

Joaquin Portilla

List of Publications by Year in descending order

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60
papers

520
citations

1039880

9
h-index

794469

19
g-index

60
all docs

60
docs citations

60
times ranked

273
citing authors

#	ARTICLE	IF	CITATIONS
1	Closed-loop stability analysis of microwave amplifiers. Electronics Letters, 2001, 37, 226.	0.5	146
2	Analytical comparison between time- and frequency-domain techniques for phase-noise analysis. IEEE Transactions on Microwave Theory and Techniques, 2002, 50, 2353-2361.	2.9	40
3	Analysis and elimination of parametric oscillations in monolithic power amplifiers. , 0, , .		38
4	A pulsed S-parameters measurement setup for the non-linear characterization of FETs and bipolar power transistors. , 1993, , .		21
5	High power-added efficiency MMIC amplifier for 2.4 GHz wireless communications. IEEE Journal of Solid-State Circuits, 1999, 34, 120-123.	3.5	21
6	Very High Sensitivity Displacement Sensor Based on Resonant Cavities. IEEE Sensors Journal, 2010, 10, 1335-1336.	2.4	19
7	Low-noise monolithic Ku-band VCO using pseudomorphic HEMT technology. , 1997, 7, 380-382.		18
8	Detecting and avoiding odd-mode parametric oscillations in microwave power amplifiers. International Journal of RF and Microwave Computer-Aided Engineering, 2005, 15, 469-478.	0.8	18
9	Investigations of AM, PM Noise, and Noise Figure in an SiGe-HBT Amplifier Operating in Linear and Nonlinear Regimes. IEEE Transactions on Microwave Theory and Techniques, 2010, 58, 807-813.	2.9	15
10	An improved CAD oriented FET model for large-signal and noise applications. , 1994, , .		14
11	Model-Order Reduction of Linear and Weakly Nonlinear Time-Varying RF and Microwave Circuits. IEEE Transactions on Microwave Theory and Techniques, 2004, 52, 2262-2273.	2.9	12
12	On linearisation of microwave-transmitter solid-state power amplifiers. International Journal of RF and Microwave Computer-Aided Engineering, 2005, 15, 491-505.	0.8	12
13	Hysteresis prediction in autonomous microwave circuits using commercial software: application to a Ku-band MMIC VCO. IEEE Journal of Solid-State Circuits, 1998, 33, 1239-1243.	3.5	11
14	Techniques for oscillator nonlinear optimization and phase-noise analysis using commercial harmonic-balance software. , 0, , .		11
15	Study of PM Noise and Noise Figure in Low Noise Amplifiers Working under Small and Large Signal Conditions. IEEE MTT-S International Microwave Symposium Digest IEEE MTT-S International Microwave Symposium, 2007, , .	0.0	10
16	Low-noise Ku-band MMIC balanced P-HEMT upconverter. IEEE Journal of Solid-State Circuits, 1999, 34, 259-263.	3.5	9
17	Optical ports: next generation of MMIC control devices?. , 2005, , .		7
18	ESS-Bilbao light-ion linear accelerator and neutron source: design and applications. Journal of Physics: Conference Series, 2011, 325, 012003.	0.3	7

