Andrea Bevilacqua

List of Publications by Year
in descending order

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97	1,517	361388 20	361001 35
papers	citations	h-index	g-index

98	98	98	1141
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Transformer-Based Dual-Mode Voltage-Controlled Oscillators. IEEE Transactions on Circuits and Systems Part 2: Express Briefs, 2007, 54, 293-297.	2.2	111
2	An Integrated Microwave Imaging Radar With Planar Antennas for Breast Cancer Detection. IEEE Transactions on Microwave Theory and Techniques, 2013, 61, 2108-2118.	4.6	93
3	Analysis and Design of an Integrated Notch Filter for the Rejection of Interference in UWB Systems. IEEE Journal of Solid-State Circuits, 2009, 44, 331-343.	5.4	82
4	A 40â€“67 GHz Power Amplifier With 13 dBm ${m P}_{m SAT}$ and 16% PAE in 28 nm CMOS LP. IEEE Journal of Solid-State Circuits, 2015, 50, 1618-1628.	5.4	75
5	On the Phase Noise Performance of Transformer-Based CMOS Differential-Pair Harmonic Oscillators. IEEE Transactions on Circuits and Systems I: Regular Papers, 2015, 62, 2334-2341.	5.4	67
6	A 5 Mb/s UWB-IR Transceiver Front-End for Wireless Sensor Networks in 0.13 $mu{hbox{m}}$ CMOS. IEEE Journal of Solid-State Circuits, 2011, 46, 1636-1647.	5.4	60
7	An Analysis of $1/f$ Noise to Phase Noise Conversion in CMOS Harmonic Oscillators. IEEE Transactions on Circuits and Systems I: Regular Papers, 2012, 59, 938-945.	5.4	51
8	A 19.5-GHz 28-nm Class-C CMOS VCO, With a Reasonably Rigorous Result on 1/f Noise Upconversion Caused by Short-Channel Effects. IEEE Journal of Solid-State Circuits, 2020, 55, 1842-1853.	5.4	51
9	Design of Low-Noise <formula formulatype="inline"><tex Notation="TeX">K</tex></formula>-Band SiGe Bipolar VCOs: Theory and Implementation. IEEE Transactions on Circuits and Systems I: Regular Papers, 2015, 62, 607-615.	5.4	49
10	An Energy-Detector for Noncoherent Impulse-Radio UWB Receivers. IEEE Transactions on Circuits and Systems I: Regular Papers, 2009, 56, 1030-1040.	5.4	48
11	Second-Order Equivalent Circuits for the Design of Doubly-Tuned Transformer Matching Networks. IEEE Transactions on Circuits and Systems I: Regular Papers, 2018, 65, 4157-4168.	5.4	47
12	A Compact Wideband Front-End Using a Single-Inductor Dual-Band VCO in 90 nm Digital CMOS. IEEE Journal of Solid-State Circuits, 2008, 43, 2693-2705.	5.4	45
13	A quad-core 15GHz BiCMOS VCO with â^’124dBc/Hz phase noise at 1MHz offset, â^’189dBc/Hz FOM, and robust to multimode concurrent oscillations. , 2018, , .		40
14	A 3.4-7 GHz Transformer-Based Dual-mode Wideband VCO. , 2006, , .		39
15	UWB Fast-Hopping Frequency Generation Based on Sub-Harmonic Injection Locking. IEEE Journal of Solid-State Circuits, 2008, 43, 2844-2852.	5.4	35
16	A 0.06 mm^{2} 11 mW Local Oscillator for the GSM Standard in 65 nm CMOS. IEEE Journal of Solid-State Circuits, 2010, 45, 1295-1304.	5.4	34
17	Reducing the EMI Susceptibility of a Kuijk Bandgap. IEEE Transactions on Electromagnetic Compatibility, 2008, 50, 876-886.	2.2	30
18	Nonisolated High-Step-up DCâ€“DC Converter With Minimum Switch Voltage Stress. IEEE Transactions on Power Electronics, 2019, 34, 1470-1480.	7.9	27

