Eran Socher

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/8485282/publications.pdf

Version: 2024-02-01

114	1,726	361413	345221
papers	citations	20 h-index	36 g-index

116	116	116	1349
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A 90-98 GHz CMOS Transmitter Frontend for Concurrent Phase-Coded FMCW Radar Applications. IEEE Journal of Microwaves, 2022, 2, 275-285.	6.5	0
2	30-46 GHz 1.5dB IL Negative Gate Control SPDT with 24.5dBm IP1 in 130nm CMOS. , 2022, , .		0
3	A Zero Bias J-Band Antenna-Coupled Detector in 65-nm CMOS. IEEE Transactions on Terahertz Science and Technology, 2021, 11, 62-69.	3.1	8
4	95GHz 13dBm IQ-combined PA in 65nm CMOS. , 2021, , .		2
5	28â€“38-GHz 6-bit Compact Passive Phase Shifter in 130-nm CMOS. IEEE Microwave and Wireless Components Letters, 2021, 31, 1311-1314.	3.2	5
6	Outan: An On-Head System for Driving ÂµLED Arrays Implanted in Freely Moving Mice. IEEE Transactions on Biomedical Circuits and Systems, 2021, 15, 303-313.	4.0	3
7	A 204 GHz Power Amplifier with 6.9dBm Psat and 8.8dB Gain in 65nm CMOS Technology. , 2021, , .		0
8	A 0.4THz Radiating On-chip Locked Source in 65nm CMOS. , 2021, , .		0
9	A 280-GHz Digitally Controlled Four Port Chip-Scale Dielectric Resonator Antenna Transmitter With DiCAD True Time Delay. IEEE Solid-State Circuits Letters, 2020, 3, 454-457.	2.0	5
10	W-Band Endfire 2-D Phased-Array Transmitter Based on Ã—9 CMOS Active Multiplier Chips. IEEE Transactions on Antennas and Propagation, 2020, 68, 7893-7904.	5.1	9
11	A Multiport Chip-Scale Dielectric Resonator Antenna for CMOS THz Transmitters. IEEE Transactions on Microwave Theory and Techniques, 2020, 68, 3621-3632.	4.6	17
12	Coherent J-Band radiating arrays based on Ã—27 CMOS activemultiplier chips. International Journal of Microwave and Wireless Technologies, 2019, 11, 747-754.	1.9	2
13	Electromagnetic Property Characterization of Biological Tissues at D-Band. IEEE Transactions on Terahertz Science and Technology, 2018, 8, 155-160.	3.1	11
14	57â€“67-GHz Highly Compact Bidirectional 3-Bit Phase Shifter in 28-nm CMOS. IEEE Microwave and Wireless Components Letters, 2018, 28, 1017-1019.	3.2	11
15	A 280GHz +9dBm TRP Dense 2D Multi Port Radiator in 65nm CMOS. , 2018, , .		6
16	A Low-Power 28-nm CMOS FD-SOI Reflection Amplifier for an Active F-Band Reflectarray. IEEE Transactions on Microwave Theory and Techniques, 2017, 65, 3910-3921.	4.6	17
17	Design and Measurements of 100 GHz Reflectarray and Transmitarray Active Antenna Cells. IEEE Transactions on Antennas and Propagation, 2017, 65, 6986-6997.	5.1	17
18	A fully integrated high gain 85â€“106 GHz packaged receiver module in CMOS 65 nm for FMCW radar. , 2017, , .		5

