

# Alberto Valdes-Garcia

## List of Publications by Year in descending order

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Version: 2024-02-01

48  
papers

7,606  
citations

361413

20  
h-index

610901

24  
g-index

48  
all docs

48  
docs citations

48  
times ranked

9507  
citing authors

#	ARTICLE	IF	CITATIONS
1	Ultrafast graphene photodetector. Nature Nanotechnology, 2009, 4, 839-843.	31.5	2,748
2	Operation of Graphene Transistors at Gigahertz Frequencies. Nano Letters, 2009, 9, 422-426.	9.1	982
3	Wafer-Scale Graphene Integrated Circuit. Science, 2011, 332, 1294-1297.	12.6	812
4	A 28-GHz 32-Element TRX Phased-Array IC With Concurrent Dual-Polarized Operation and Orthogonal Phase and Gain Control for 5G Communications. IEEE Journal of Solid-State Circuits, 2017, 52, 3373-3391.	5.4	412
5	A Fully-Integrated 16-Element Phased-Array Receiver in SiGe BiCMOS for 60-GHz Communications. IEEE Journal of Solid-State Circuits, 2011, 46, 1059-1075.	5.4	411
6	State-of-the-Art Graphene High-Frequency Electronics. Nano Letters, 2012, 12, 3062-3067.	9.1	371
7	A Fully Integrated 16-Element Phased-Array Transmitter in SiGe BiCMOS for 60-GHz Communications. IEEE Journal of Solid-State Circuits, 2010, 45, 2757-2773.	5.4	275
8	Antenna-in-Package Design Considerations for Ka-Band 5G Communication Applications. IEEE Transactions on Antennas and Propagation, 2017, 65, 6372-6379.	5.1	166
9	High-Frequency Graphene Voltage Amplifier. Nano Letters, 2011, 11, 3690-3693.	9.1	165
10	Development, Implementation, and Characterization of a 64-Element Dual-Polarized Phased-Array Antenna Module for 28-GHz High-Speed Data Communications. IEEE Transactions on Microwave Theory and Techniques, 2019, 67, 2975-2984.	4.6	117
11	Ultimate RF Performance Potential of Carbon Electronics. IEEE Transactions on Microwave Theory and Techniques, 2011, 59, 2739-2750.	4.6	107
12	The More (Antennas), the Merrier: A Survey of Silicon-Based mm-Wave Phased Arrays Using Multi-IC Scaling. IEEE Microwave Magazine, 2019, 20, 32-50.	0.8	95
13	<math>W</math>-Band Dual-Polarization Phased-Array Transceiver Front-End in SiGe BiCMOS. IEEE Transactions on Microwave Theory and Techniques, 2015, 63, 1989-2002.	4.6	83
14	A multilayer organic package with 64 dual-polarized antennas for 28GHz 5G communication. , 2017, , .		78
15	W-band scalable phased arrays for imaging and communications. , 2015, 53, 196-204.		73
16	A linearized, low-phase-noise VCO-based 25-GHz PLL with autonomic biasing. IEEE Journal of Solid-State Circuits, 2013, 48, 1138-1150.	5.4	66
17	A Ka-band digitally-controlled phase shifter with sub-degree phase precision. , 2016, , .		60
18	A fully-integrated dual-polarization 16-element W-band phased-array transceiver in SiGe BiCMOS. , 2013, , .		55