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19	Integrated SFCW Transceivers for UWB Breast Cancer Imaging: Architectures and Circuit Constraints. IEEE Transactions on Circuits and Systems I: Regular Papers, 2012, 59, 1228-1241.	5.4	24
20	A 28-GHz Stacked Power Amplifier with 20.7-dBm Output P _{1dB} in 28-nm Bulk CMOS. IEEE Solid-State Circuits Letters, 2020, 3, 170-173.	2.0	24
21	A 0.13Â¿m CMOS LNA with Integrated Balun and Notch Filter for 3-to-5GHz UWB Receivers. Digest of Technical Papers - IEEE International Solid-State Circuits Conference, 2007, , .	0.0	21
22	An Integrated Solution for Suppressing WLAN Signals in UWB Receivers. IEEE Transactions on Circuits and Systems Part 1: Regular Papers, 2007, 54, 1617-1625.	0.1	20
23	A 12 GHz 22 dB-Gain-Control SiGe Bipolar VGA With 2Â° Phase-Shift Variation. IEEE Journal of Solid-State Circuits, 2016, , 1-12.	5.4	19
24	An Integrated Divide-by-Two Direct Injection-Locking Frequency Divider for Bands S Through K_{u}. IEEE Transactions on Microwave Theory and Techniques, 2010, 58, 1686-1695.	4.6	18
25	A 64-Channel 965- <inline-formula> <tex-math notation="LaTeX">μ{W}</tex-math> </inline-formula> Neural Recording SoC With UWB Wireless Transmission in 130-nm CMOS. IEEE Transactions on Circuits and Systems II: Express Briefs, 2016, 63, 528-532.	3.0	18
26	A Novel Integrated Step-Up Hybrid Converter With Wide Conversion Ratio. IEEE Transactions on Power Electronics, 2020, 35, 2764-2775.	7.9	18
27	A thorough analysis of the tank quality factor in LC oscillators with switched capacitor banks. , 2010, , .		17
28	On the bias noise to phase noise conversion in harmonic oscillators using Groszkowski theory. , 2011, , .		16
29	A 39-GHz Frequency Tripler With >40-dBc Harmonic Rejection for 5G Communication Systems in 28-nm Bulk CMOS. IEEE Solid-State Circuits Letters, 2019, 2, 107-110.	2.0	16
30	A 2â€“16 GHz 65 nm CMOS Stepped-Frequency Radar Transmitter With Harmonic Rejection for High-Resolution Medical Imaging Applications. IEEE Transactions on Circuits and Systems I: Regular Papers, 2015, 62, 413-422.	5.4	15
31	On the Optimal Operation Frequency to Minimize Phase Noise in Integrated Harmonic Oscillators. IEEE Transactions on Circuits and Systems II: Express Briefs, 2018, 65, 657-661.	3.0	15
32	A linear model of efficiency for Switched-Capacitor RF Power-Amplifiers. , 2014, , .		14
33	Doubly-Tuned Transformer Networks: A Tutorial. IEEE Transactions on Circuits and Systems II: Express Briefs, 2021, 68, 550-555.	3.0	14
34	An <formula formulatype="inline"><tex Notation="TeX">X</tex> </formula>-Band Lumped-Element Wilkinson Combiner With Embedded Impedance Transformation. IEEE Microwave and Wireless Components Letters, 2014, 24, 689-691.	3.2	13
35	A 15.5â€“39GHz BiCMOS VGA with phase shift compensation for 5G mobile communication transceivers. , 2016, , .		13
36	13.9 A 1.1V 28.6dBm fully integrated digital power amplifier for mobile and wireless applications in 28nm CMOS technology with 35% PAE. , 2017, , .		11