#	Article	IF	Citations
19	Digital predistortion on concurrent noncontiguous transmitters using 2D piecewise vector decomposition. , 2017, , .		5
20	W-band energy harvesting rectenna array in 65-nm CMOS. , 2017, , .		19
21	A 9th harmonic F-band 65-nm CMOS low power active multiplier. , 2017, , .		0
22	Ku-band to F-band active multiplier chain in 65-nm CMOS. , 2016, , .		10
23	0.61THz radiating source with on-chip antenna on 65nm CMOS. , 2016, , .		9
24	A 154â€“165 GHz LNA and receiver in CMOS 65 nm technology. , 2016, , .		4
25	A 0.58â€“0.61THz single on-chip antenna transceiver based on active X30 LO chain on 65nm CMOS. , 2016, , .		9
26	An F-Band Reflection Amplifier using 28 nm CMOS FD-SOI Technology for Active Reflectarrays and Spatial Power Combining Applications. , 2016, , .		2
27	An F-band dual band 12+12Gbps packaged CMOS bi-directional transceiver. , 2016, , .		1
28	A +6dBm 128GHz source module with full F-band waveguide package and wirebonded CMOS chip. , 2016, , .		1
29	Digital predistortion using piecewise memory polynomial for 802.11 WiFi applications. , 2016, , .		9
30	Digital multi-level closed loop design for wideband envelope tracking systems. , 2016, , .		0
31	Multi-level ASK spatial modulators employing a 100 GHz lens-array antenna and 65 nm CMOS. , 2016, , .		1
32	A 102â€“129-GHz 39-dB Gain 8.4-dB Noise Figure I/Q Receiver Frontend in 28-nm CMOS. IEEE Transactions on Microwave Theory and Techniques, 2016, 64, 1535-1543.	4.6	39
33	20.4 A 300GHz wirelessly locked 2Ã—3 array radiating 5.4dBm with 5.1% DC-to-RF efficiency in 65nm CMOS. , 2016, , .		18
34	Noise Figure Optimization Tool for Millimeter-Wave Receivers at Near-<inline-formula> <tex-math notation="LaTeX">f_{max}</tex-math> </inline-formula> Frequencies. IEEE Transactions on Circuits and Systems II: Express Briefs, 2016, 63, 914-918.	3.0	1
35	An on-chip active frequency multiplier-by-seven (X-band to W-band) for millimeter-wave signal generation. , 2015, , .		0
36	Sub-harmonic wireless injection locking of a THz CMOS chip array. , 2015, , .		9

#	Article	IF	Citations
37	A wideband 100â€“130GHz direct conversion high efficiency transmitter in 28nm CMOS. , 2015, , .		0
38	A 93.9 â€“ 102.5 GHz Colpitts VCO utilizing magnetic coupling band switching in 65nm CMOS. , 2015, , .		7
39	Sub-harmonic wireless locking of a THz radiating on-chip source in 65 nm CMOS. , 2015, , .		1
40	Fully integrated LDMOS class AB power amplifiers. , 2015, , .		4
41	Multiband receiver for Gb/s communication at mm-wave frequencies. , 2015, , .		0
42	RF-DAC challenges for mm-Wave transmitter in CMOS process. , 2015, , .		0
43	A Wide-Band CMOS to Waveguide Transition at mm-Wave Frequencies With Wire-Bonds. IEEE Transactions on Microwave Theory and Techniques, 2015, 63, 2741-2750.	4.6	36
44	Wide Tuning-Range mm-Wave Voltage-Controlled Oscillator Employing an Artificial Magnetic Transmission Line. IEEE Transactions on Microwave Theory and Techniques, 2015, 63, 1342-1352.	4.6	26
45	A 0.3 THz Radiating Active <formula formulatype="inline"><tex Notation="TeX">$imes{hbox{27}}$</tex> </formula> Frequency Multiplier Chain With 1 mW Radiated Power in CMOS 65-nm. IEEE Transactions on Terahertz Science and Technology, 2015, 5, 645-648.	3.1	17
46	A packaged 86–98 GHz CMOS transmitter for FMCW radar applications with 30 dBm of EIRP. , 2015, , .		1
47	130-320-GHz CMOS Harmonic Down-Converters Around and Above the Cutoff Frequency. IEEE Transactions on Microwave Theory and Techniques, 2015, 63, 2275-2288.	4.6	24
48	9mW 6Gbps bi-directional 85–90GHz transceiver in 65nm CMOS. , 2014, , .		1
49	A 230–310 GHz down converter with integrated local oscillator in 65 nm CMOS technology. , 2014, , .		0
50	Digital closed loop design for wideband envelope tracking system. , 2014, , .		0
51	A SiGe Distributed Millimeter-Wave Frequency Tripler. IEEE Microwave and Wireless Components Letters, 2014, 24, 893-895.	3.2	17
52	On the relationship between the physical aperture and the scattered power from a receiving antenna. , 2014, , .		0
53	Exploration of Terahertz Imaging with Silicon MOSFETs. Journal of Infrared, Millimeter, and Terahertz Waves, 2014, 35, 63-80.	2.2	80
54	W-Band CMOS on-chip energy harvester and rectenna. , 2014, , .		35

