

# Wooyeol Choi

## List of Publications by Year in descending order

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Version: 2024-02-01

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papers

795

citations

687363

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h-index

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docs citations

65

times ranked

805

citing authors

#	ARTICLE	IF	CITATIONS
1	300-GHz Double-Balanced Up-Converter Using Asymmetric MOS Varactors in 65-nm CMOS. IEEE Journal of Solid-State Circuits, 2022, 57, 2336-2347.	5.4	7
2	Terahertz Even-Order Subharmonic Mixer Using Symmetric MOS Varactors. IEEE Journal of Solid-State Circuits, 2021, 56, 355-366.	5.4	11
3	A 10-Gb/s 180-GHz Phase-Locked-Loop Minimum Shift Keying Receiver. IEEE Journal of Solid-State Circuits, 2021, 56, 681-693.	5.4	14
4	Emulating UAV Motion by Utilizing Robotic Arm for mmWave Wireless Channel Characterization. IEEE Transactions on Antennas and Propagation, 2021, 69, 6691-6701.	5.1	8
5	23.1 270-to-300GHz Double-Balanced Parametric Upconverter Using Asymmetric MOS Varactors and a Power-Splitting-Transformer Hybrid in 65nm CMOS. , 2021, , .		4
6	180-GHz Broadside Radiation Bond-Wire Antenna for Short-Range Wireless Communication. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2021, 11, 530-532.	2.5	1
7	De-embedding Motion Artifacts from Robotic Arm Assisted Propagation Measurements. , 2021, , .		0
8	315-GHz Self-Synchronizing Minimum Shift Keying Receiver in 65-nm CMOS. , 2020, , .		7
9	Corrections to â€œLow-Cost Packaging of 300ÂGHz Integrated Circuits With an On-Chip Patch Antennaâ€. IEEE Antennas and Wireless Propagation Letters, 2020, 19, 1466-1466.	4.0	0
10	Indiumâ€“Galliumâ€“Zinc Oxide Schottky Diodes Operating across the Glass Transition of Stimuliâ€Responsive Polymers. Advanced Electronic Materials, 2020, 6, 1901210.	5.1	10
11	610-GHz Fourth Harmonic Signal Reactively Generated in a CMOS Voltage Controlled Oscillator Using Differentially Pumped Varactors. IEEE Solid-State Circuits Letters, 2020, 3, 46-49.	2.0	8
12	A Wideband 180-GHz Phase-Locked-Loop Based MSK Receiver. , 2020, , .		1
13	300-GHz 2nd-Order Subharmonic Upconversion Mixer Using Symmetric MOS Varactors in 65-nm CMOS. IEEE Solid-State Circuits Letters, 2020, 3, 538-541.	2.0	3
14	287-GHz CMOS Transceiver Pixel Array in a QFN Package for Active Imaging. , 2020, , .		8
15	Generation of High Data Rate MSK-Modulated 180-GHz Signals. IEEE Microwave and Wireless Components Letters, 2019, 29, 757-760.	3.2	7
16	426-GHz Imaging Pixel Integrating a Transmitter and a Coherent Receiver with an Area of $380\text{--}471\frac{1}{4}\text{m}^2$ in 65-nm CMOS. , 2019, , .		8
17	Opening Terahertz for Everyday Applications. IEEE Communications Magazine, 2019, 57, 70-76.	6.1	49
18	A Perspective on Terahertz Next-Generation Wireless Communications. Technologies, 2019, 7, 43.	5.1	90

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19	CMOS Transceiver Pixels for Terahertz Imaging. , 2019,,.	1	
20	Low-Cost Packaging of 300 GHz Integrated Circuits With an On-Chip Patch Antenna. IEEE Antennas and Wireless Propagation Letters, 2019, 18, 2444-2448.	4.0	13
21	CMOS circuits for terahertz imaging. , 2019,,.	0	
22	Terahertz RF Front-End Employing Even-Order Subharmonic MOS Symmetric Varactor Mixers in 65-NM CMOS for Hydration Measurements at 560 GHz. , 2018,,.	16	
23	300-GHz CMOS QPSK transmitter for 30-Gbps dielectric waveguide communication. , 2018,,.	27	
24	450 Å– 580 Åµm <sup>2</sup> Pixel incorporating TX and coherent RX in CMOS for mmwave active imaging using a single reflector. Electronics Letters, 2018, 54, 982-984.	1.0	13
25	(Keynote) Devices in CMOS for Terahertz Circuits and Systems. ECS Transactions, 2017, 80, 3-15.	0.5	0
26	Self-Dynamic and Static Biasing for Output Power and Efficiency Enhancement of Complementary Antiparallel Diode Pair Frequency Tripler. IEEE Microwave and Wireless Components Letters, 2017, 27, 1110-1112.	3.2	6
27	Devices and circuits in CMOS for THz applications. , 2016,,.	10	
28	225–280 GHz receiver for rotational spectroscopy. , 2016,,.	10	
29	160–310 GHz frequency doubler in 65-nm CMOS with 3-dBm peak output power for rotational spectroscopy. , 2016,,.	23	
30	Kelvin inductance and resistance measurements using an AC source and DC voltmeters. , 2016,,.	1	
31	200–280GHz CMOS RF front-end of transmitter for rotational spectroscopy. , 2016,,.	14	
32	Compact Diode Connected MOSFET Detector for On-Chip Millimeter-Wave Voltage Measurements. IEEE Microwave and Wireless Components Letters, 2016, 26, 349-351.	3.2	6
33	25.2 A 210-to-305GHz CMOS receiver for rotational spectroscopy. , 2016,,.	36	
34	A new compact high-efficiency mmWave power amplifier in 65 nm CMOS process. , 2015,,.	3	
35	Terahertz imaging circuits in CMOS. , 2015,,.	1	
36	410-GHz CMOS imager using a 4<sup>th</sup> sub-harmonic mixer with effective NEP of 0.3 fW/Hz <sup>0.5</sup> ; at 1-kHz noise bandwidth. , 2015,,.	8	