#	ARTICLE	IF	CITATIONS
19	A compact 4-chip package with 64 embedded dual-polarization antennas for W-band phased-array transceivers. , 2014, , .		51
20	Fully Integrated 94-GHz Dual-Polarized TX and RX Phased Array Chipset in SiGe BiCMOS Operating up to 105 Å°C. IEEE Journal of Solid-State Circuits, 2018, 53, 2512-2531.	5.4	47
21	CMOS millimeter wave phase shifter based on tunable transmission lines. , 2013, , .		38
22	An Integral Path Self-Calibration Scheme for a Dual-Loop PLL. IEEE Journal of Solid-State Circuits, 2013, 48, 996-1008.	5.4	37
23	Antenna-in-Package Integration for a Wideband Scalable 5G Millimeter-Wave Phased-Array Module. IEEE Microwave and Wireless Components Letters, 2021, 31, 682-684.	3.2	34
24	An Enhanced 64-Element Dual-Polarization Antenna Array Package for W-Band Communication and Imaging Applications. , 2018, , .		29
25	A 52 GHz Frequency Synthesizer Featuring a 2nd Harmonic Extraction Technique That Preserves VCO Performance. IEEE Journal of Solid-State Circuits, 2015, 50, 1214-1223.	5.4	26
26	Impact of gate resistance in graphene radio frequency transistors. Applied Physics Letters, 2012, 101, .	3.3	21
27	Circuit and antenna-in-package innovations for scaled mmWave 5G phased array modules. , 2018, , .		21
28	3-D Imaging Using Millimeter-Wave 5G Signal Reflections. IEEE Transactions on Microwave Theory and Techniques, 2021, 69, 2936-2948.	4.6	21
29	Multi-Mode 60-GHz Radar Transmitter SoC in 45-nm SOI CMOS. IEEE Journal of Solid-State Circuits, 2020, 55, 1187-1198.	5.4	19
30	Enhanced multilayer organic packages with embedded phased-array antennas for 60-GHz wireless communications. , 2013, , .		17
31	Continuous True-Time Delay Phase Shifter Using Distributed Inductive and Capacitive Miller Effect. IEEE Transactions on Microwave Theory and Techniques, 2019, 67, 3053-3063.	4.6	17
32	Scaling Millimeter-Wave Phased Arrays: Challenges and Solutions. , 2018, , .		16
33	Graphene technology with inverted-T gate and RF passives on 200 mm platform. , 2011, , .		15
34	A Software-Defined Phased Array Radio with mmWave to Software Vertical Stack Integration for 5G Experimentation. , 2018, , .		14
35	A fully-integrated 94-GHz 32-element phased-array receiver in SiGe BiCMOS. , 2017, , .		13
36	A 250-mW 60-GHz CMOS Transceiver SoC Integrated With a Four-Element AiP Providing Broad Angular Link Coverage. IEEE Journal of Solid-State Circuits, 2019, , 1-14.	5.4	13

#	ARTICLE	IF	CITATIONS
37	A 128-element Dual-Polarized Software-Defined Phased Array Radio for mm-wave 5G Experimentation. , 2018, , .		12
38	Si-Based 94-GHz Phased Array Transmit and Receive Modules for Real-Time 3D Radar Imaging. , 2019, , .		12
39	3D Imaging using mmWave 5G Signals. , 2020, , .		12
40	A High-Linearity, 24-30 GHz RF, Beamforming and Frequency-Conversion IC for Scalable 5G Phased Arrays. , 2021, , .		11
41	Variable Delay Transmission Lines in advanced CMOS SOI technology. , 2014, , .		6
42	AI-driven Event Recognition with a Real-Time 3D 60-GHz Radar System. , 2020, , .		6
43	<i>W</i> -Band SiGe Frequency Doubler With Optimum Harmonic Termination for 14% Efficiency. IEEE Microwave and Wireless Components Letters, 2021, 31, 272-275.	3.2	6
44	Tunable Delay Line Using Distributed Inductive/Capacitive Miller Effect. , 2018, , .		5
45	Novel Phased Array Antenna-in-Package Development and Active Module Demonstration for 5G Millimeter-Wave Wireless Communication. , 2021, , .		5
46	Development of a Compact 28-GHz Software- Defined Phased Array for a City-Scale Wireless Research Testbed. , 2021, , .		5
47	Graphene technology for RF and THz applications. , 2013, , .		1
48	Correction to "A Linearized, Low Phase Noise VCO Based 25 GHz PLL With Autonomic Biasing". IEEE Journal of Solid-State Circuits, 2013, 48, 1539-1539.	5.4	0