#	Article	IF	Citations
55	High Efficiency 293 GHz Radiating Source in 65 nm CMOS. IEEE Microwave and Wireless Components Letters, 2014, 24, 463-465.	3.2	44
56	A 67-110GHz CMOS to WR-10 waveguide transition using wirebonds and wideband microstrip launcher. , 2014, , .		5
57	Beyond the Smith Chart: A Universal Graphical Tool for Impedance Matching Using Transformers. IEEE Microwave Magazine, 2014, 15, 100-109.	0.8	10
58	A Low-Power Low-Cost 24 GHz RFID Tag With a C-Flash Based Embedded Memory. IEEE Journal of Solid-State Circuits, 2014, 49, 1942-1957.	5.4	26
59	An F-band 20.6Gbp/s QPSK transmitter in 65nm CMOS. , 2014, , .		2
60	A 71–86GHz multi-tanh up-conversion mixer achieving +1dBm OP1dB in 0.13 μm SiGe technology. , 2014, , .		3
61	Analysis of cross-coupled common-source cores for W-band LNA design at 28nm CMOS. , 2013, , .		5
62	On-chip transmitter with an EIRP of +2.8 dBm at 217 GHz in 90 nm CMOS. , 2013, , .		0
63	A V-band 8.5Gbps transmitter in 65nm CMOS. , 2013, , .		0
64	A 210â€“227 GHz Transmitter With Integrated On-Chip Antenna in 90 nm CMOS Technology. IEEE Transactions on Terahertz Science and Technology, 2013, 3, 141-150.	3.1	70
65	Wideband transformer-coupled E-band power amplifier in 90Ânm CMOS. International Journal of Microwave and Wireless Technologies, 2013, 5, 71-75.	1.9	2
66	0.5W X-band SiGe PA with integrated double-tuned transformers. , 2013, , .		10
67	A 234–248 GHz power efficient fundamental VCO using 32 nm CMOS SOI technology. , 2013, , .		0
68	240 GHz and 272 GHz Fundamental VCOs Using 32 nm CMOS Technology. IEEE Transactions on Microwave Theory and Techniques, 2013, 61, 4461-4471.	4.6	31
69	CMOS distributed amplifiers using high-pass and low-pass artificial transmission lines. , 2013, , .		3
70	Analysis and design of an X-band-to-W-band CMOS active multiplier with improved harmonic rejection. IEEE Transactions on Microwave Theory and Techniques, 2013, 61, 1924-1933.	4.6	56
71	An often overlooked term in the application of the Poynting theorem around a receiving antenna. , 2013, , .		0
72	Structural scattering and the virtual aperture of a half-wavelength dipole antenna. , 2012, , .		1

#	Article	IF	Citations
73	F — Band injection locked tripler based on Colpitts oscillator. , 2012, , .		5
74	52â€“75â€…GHz wideband low-noise amplifier in 90â€…nm CMOS technology. Electronics Letters, 2012, 48, 71.	1.0	17
75	A 209â€“233 GHz Frequency Source in 90 nm CMOS Technology. IEEE Microwave and Wireless Components Letters, 2012, 22, 260-262.	3.2	30
76	X-Band to W-Band Frequency Multiplier in 65 nm CMOS Process. IEEE Microwave and Wireless Components Letters, 2012, 22, 424-426.	3.2	18
77	V-band low phase noise QVCO in 90nm CMOS technology using a gate-connected tank. Electronics Letters, 2012, 48, 1046-1048.	1.0	3
78	Modeling and design of a low-power injection-locked frequency divider in 90nm CMOS for 60GHz applications. , 2011, , .		4
79	Wide tuning range W-band Colpitts VCO in 90â€…nm CMOS. Electronics Letters, 2011, 47, 1227.	1.0	22
80	RF-Interconnect for Future Network-On-Chip. , 2011, , 255-280.		15
81	Design and optimization of a low-noise cross-coupled fundamental VCO in 90nm CMOS for 60GHz applications. , 2011, , .		3
82	A triple band travelling wave VCO using digitally controlled artificial dielectric transmission lines. , 2011, , .		7
83	A compact power efficient transformer coupled differential W-band CMOS amplifier. , 2010, , .		4
84	A Dual-Band Millimeter-Wave CMOS Oscillator With Left-Handed Resonator. IEEE Transactions on Microwave Theory and Techniques, 2010, 58, 1401-1409.	4.6	28
85	A dual band mm-wave CMOS oscillator with left-handed resonator. , 2009, , .		9
86	A beyond 60GHz cross-coupled fundamental VCO in 45nm CMOS. , 2009, , .		4
87	CMP network-on-chip overlaid with multi-band RF-interconnect. High Performance Computer Architecture (HPCA), Proceedings of the IEEE International Symposium on, 2008, , .	0.0	181
88	Millimeter-wave CMOS digital controlled artificial dielectric differential mode transmission lines for reconfigurable ICs. , 2008, , .		45
89	Simultaneous sub-harmonic injection-locked mm-wave frequency generators for multi-band communications in CMOS. , 2008, , .		8
90	Power reduction of CMP communication networks via RF-interconnects. , 2008, , .		43