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37	A Broadband 22â€“31-GHz Bidirectional Image-Reject Up/Down Converter Module in 28-nm CMOS for 5G Communications. IEEE Journal of Solid-State Circuits, 2022, 57, 1968-1981.	5.4	11
38	A SiGe bipolar VCO for backhaul E-band communication systems. , 2012, , .		10
39	Phase Noise Analysis of the Tuned-Inputâ€“Tuned-Output (TITO) Oscillator. IEEE Transactions on Circuits and Systems II: Express Briefs, 2012, 59, 20-24.	3.0	9
40	Analysis and Design of a 17-GHz All-npn Push-Pull Class-C VCO. IEEE Journal of Solid-State Circuits, 2020, 55, 2345-2355.	5.4	9
41	A 12-GHz Reconfigurable Multicore CMOS DCO, With a Time-Variant Analysis of the Impact of Reconfiguration Switches on Phase Noise. IEEE Journal of Solid-State Circuits, 2022, 57, 2802-2811.	5.4	9
42	Design, Simulation, and Testing of a CMOS Analog Decoder for the Block Length-40 UMTS Turbo Code. IEEE Transactions on Communications, 2006, 54, 1973-1982.	7.8	7
43	UWB Fast-Hopping Frequency Generation Based on Sub-Harmonic Injection Locking. , 2008, , .		7
44	A 20Mb/s, 2.76 pJ/b UWB impulse radio TX with 11.7% efficiency in 130 nm CMOS. , 2014, , .		7
45	SiGe BiCMOS VCO with 27% tuning range for 5G communications. , 2015, , .		7
46	On the Remarkable Performance of the Series-Resonance CMOS Oscillator. IEEE Transactions on Circuits and Systems I: Regular Papers, 2018, 65, 531-542.	5.4	7
47	A 114-126 GHz Frequency Quintupler with >36 dBc Harmonic Rejection in 0.13 Î¼m SiGe BiCMOS. , 2019, , .		7
48	A 10.7â€“14.1 GHz Reconfigurable Octacore DCO with â^'126 dBc/Hz Phase Noise at 1 MHz offset in 28 nm CMOS. , 2021, , .		7
49	A X-Band ${m I}/{m Q}$ Upconverter in 65 nm CMOS for High Resolution FMCW Radars. IEEE Microwave and Wireless Components Letters, 2012, 22, 141-143.	3.2	6
50	A K-band SiGe bipolar VCO with transformer-coupled varactor for backhaul links. , 2013, , .		6
51	A 21GHz 20.5%-tuning range Colpitts VCO with â^'119 dBc/Hz phase noise at 1MHz offset. , 2017, , .		6
52	A 1.75–15 GHz stepped frequency receiver for breast cancer imaging in 65 nm CMOS. , 2012, , .		5
53	Class-J SiGe <inline-formula> <tex-math notation="LaTeX">X </tex-math> </inline-formula>-Band Power Amplifier Using a Ladder Filter-Based AMâ€“PM Distortion Reduction Technique. IEEE Transactions on Circuits and Systems I: Regular Papers, 2018, 65, 3780-3789.	5.4	5
54	Demonstration of UV-Induced Threshold Voltage Instabilities in Vertical GaN Nanowire Array-Based Transistors. IEEE Transactions on Electron Devices, 2019, 66, 2119-2124.	3.0	5

#	Article	IF	Citations
55	A 19.5 GHz 28 nm CMOS Class-C VCO with Reduced 1/f Noise Upconversion. , 2019, , .		5
56	A Reconfigurable Switched Capacitor DCâ€“DC Converter With 1.9â€“6.3-V Input Voltage Range and 85% Peak Efficiency in 28-nm CMOS. IEEE Solid-State Circuits Letters, 2020, 3, 106-109.	2.0	5
57	A Multichannel D-Band Radar Receiver With Optimized LO Distribution. IEEE Solid-State Circuits Letters, 2021, 4, 141-144.	2.0	5
58	An analog front-end with integrated notch filter for 3–5 GHz UWB receivers in 0.13 μm CMOS. Solid-State Circuits Conference, 2008 ESSCIRC 2008 34th European, 2007, , .	0.0	4
59	Design of Broadband Inductorless LNAs in Ultra-Scaled CMOS Technologies. , 2008, , .		4
60	A 6–9-GHz programmable gain LNA with integrated balun in 90-nm CMOS. , 2008, , .		4
61	Analysis and design of a 1.1dB-IL third-order Matching Network for Switched-Capacitor PAs. , 2015, , .		4
62	Non-isolated high step-up DC-DC converter with minimum switch voltage stress. , 2017, , .		4
63	A 39-GHz Frequency Tripler With >40-dBc Harmonic Rejection for 5G Communication Systems in 28-nm Bulk CMOS. , 2019, , .		4
64	Global Optimization of Reconfigurable Switched Capacitor DC-DC Converters. , 2019, , .		4
65	Harmonic Oscillators in CMOSâ€”A Tutorial Overview. IEEE Open Journal of the Solid-State Circuits Society, 2021, 1, 2-17.	2.7	4
66	A 13.56ÂMHz reconfigurable step-up switched capacitor converter for wireless power transfer system in implantable medical devices. Analog Integrated Circuits and Signal Processing, 2022, 110, 517-525.	1.4	4
67	Analysis and design of a low-power single-stage CMOS wireless receiver. , 2009, , .		3
68	A digitally programmable ring oscillator in the UWB range. , 2010, , .		3
69	A 130-nm CMOS Dual Input-Polarity DCâ€“DC Converter for Low-Power Applications. IEEE Solid-State Circuits Letters, 2019, 2, 211-214.	2.0	3
70	Considerations on 120GHz LO Signal Generation and Distribution for Highly-Integrated Multi-Channel Radar Transceivers. , 2019, , .		3
71	A 20-GHz Class-C VCO With 80-GHz Fourth-Harmonic Output in 28-nm CMOS. IEEE Microwave and Wireless Components Letters, 2021, 31, 1154-1157.	3.2	3
72	A 5Mb/s UWB-IR CMOS transceiver with a 186 pJ/b and 150 pJ/b TX/RX energy request. , 2010, , .		2

