3302.	3.5	43
7	A New Approach to Low-Power and Low-Latency Wake-Up Receiver System for Wireless Sensor Nodes. IEEE Journal of Solid-State Circuits, 2012, 47, 2405-2419.	3.5	41
8	A 230-260-GHz Wideband and High-Gain Amplifier in 65-nm CMOS Based on Dual-Peak $\text{G}_{\text{max}}$ -Core. IEEE Journal of Solid-State Circuits, 2019, 54, 1613-1623.	3.5	38
9	A Long Reset-Time Power-On Reset Circuit With Brown-Out Detection Capability. IEEE Transactions on Circuits and Systems II: Express Briefs, 2011, 58, 778-782.	2.2	35
10	A CMOS Wideband Highly Linear Low-Noise Amplifier for Digital TV Applications. IEEE Transactions on Microwave Theory and Techniques, 2013, 61, 3700-3711.	2.9	32
11	A 280-300-GHz Three-Stage Amplifiers in 65-nm CMOS With 12-/9-dB Gain and 1.6/1.4% PAE While Dissipating 17.9 mW. IEEE Microwave and Wireless Components Letters, 2018, 28, 79-81.	2.0	30
12	Nonlinear Analysis of Nonresonant THz Response of MOSFET and Implementation of a High-Responsivity Cross-Coupled THz Detector. IEEE Transactions on Terahertz Science and Technology, 2018, 8, 108-120.	2.0	26
13	A $\text{D}_{\text{max}}$ -Band High-Gain and Low-Power LNA in 65-nm CMOS by Adopting Simultaneous Noise- and Input-Matched $\text{G}_{\text{max}}$ -Core. IEEE Transactions on Microwave Theory and Techniques, 2021, 69, 2519-2530.	2.9	24
14	A Two-Channel Asynchronous SAR ADC With Metastable-Then-Set Algorithm. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2012, 20, 765-769.	2.1	20
15	A 5.8-GHz DSRC Transceiver With a $\mu\text{A}$ Interference-Aware Wake-Up Receiver for the Chinese ETCS. IEEE Transactions on Microwave Theory and Techniques, 2014, 62, 3146-3160.	2.9	18
16	Field Experiment of Photonic Radar for Low-RCS Target Detection and High-Resolution Image Acquisition. IEEE Access, 2021, 9, 63559-63566.	2.6	17
17	A 200-V 98.16%-Efficiency Buck LED Driver Using Integrated Current Control to Improve Current Accuracy for Large-Scale Single-String LED Backlighting Applications. IEEE Transactions on Power Electronics, 2016, 31, 6416-6427.	5.4	16
18	A rectifier for piezoelectric energy harvesting system with series Synchronized Switch Harvesting Inductor. , 2013, , .		15

#	ARTICLE	IF	CITATIONS
19	A 50- $\mu$ W 450 MHz Tunable RF Biquad Filter Based on a Wideband Source Follower With $> 26$ dBm IIP <sub>3</sub> , +12 dBm P <sub>1dB</sub> , and 15 dB Noise Figure. IEEE Journal of Solid-State Circuits, 2015, 50, 2294-2305.	3.5	15
20	Optimization of piezoelectric energy harvesting systems by using a MPPT method. , 2014, , .		14
21	MOSFET Characteristics for Terahertz Detector Application From On-Wafer Measurement. IEEE Transactions on Terahertz Science and Technology, 2015, 5, 1068-1077.	2.0	14
22	A 2.4GHz, $\sim 102$ dBm-sensitivity, 25kb/s, 0.466mW interference resistant BFSK multi-channel sliding-IF ULP receiver. , 2017, , .		14
23	Game Theoretic Perspective of Optimal CSMA. IEEE Transactions on Wireless Communications, 2018, 17, 194-209.	6.1	14
24	A 45- $\mu$ W, 162.1-dBc/Hz FoM, 490-MHz Two-Stage Differential Ring VCO Without a Cross-Coupled Latch. IEEE Transactions on Circuits and Systems II: Express Briefs, 2018, 65, 1579-1583.	2.2	13
25	A high efficiency piezoelectric energy harvesting system. , 2011, , .		12
26	A 2.2 mW, 40 dB Automatic Gain Controllable Low Noise Amplifier for FM Receiver. IEEE Transactions on Circuits and Systems I: Regular Papers, 2015, 62, 600-606.	3.5	12