#	ARTICLE	IF	CITATIONS
37	85-to-127 GHz CMOS Signal Generation Using a Quadrature VCO With Passive Coupling and Broadband Harmonic Combining for Rotational Spectroscopy. <i>IEEE Journal of Solid-State Circuits</i> , 2015, 50, 1361-1371.	5.4	41
38	High-Efficiency Power Amplifier Using an Active Second-Harmonic Injection Technique Under Optimized Third-Harmonic Termination. <i>IEEE Transactions on Circuits and Systems II: Express Briefs</i> , 2014, 61, 549-553.	3.0	25
39	85-to-127 GHz CMOS transmitter for rotational spectroscopy. , 2014, , .		13
40	54 GHz CMOS LNAs with 3.6 dB NF and 28.2 dB gain using transformer feedback Gm-boosting technique. , 2014, , .		10
41	Three-harmonic time-domain load-pull measurement system with the 40-GHz maximum third order harmonic frequency for nonlinear device characterization. , 2013, , .		0
42	Broadband Root-Mean-Square Detector in CMOS for On-Chip Measurements of Millimeter-Wave Voltages. <i>IEEE Electron Device Letters</i> , 2012, 33, 752-754.	3.9	14
43	X-to-K band broadband watt-level power amplifier using stacked-FET unit cells. , 2011, , .		25
44	Millimeter-Wave High-Linear CMOS Low-Noise Amplifier Using Multiple-Gate Transistors. <i>ETRI Journal</i> , 2011, 33, 462-465.	2.0	2
45	A \$V\$-Band Switched Beam-Forming Antenna Module Using Absorptive Switch Integrated With 4\$,imes,\$4 Butler Matrix in 0.13-\$mu{m} CMOS. <i>IEEE Transactions on Microwave Theory and Techniques</i> , 2010, , .	4.6	18
46	A V-band switched beam-forming network using absorptive SP4T switch integrated with 4&#x00D7;4 Butler matrix in 0.13-&#x00B5;m CMOS. , 2010, , .		1
47	60 GHz broadband image rejection receiver using varactor tuning. , 2010, , .		19
48	Ultra-Low-Power Series-Feedback Frequency Divider Using 0.15-<formula formulatype="inline"><math>\mu_m</math></formula> GaAs pHEMT's at W-Band. <i>IEEE Microwave and Wireless Components Letters</i> , 2010, 20, 634-636.	3.2	3
49	A V-Band Parallel-Feedback Oscillator With a Micromachined Cavity Integrated on a Thin-Film Substrate. <i>IEEE Microwave and Wireless Components Letters</i> , 2009, 19, 107-109.	3.2	8
50	Scalable Small-Signal Modeling of RF CMOS FET Based on 3-D EM-Based Extraction of Parasitic Effects and Its Application to Millimeter-Wave Amplifier Design. <i>IEEE Transactions on Microwave Theory and Techniques</i> , 2009, 57, 3345-3353.	4.6	31
51	A Non-Contact-Type RF MEMS Switch for 24-GHz Radar Applications. <i>Journal of Microelectromechanical Systems</i> , 2009, 18, 163-173.	2.5	42
52	Scalable small-signal modeling of RF CMOS FET based on 3-D EM-based extraction of parasitic effects. , 2009, , .		3
53	Hot-Switching Test of Non-Contact Type MEMS Switch. <i>IEEE MTT-S International Microwave Symposium Digest IEEE MTT-S International Microwave Symposium</i> , 2007, , .	0.0	2
54	A distributed amplifier with 12.5-dB gain and 82.5-GHz bandwidth using 0.1 $\frac{1}{4}$ m GaAs metamorphic HEMTs. <i>Microwave and Optical Technology Letters</i> , 2007, 49, 2873-2875.	1.4	1

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55	A 77 GHz Transceiver for Automotive Radar System Using a 120nm In0.4AlAs/In0.35GaAs Metamorphic HEMTs. , 2006, , .	5	
56	A V-band MMIC Self Oscillating Mixer Active Integrated Antenna Using a Push-Pull Patch Antenna. , 2006, , .	10	
57	V-band MMIC oscillator array. Electronics Letters, 2005, 41, 481.	1.0	0
58	W-band divide-by-3 frequency divider using 0.1â€...[micro sign]m InAlAsâ•InGaAs metamorphic HEMT technology. Electronics Letters, 2005, 41, 1005.	1.0	16
59	The flip-chip mounted mmic technology using the modified mcmd substrate for compact and low-cost w-band transceiver., 2005, , .	4	
60	Determination of back-scatter coefficient from third-order Rayleigh effect in a Raman amplifier. IEEE Photonics Technology Letters, 2004, 16, 1459-1461.	2.5	3
61	A V-band micromachined 2-D beam-steering antenna driven by magnetic force with polymer-based hinges. IEEE Transactions on Microwave Theory and Techniques, 2003, 51, 325-331.	4.6	45
62	V-band reflection-type phase shifters using micromachined CPW coupler and RF switches. Journal of Microelectromechanical Systems, 2002, 11, 808-814.	2.5	29
63	A V-band single-chip MMIC oscillator array using a 4-port microstrip patch antenna. , 0, , .	0	0
64	High performance of W-band MMICs using 60nm InGaAs HEMT technology. , 0, , .	1	