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73	A 4.1 to 5.1 GHz 430 μA injection-locked frequency divider by 7 in 65 nm CMOS. , 2010, , .		2
74	A local oscillator for WCDMA band VII based on frequency multiplication. Analog Integrated Circuits and Signal Processing, 2012, 72, 111-119.	1.4	2
75	A 2.7â€“6.1ÂGHz CMOS local oscillator based on frequency multiplication by 3/2. Analog Integrated Circuits and Signal Processing, 2013, 74, 11-20.	1.4	2
76	A 40–67GHz power amplifier with 13dBm PSAT and 16% PAE in 28 nm CMOS LP. , 2014, , .		2
77	A Symbol-Duty-Cycled 440-pJ/b Impulse Radio Receiver With 0.57-aJ Sensitivity in 130-nm CMOS. IEEE Transactions on Microwave Theory and Techniques, 2017, 65, 565-573.	4.6	2
78	A Multi-Phase Self-Reconfigurable Switched-Capacitor DC-DC Step-Up Converter Integrated in CMOS Technology. , 2019, , .		2
79	A 17 GHz All-npn Push-Pull Class-C VCO. , 2019, , .		2
80	Compact Modeling of Nonideal Trapping/Detrapping Processes in GaN Power Devices. IEEE Transactions on Electron Devices, 2022, 69, 4432-4437.	3.0	2
81	A 0.35 μm SiGe Low-Noise Amplifier for UWB, Receivers with Integrated Interferer Rejection. , 2006, , .		1
82	A 2.7–6.1GHz CMOS local oscillator based on frequency multiplication by 3/2. , 2011, , .		1
83	Time-variant analysis and design of a power efficient ISM-band quadrature receiver. Analog Integrated Circuits and Signal Processing, 2011, 67, 11-20.	1.4	1
84	Integrated transceivers for UWB breast cancer imaging: Architecture and circuit constraints. , 2011, , .		1
85	Wideband 2–16GHz local oscillator generation for short-range radar applications. , 2013, , .		1
86	A 12GHz 22dB-gain-control SiGe bipolar VGA with 2° phase shift variation. , 2015, , .		1
87	A symbol-duty-cycled 440 pJ/b impulse radio receiver with 0.57 aJ sensitivity in 130 nm CMOS. , 2015, , .		1
88	Analysis and design of power and efficiency in third-order matching networks for switched-capacitor power-amplifiers. Analog Integrated Circuits and Signal Processing, 2016, 89, 307-315.	1.4	1
89	A low-voltage III-order log-domain filter in standard CMOS technology with tunable frequency. , 2006, , .		0
90	A 0.059-mm² 10.8-mW local oscillator for GSM systems in 65-nm CMOS. , 2009, , .		0

#	Article	IF	Citations
91	Accurate time-variant analysis of a current-reuse 2.2 GHz 1.3 mW CMOS front-end. , 2010, , .		0
92	Low-power ultra-Wide-Band Impulse Radio transceivers for short range communications. , 2012, , .		0
93	Energy-efficient ultra-wideband impulse radios for short-range low-data rate communications. , 2014, , .		0
94	Great lessons from the back of the envelope. IEEE Solid-State Circuits Magazine, 2014, 6, 45-45.	0.4	0
95	A 28nm Low-Voltage Digital Power-Amplifier for QAM-256 WIFI Applications in 0.5mm² Area w/ 2D Digital-Pre-Distortion and Package Combiner. , 2018, , .		0
96	Guest Editorial Special Issue on the 47th European Solid-State Circuits Conference (ESSCIRC). IEEE Journal of Solid-State Circuits, 2018, 53, 1876-1877.	5.4	0
97	A 130-nm CMOS Dual Input-Polarity DCâ€“DC Converter for Low-Power Applications. , 2019, , .		0