27	Wide Locking-Range Frequency Multiplier by 1.5 Employing Quadrature Injection-Locked Frequency Tripler With Embedded Notch Filtering. IEEE Transactions on Microwave Theory and Techniques, 2019, 67, 4791-4802.	2.9	12
28	Provable per-link delay-optimal CSMA for general wireless network topology. , 2014, , .		11
29	Breaking the Trapping Sets in LDPC Codes: Check Node Removal and Collaborative Decoding. IEEE Transactions on Communications, 2016, 64, 15-26.	4.9	11
30	A 96.5% Efficiency Current Mode Hysteretic Buck Converter With 1.2% Error Auto-Selectable Frequency Locking. IEEE Transactions on Power Electronics, 2018, 33, 7733-7743.	5.4	11
31	17.6 A Reconfigurable DC-DC Converter for Maximum TEG Energy Harvesting in a Battery-Powered Wireless Sensor Node. , 2021, , .		11
32	A 2.4-GHz Super-Regenerative Transceiver With Selectivity-Improving Dual Q-Enhancement Architecture and 102- $\mu$ W All-Digital FLL. IEEE Transactions on Microwave Theory and Techniques, 2017, 65, 3287-3298.	2.9	10
33	X-Band Photonic-Based Pulsed Radar Architecture with a High Range Resolution. Applied Sciences (Switzerland), 2020, 10, 6558.	1.3	10
34	An 80 MHz Bandwidth and 26.8 dBm OOB IIP <sub>3</sub> Transimpedance Amplifier With Improved Nested Feedforward Compensation and Multi-Order Filtering. IEEE Transactions on Circuits and Systems I: Regular Papers, 2020, 67, 3410-3421.	3.5	10
35	A D-Band Power Amplifier in 65-nm CMOS by Adopting Simultaneous Output Power-and Gain-Matched $G_{max}$ -Core. IEEE Access, 2021, 9, 99039-99049.	2.6	10
36	Design of High-Gain Sub-THz Regenerative Amplifiers Based on Double- $G_{max}$ Gain Boosting Technique. IEEE Journal of Solid-State Circuits, 2021, 56, 3388-3398.	3.5	10

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37	A 250-GHz 12.6-dB Gain and 3.8-dBm $P_{sat}$ Power Amplifier in 65-nm CMOS Adopting Dual-Shunt Elements Based $G_{max}$ -Core. IEEE Microwave and Wireless Components Letters, 2021, 31, 292-295.	2.0	10
38	Distributed learning for utility maximization over CSMA-based wireless multihop networks. , 2014, , .		9
39	CSMA Using the Bethe Approximation: Scheduling and Utility Maximization. IEEE Transactions on Information Theory, 2015, 61, 4776-4787.	1.5	9
40	Dynamic Control for On-Demand Interference-Managed WLAN Infrastructures. IEEE/ACM Transactions on Networking, 2020, 28, 84-97.	2.6	9
41	CSMA using the Bethe approximation for utility maximization. , 2013, , .		8
42	Delay Optimal CSMA With Linear Virtual Channels Under a General Topology. IEEE/ACM Transactions on Networking, 2016, 24, 2847-2857.	2.6	8
43	A 2.4-GHz Ternary Sequence Spread Spectrum OOK Transceiver for Reliable and Ultra-Low Power Sensor Network Applications. IEEE Transactions on Circuits and Systems I: Regular Papers, 2017, 64, 2976-2987.	3.5	8
44	A Fully Integrated 490-GHz CMOS Heterodyne Imager Adopting Second Subharmonic Resistive Mixer Structure. IEEE Microwave and Wireless Components Letters, 2019, 29, 673-676.	2.0	8
45	Time-Multiplexed PWM LED Driver With Grayscale Enhancement Techniques for Signage Display. IEEE Transactions on Industrial Electronics, 2022, 69, 6410-6419.	5.2	8
46	A Compact Flicker-Free Transformer-Less LED Driver With an Enhanced Power Factor for Omnidirectional Multichannel Smart Bulb Applications. IEEE Transactions on Power Electronics, 2016, 31, 5851-5862.	5.4	7