#	ARTICLE	IF	CITATIONS
19	Optimum-setting and calibration procedures for heterodyne measurements of amplitude and phase noise in high-frequency amplifiers. IEEE Transactions on Microwave Theory and Techniques, 2014, 62, 1239-1248.	2.9	7
20	High-precision displacement sensor based on resonant cavities through an electronic interface based on Arduino. Sensors and Actuators A: Physical, 2019, 295, 296-301.	2.0	7
21	Characterization of Galileo signal correlation losses caused by non linear power amplification with memory. , 2008, , .		5
22	Simple nonlinearity evaluation and modeling of low-noise amplifiers with application to radio astronomy receivers. Review of Scientific Instruments, 2010, 81, 074704.	0.6	5
23	Effect of the Input and Output Impedance on Amplifier Large-Signal Noise Performances. IEEE Transactions on Microwave Theory and Techniques, 2011, 59, 1571-1578.	2.9	5
24	A simple and reliable technique to characterize amplitude to phase modulation distortion for high-frequency amplifiers and nonlinear devices. Review of Scientific Instruments, 2013, 84, 084708.	0.6	5
25	Automated system for efficient microwave power coupling in an S-band ECR ion source driven under different operating conditions. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2014, 741, 95-103.	0.7	5
26	A dynamical load-cycle charge model for RF power FETs. IEEE Microwave and Wireless Components Letters, 2001, 11, 296-298.	2.0	4
27	Harmonic-balance analysis of digital frequency dividers. IEEE Microwave and Wireless Components Letters, 2002, 12, 287-289.	2.0	4
28	Analysis of nonlinear RF and microwave circuits using harmonic balance and system identification methods. International Journal of RF and Microwave Computer-Aided Engineering, 2002, 12, 448-459.	0.8	4
29	Nonlinear and Memory Characterization of GaAs FET Devices and FET-Based Power Amplifier Circuits. , 2006, , .		4
30	Behavioural Modelling Method for RF and Microwave Mixers. , 2006, , .		3
31	Study of the influence of bias and matching networks on the distortion and memory of FET-based power amplifiers. International Journal of RF and Microwave Computer-Aided Engineering, 2008, 18, 517-526.	0.8	3
32	A configurable electronics system for the ESS-Bilbao beam position monitors. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2013, 721, 50-59.	0.7	3
33	Interface electronics for an RF resonance-based displacement sensor. Journal of Physics: Conference Series, 2013, 450, 012017.	0.3	3
34	PXIe-Based LLRF Architecture and Versatile Test Bench for Heavy Ion Linear Acceleration. IEEE Transactions on Nuclear Science, 2015, 62, 963-971.	1.2	3
35	Experimental Study of AM and PM Noise in Cascaded Amplifiers. Electronics (Switzerland), 2022, 11, 470.	1.8	3
36	Low 1/f Noise 30 GHz Broadband Amplifiers for the Differential Radiometers of the Planck Surveyor Mission.. , 2001, , .		2

#	ARTICLE	IF	CITATIONS
37	Analysis of microwave frequency dividers in harmonic-balance simulators. , 0, , .		2
38	LTV Circuit Modelling Techniques for System Simulation. Application to a MMIC K-Band I-Q Signal-Modulator. , 2002, , .		2
39	MMIC medium-power amplifier in K band with matching and power-divider/combiner networks implemented with the use of lumped elements. Microwave and Optical Technology Letters, 2002, 33, 397-400.	0.9	2
40	Conceptual design of the proton irradiation facility for space radiation testing at ESSBilbao. , 2011, , .		2
41	Making Explicit and Reinforcing Horizontal Competences in an Electronic Engineering Degree. Procedia, Social and Behavioral Sciences, 2014, 141, 961-968.	0.5	2
42	Stability analysis based on frequency domain methods for nonlinear systems. , 0, , .		1
43	Reduced-Order Modeling Technique for Weakly Non-Linear Time-Varying Circuits with Memory. , 2003, , .		1
44	Reduced-order modeling technique for weakly non-linear time-varying circuits with memory. , 2003, , .		1
45	A Novel Micro- and Nano-Scale Positioning Sensor Based on Radio Frequency Resonant Cavities. Sensors, 2014, 14, 9615-9627.	2.1	1
46	Studies on AM and PM noise in microwave amplifiers working under linear and non-linear operating conditions. , 2015, , .		1
47	Reliable and integrated technique for determining resonant frequency in radio frequency resonators. Application to a high-precision resonant cavity-based displacement sensor. Review of Scientific Instruments, 2015, 86, 034709.	0.6	1
48	High-performance monolithic amplifiers in low microwave bands using GaAs MESFET technology. , 0, , .		0
49	Low noise Ku-band drain mixer using P-HEMT technology. , 0, , .		0
50	Suitability of Power Amplifier Linearising Structures for New BWA and WPAN Systems. , 0, , .		0
51	Oscillators, Frequency Synthesisers and PLL Techniques. , 2006, , 461-518.		0
52	Frequency-Domain Identification and Model-Order Selection for Efficiently Simulating Microwave Radiometers. Computing in Science and Engineering, 2012, 14, 68-77.	1.2	0
53	Electronic interface for position sensing using resonant cavities. , 2013, , .		0
54	Studies on small- and large-signal noise in solid-state amplifiers. , 2013, , .		0

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55	HIL testing of a compact Beam Position Monitor diagnostic for particle accelerators. , 2014, , .		0
56	New PXIe-based LLRF architecture and test bench for heavy ion linear acceleration. , 2014, , .		0
57	Characterization techniques for stability and noise in microwave amplifiers under large-signal excitations. , 2016, , .		0
58	On RF transmitter power amplifier linearisation. , 2006, , .		0
59	Verification of WLAN 802.11a system-level specifications for commercially off-the-shelf power amplifiers. , 2006, , .		0
60	New Generation Compact Linear Accelerator for Low-Current, Low-Energy Multiple Applications. Applied Sciences (Switzerland), 2022, 12, 4118.	1.3	0