#	Article	IF	Citations
91	RF interconnects for communications on-chip. , 2008, , .		52
92	Can RF Help CMOS Processors? [Topics in Circuits for Communications]. , 2007, 45, 104-111.		33
93	Temperature Sensitivity of SOI-CMOS Transistors for Use in Uncooled Thermal Sensing. IEEE Transactions on Electron Devices, 2005, 52, 2784-2790.	3.0	33
94	Modeling, design, and fabrication of uncooled IR CMOS compatible thermoelectric sensors. , 2003, , .		1
95	On the effect of residual charges on the pull-in parameters of electrostatic actuators. Sensors and Actuators A: Physical, 2002, 97-98, 563-568.	4.1	29
96	A novel spiral CMOS compatible micromachined thermoelectric IR microsensor. Journal of Micromechanics and Microengineering, 2001, 11, 574-576.	2.6	21
97	CMOS COMPATIBLE INTEGRATED THERMOELECTRIC SENSORS USING NOVEL FRONTSIDE MICROMACHINING. , 2000, , .		0
98	A novel micromachined vibrating rate-gyroscope with optical sensing and electrostatic actuation. Sensors and Actuators A: Physical, 2000, 83, 54-60.	4.1	25
99	Comparative study of novel micromachined accelerometers employing MIDOS. Sensors and Actuators A: Physical, 2000, 80, 91-99.	4.1	5
100	Design and noise consideration of an accelerometer employing modulated integrative differential optical sensing. Sensors and Actuators A: Physical, 2000, 84, 53-64.	4.1	12
101	Optimal performance of CMOS compatible IR thermoelectric sensors. Journal of Microelectromechanical Systems, 2000, 9, 38-46.	2.5	25
102	FROM SINGLE TO MULTI-AXIAL, DECOUPLED MODE MICROMACHINED INERTIAL SENSORS WITH MIDOS. , 2000, , .		0
103	MONOLITHIC CMOS READOUT FOR MICROMACHINED IR THERMOELECTRIC SENSORS: MODELING AND CHARACTERIZATION. , 2000, , .		0
104	THE GENERALIZED PULL-IN CONDITION IN MICROMACHINED VOLTAGE CONTROLLED ELECTROSTATIC ACTUATORS WITH A SINGLE DEGREE OF FREEDOM. , 2000, , .		0
105	Characterization of a novel micromachined optical vibrating rate gyroscope. Review of Scientific Instruments, 1999, 70, 1274-1276.	1.3	1
106	Optimal design and noise considerations of CMOS compatible IR thermoelectric sensors. Sensors and Actuators A: Physical, 1998, 71, 107-115.	4.1	32
107	Optimal design and noise consideration of micromachined vibrating rate gyroscope with modulated integrative differential optical sensing. Journal of Microelectromechanical Systems, 1998, 7, 329-338.	2.5	18
108	Pull-in study of an electrostatic torsion microactuator. Journal of Microelectromechanical Systems, 1998, 7, 373-379.	2.5	216

#	Article	IF	Citations
109	Micromachined accelerometer with modulated integrative differential optical sensing. Electronics Letters, 1998, 34, 654.	1.0	2
110	Novel dual-axis SOI micromachined inertial sensors with optical sensing: design and fabrication. , 0, , .		0
111	Modeling and characterization of CMOS readout circuits for monolithic uncooled IR thermoelectric sensors. , 0, , .		0
112	A generalized algebraic equation for the pull-in condition in micromachined electrostatic micromirrors: modeling and characterization. , 0, , .		1
113	Novel CMOS compatible frontside micromachining of integrated thermoelectric sensors. , 0, , .		2
114	Modeling, design and characterization of surface micromachined polysilicon microbolometers. , 0, , .		0