47	Information source localization with protector diffusion in networks. Journal of Communications and Networks, 2019, 21, 136-147.	1.8	7
48	An LPWAN Radio with a Reconfigurable Data/Duty-Cycled-Wake-Up Receiver. , 2022, , .		7
49	Challenges and directions of ultra low energy wireless sensor nodes for biosignal monitoring. , 2012, , .		6
50	Development of low-complexity all-digital frequency locked loop as 500 MHz reference clock generator for field-programmable gate array. IET Circuits, Devices and Systems, 2014, 8, 73-81.	0.9	6
51	Effects of Parasitic Source/Drain Junction Area on Terahertz Responsivity of MOSFET Detector. IEEE Transactions on Terahertz Science and Technology, 2018, 8, 681-687.	2.0	6
52	High-Power 268-GHz Push-Push Transformer-Based Oscillator With Capacitive Degeneration. IEEE Microwave and Wireless Components Letters, 2018, 28, 612-614.	2.0	6
53	A 915 MHz, 499 $\mu$ W, $-99$ dBm, and 100 kbps BFSK Direct Conversion Receiver. , 2019, , .		6
54	A 247 and 272 GHz Two-Stage Regenerative Amplifiers in 65 nm CMOS with 18 and 15 dB Gain Based on Double- $G_{max}$ Gain Boosting Technique. , 2020, , .		6

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55	A 5.5-dBm, 31.9% Efficiency 915-MHz Transmitter Employing Frequency Tripler and 207- $\mu$ W Synthesizer. IEEE Microwave and Wireless Components Letters, 2020, 30, 90-93.	2.0	6
56	Power Management IC With a Three-Phase Cold Self-Start for Thermoelectric Generators. IEEE Transactions on Circuits and Systems I: Regular Papers, 2021, 68, 103-113.	3.5	6
57	A Sub-nW Single-Supply 32-kHz Sub-Harmonic Pulse Injection Crystal Oscillator. IEEE Journal of Solid-State Circuits, 2021, 56, 1849-1858.	3.5	6
58	A 520 pJ/pulse IR-UWB radar for short range object detection. , 2011, , .		5
59	A high speed comparator based active rectifier for wireless power transfer systems. , 2011, , .		5
60	Impacts of Selfish Behaviors on the Scalability of Hybrid Client-Server and Peer-to-Peer Caching Systems. IEEE/ACM Transactions on Networking, 2015, 23, 1818-1831.	2.6	5
61	0.5 and 1.5 THz monolithic imagers in a 65 nm CMOS adopting a VCO-based signal processing. , 2017, , .		5
62	A Real-Time Entropy Estimation Algorithm for Lithium Batteries Based on a Combination of Kalman Filter and Nonlinear Observer. IEEE Transactions on Industrial Electronics, 2020, 67, 8034-8043.	5.2	5
63	Automatic Bias Control Technique of Dual-Parallel Mach-Zehnder Modulator Based on Simulated Annealing Algorithm for Quadrupled Signal Generation. Photonics, 2021, 8, 80.	0.9	5
64	A -123-dBm Sensitivity Split-Channel BFSK Reconfigurable Data/Wake-Up Receiver for Low-Power Wide-Area Networks. IEEE Journal of Solid-State Circuits, 2021, 56, 2656-2667.	3.5	5
65	A Reconfigurable DC-DC Converter for Maximum Thermoelectric Energy Harvesting in a Battery-Powered Duty-Cycling Wireless Sensor Node. IEEE Journal of Solid-State Circuits, 2022, 57, 2719-2730.	3.5	5
66	Analysis and Design of Inductorless Transimpedance Amplifier Employing Nested Feedforward Noise-Canceling Amplifiers. IEEE Transactions on Microwave Theory and Techniques, 2022, 70, 3923-3932.	2.9	5
67	A low power low inaccuracy linearity-compensated temperature sensor for attachable medical devices. , 2013, , .		4
68	Calibration technique for sensitivity variation in RVDT type accelerator position sensor. , 2013, , .		4
