

Wooyeol Choi

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5386026/publications.pdf>

Version: 2024-02-01

64
papers

795
citations

687363

13
h-index

642732

23
g-index

65
all docs

65
docs citations

65
times ranked

805
citing authors

#	ARTICLE	IF	CITATIONS
1	A Perspective on Terahertz Next-Generation Wireless Communications. <i>Technologies</i> , 2019, 7, 43.	5.1	90
2	Opening Terahertz for Everyday Applications. <i>IEEE Communications Magazine</i> , 2019, 57, 70-76.	6.1	49
3	A V-band micromachined 2-D beam-steering antenna driven by magnetic force with polymer-based hinges. <i>IEEE Transactions on Microwave Theory and Techniques</i> , 2003, 51, 325-331.	4.6	45
4	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
5	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
6	25.2 A 210-to-305GHz CMOS receiver for rotational spectroscopy. , 2016, , .		36
7	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
8	V-band reflection-type phase shifters using micromachined CPW coupler and RF switches. <i>Journal of Microelectromechanical Systems</i> , 2002, 11, 808-814.	2.5	29
9	300-GHz CMOS QPSK transmitter for 30-Gbps dielectric waveguide communication. , 2018, , .		27
10	X-to-K band broadband watt-level power amplifier using stacked-FET unit cells. , 2011, , .		25
11	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
12	160-310 GHz frequency doubler in 65-nm CMOS with 3-dBm peak output power for rotational spectroscopy. , 2016, , .		23
13	60 GHz broadband image rejection receiver using varactor tuning. , 2010, , .		19
14	A V-Band Switched Beam-Forming Antenna Module Using Absorptive Switch Integrated With Butler Matrix in 0.13- μm CMOS. <i>IEEE Transactions on Microwave Theory and Techniques</i> , 2010, , .	4.6	18
15	W-band divide-by-3 frequency divider using 0.1- μm InAlAs-InGaAs metamorphic HEMT technology. <i>Electronics Letters</i> , 2005, 41, 1005.	1.0	16
16	Terahertz RF Front-End Employing Even-Order Subharmonic MOS Symmetric Varactor Mixers in 65-NM CMOS for Hydration Measurements at 560 GHz. , 2018, , .		16
17	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
18	200-280GHz CMOS RF front-end of transmitter for rotational spectroscopy. , 2016, , .		14

#	ARTICLE	IF	CITATIONS
19	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
20	85-to-127 GHz CMOS transmitter for rotational spectroscopy. , 2014, , .		13
21	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
22	450 Å– 580 Å ² Pixel incorporating TX and coherent RX in CMOS for mm-wave active imaging using a single reflector. Electronics Letters, 2018, 54, 982-984.	1.0	13
23	Terahertz Even-Order Subharmonic Mixer Using Symmetric MOS Varactors. IEEE Journal of Solid-State Circuits, 2021, 56, 355-366.	5.4	11
24	A V-band MMIC Self Oscillating Mixer Active Integrated Antenna Using a Push-Pull Patch Antenna. , 2006, , .		10
25	54 GHz CMOS LNAs with 3.6 dB NF and 28.2 dB gain using transformer feedback Gm-boosting technique. , 2014, , .		10
26	Devices and circuits in CMOS for THz applications. , 2016, , .		10
27	225–280 GHz receiver for rotational spectroscopy. , 2016, , .		10
28	Indium–Gallium–Zinc Oxide Schottky Diodes Operating across the Glass Transition of Stimuli-Responsive Polymers. Advanced Electronic Materials, 2020, 6, 1901210.	5.1	10
29	A V-Band Parallel-Feedback Oscillator With a Micromachined Cavity Integrated on a Thin-Film Substrate. IEEE Microwave and Wireless Components Letters, 2009, 19, 107-109.	3.2	8
30	410-GHz CMOS imager using a 4×4 sub-harmonic mixer with effective NEP of 0.3 fW/Hz ² at 1-kHz noise bandwidth. , 2015, , .		8
31	426-GHz Imaging Pixel Integrating a Transmitter and a Coherent Receiver with an Area of $380 \times 47 \mu\text{m}^2$ in 65-nm CMOS. , 2019, , .		8
32	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
33	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
34	287-GHz CMOS Transceiver Pixel Array in a QFN Package for Active Imaging. , 2020, , .		8
35	Generation of High Data Rate MSK-Modulated 180-GHz Signals. IEEE Microwave and Wireless Components Letters, 2019, 29, 757-760.	3.2	7
36	315-GHz Self-Synchronizing Minimum Shift Keying Receiver in 65-nm CMOS. , 2020, , .		7