69	Just-in-time WLANs: On-demand interference-managed WLAN infrastructures. , 2016, , .		4
70	A 230-260GHz wideband amplifier in 65nm CMOS based on dual-peak $G_{max}$ -core. , 2017, , .		4
71	A high linear low flicker noise 25% duty cycle LO I/Q mixer for a FM radio receiver. , 2011, , .		3
72	A 0.5V 2.41GHz, 196.3dBc/Hz FoM differential colpitts VCO with an output voltage swing exceeding supply and ground potential requiring no additional inductor. , 2013, , .		3

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73	Maximum power transfer considering limited available input power in ultrasonic wireless power transfer for implanted medical devices. , 2014, , .		3
74	A zero current detector with low negative inductor current using forced freewheel switch operation in synchronous DC-DC converter. , 2014, , .		3
75	A Fast and Precise Blind I/Q Mismatch Compensation for Image Rejection in Direct-Conversion Receiver. ETRI Journal, 2014, 36, 12-21.	1.2	3
76	Bottomâ€inletâ€type microâ€electroâ€mechanical system acoustic sensors based on two polyimide/amorphousâ€Si sacrificial layers. Micro and Nano Letters, 2014, 9, 845-849.	0.6	3
77	500 GHz CMOS heterodyne imager adopting fourth subharmonic passive mixer. Microwave and Optical Technology Letters, 2020, 62, 683-687.	0.9	3
78	A 293/440 GHz Push-Push Double Feedback Oscillators with 5.0/âˆ³3.9 dBm Output Power and 2.9/0.6 % DC-to-RF Efficiency in 65 nm CMOS. , 2020, , .		3
79	A 0.3-to-1-GHz IoT Transmitter Employing Pseudo-Randomized Phase Switching Modulator and Single-Supply Class-G Harmonic Rejection PA. IEEE Journal of Solid-State Circuits, 2022, 57, 892-905.	3.5	3
80	An Active Leakage Canceller Adopting Switched-Capacitor Digital Power Amplifier for UHF-RFID Transceiver. IEEE Microwave and Wireless Components Letters, 2021, 31, 604-607.	2.0	3
81	A Low-Noise and Fast-Settling UHF RFID Receiver With Digitally Controlled Leakage Cancellation. IEEE Transactions on Circuits and Systems II: Express Briefs, 2021, 68, 2810-2814.	2.2	3
82	A 27 dB Sidelobe Suppression, 1.12 GHz BW<sub>âˆ³10<i>dB</i></sub> UWB Pulse Generator With Process Compensation. IEEE Transactions on Circuits and Systems II: Express Briefs, 2021, 68, 2805-2809.	2.2	3
83	A 95.1% Efficiency Hybrid Hysteretic Reconfigurable 3-Level Buck Converter with Improved Load Transient Response. IEEE Transactions on Power Electronics, 2022, , 1-10.	5.4	3
84	A regulator-free 84dB DR audio-band ADC for compact digital microphones. , 2010, , .		2
85	Low power consumption for detecting current zero of synchronous DC-DC buck converter. , 2012, , .		2
86	On the progressive spread over strategic diffusion: Asymptotic and computation. , 2015, , .		2
87	A 270-GHz Push-Push Transformer-Based Oscillator Adopting Power Leakage Suppression Technique. Electronics (Switzerland), 2019, 8, 1347.	1.8	2
88	Three-Phase Boost-Converter Based PMIC for Thermal Electric Generator Application. , 2019, , .		2
89	A 5 dBm 30.6% Efficiency 915 MHz Transmitter with \$210 \mu \text{W}\$ ULP PLL Employing Frequency Tripler and Digitally Controlled Duty/Phase Calibration Buffer. , 2020, , .		2
90	A 915 MHz IoT Transmitter Employing Frequency Tripler and Digitally Controlled Duty-Cycle/Phase Calibration. IEEE Journal of Solid-State Circuits, 2022, 57, 3336-3347.	3.5	2

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91	A CMOS highly linear low-noise amplifier for Digital TV applications. , 2012, , .		1
92	A Type-I $\Delta\Sigma$ Fractional-N Frequency Synthesizer Adopting a New Discrete-Time Loop Filter. IEEE Microwave and Wireless Components Letters, 2013, 23, 545-547.	2.0	1
93	Influence maximization over strategic diffusion in social networks. , 2014, , .		1
94	Incentivizing strategic users for social diffusion: Quantity or quality?. , 2017, , .		1
95	Adiabatic Persistent Contrastive Divergence learning. , 2017, , .		1
96	A 230~260GHz wideband amplifier in 65nm CMOS based on dual-peak $G_{\max}$ -core. , 2018, , .		1
97	Optimal Inference in Crowdsourced Classification via Belief Propagation. IEEE Transactions on Information Theory, 2018, 64, 6127-6138.	1.5	1
98	A Ku-Band RF Front-End Employing Broadband Impedance Matching with 3.5 dB NF and 21 dB Conversion Gain in 45-nm CMOS Technology. Electronics (Switzerland), 2020, 9, 539.	1.8	1
99	A 264-GHz, 2.3-dBm Push~Push Transformer-Based Hartley Oscillator. IEEE Microwave and Wireless Components Letters, 2021, 31, 893-896.	2.0	1
100	Design of Photonics-Based FMCW Radar Transceiver System. The Journal of Korean Institute of Electromagnetic Engineering and Science, 2021, 32, 933-941.	0.0	1
101	Low-power high-linearity 0.13- $\mu$ m CMOS WCDMA receiver front-end. , 2010, , .		0
102	A quantization noise cancelling fractional-N type $\Delta\Sigma$ frequency synthesizer using SAR-based DAC gain calibration. , 2012, , .		0
103	STI edge effect on the series resistance of CMOS Schottky barrier diodes. Microwave and Optical Technology Letters, 2014, 56, 932-935.	0.9	0
104	An area saving inductor current sensor with load transient enhancement in DC-DC converter. , 2014, , .		0
105	A 72~W, 2.4GHz, 11.7% tuning range, 212dBc/Hz FoM LC-VCO in 65nm CMOS. , 2015, , .		0
106	A method of regulating wireless power transfer based on the analysis of power communication. , 2015, , .		0
107	Distributed Medium Access Over Time-Varying Channels. IEEE/ACM Transactions on Networking, 2016, 24, 3000-3013.	2.6	0
108	Simulation-Based Distributed Coordination Maximization Over Networks. IEEE Transactions on Control of Network Systems, 2019, 6, 713-726.	2.4	0

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109	Design of Photonics-Based FMCW Transceiver System for High-Resolution ISAR. The Journal of Korean Institute of Electromagnetic Engineering and Science, 2021, 32, 215-222.	0.0	0
110	A Low Power and Low Noise On-Chip Active RF Tracking Filter for Digital TV Tuner ICs. IEICE Transactions on Electronics, 2011, E94-C, 1698-1701.	0.3	0
111	Low-Power PMIC with Two Hybrid Converters for TEG Application. , 2020, , .		0
112	Design and Manufacture of Traveling-wave Electro-optic Modulator for X-band LFM Signal Generation. Journal of the Korea Institute of Military Science and Technology, 2021, 24, 610-618.	0.1	0
113	A Fully Integrated 490-GHz CMOS Receiver Adopting Dual-Locking Receiver-Based FLL. IEEE Journal of Solid-State Circuits, 2022, 57, 2626-2639.	3.5	0
114	CMOS Based Sub-THz Wireless Transceivers: Issues and Solutions. , 2022, , .		0
115	CMOS Fractional-N Frequency Synthesizer for UHF RFID Reader Applications With Transformer-Based ISF Manipulation VCO. IEEE Transactions on Circuits and Systems II: Express Briefs, 2022, 69, 4083-4087.	2.2	0