#	ARTICLE	IF	CITATIONS
37	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
38	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
39	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
40	A 77 GHz Transceiver for Automotive Radar System Using a 120nm In _{0.4} AlAs/In _{0.35} GaAs Metamorphic HEMTs. , 2006, , .		5
41	The flip-chip mounted mmic technology using the modified mcmd substrate for compact and low-cost w-band transceiver. , 2005, , .		4
42	23.1 270-to-300GHz Double-Balanced Parametric Upconverter Using Asymmetric MOS Varactors and a Power-Splitting-Transformer Hybrid in 65nm CMOS. , 2021, , .		4
43	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
44	Scalable small-signal modeling of RF CMOS FET based on 3-D EM-based extraction of parasitic effects. , 2009, , .		3
45	Ultra-Low-Power Series-Feedback Frequency Divider Using 0.15- μm GaAs pHEMT's at W-Band. IEEE Microwave and Wireless Components Letters, 2010, 20, 634-636.	3.2	3
46	A new compact high-efficiency mmWave power amplifier in 65 nm CMOS process. , 2015, , .		3
47	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
48	Hot-Switching Test of Non-Contact Type MEMS Switch. IEEE MTT-S International Microwave Symposium Digest IEEE MTT-S International Microwave Symposium, 2007, , .	0.0	2
49	Millimeter-Wave High-Linear CMOS Low-Noise Amplifier Using Multiple-Gate Transistors. ETRI Journal, 2011, 33, 462-465.	2.0	2
50	High performance of W-band MMICs using 60nm InGaAs HEMT technology. , 0, , .		1
51	A distributed amplifier with 12.5-dB gain and 82.5-GHz bandwidth using 0.1 μm GaAs metamorphic HEMTs. Microwave and Optical Technology Letters, 2007, 49, 2873-2875.	1.4	1
52	A V-band switched beam-forming network using absorptive SP4T switch integrated with 4×4 Butler matrix in 0.13-µm CMOS. , 2010, , .		1
53	Terahertz imaging circuits in CMOS. , 2015, , .		1
54	Kelvin inductance and resistance measurements using an AC source and DC voltmeters. , 2016, , .		1

#	ARTICLE	IF	CITATIONS
55	CMOS Transceiver Pixels for Terahertz Imaging. , 2019, , .		1
56	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
57	A Wideband 180-GHz Phase-Locked-Loop Based MSK Receiver. , 2020, , .		1
58	A V-band single-chip MMIC oscillator array using a 4-port microstrip patch antenna. , 0, , .		0
59	V-band MMIC oscillator array. Electronics Letters, 2005, 41, 481.	1.0	0
60	Three-harmonic time-domain load-pull measurement system with the 40-GHz maximum third order harmonic frequency for nonlinear device characterization. , 2013, , .		0
61	(Keynote) Devices in CMOS for Terahertz Circuits and Systems. ECS Transactions, 2017, 80, 3-15.	0.5	0
62	Corrections to "Low-Cost Packaging of 300-GHz Integrated Circuits With an On-Chip Patch Antenna" IEEE Antennas and Wireless Propagation Letters, 2020, 19, 1466-1466.	4.0	0
63	De-embedding Motion Artifacts from Robotic Arm Assisted Propagation Measurements. , 2021, , .		0
64	CMOS circuits for terahertz imaging. , 2019, , .		0