

# Marvin Onabajo

## List of Publications by Year in descending order

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78  
papers

1,103  
citations

567281

15  
h-index

477307

29  
g-index

79  
all docs

79  
docs citations

79  
times ranked

812  
citing authors

#	ARTICLE	IF	CITATIONS
1	External Capacitor-Less Low Drop-Out Regulator With 25 dB Superior Power Supply Rejection in the 0.4–4 MHz Range. IEEE Journal of Solid-State Circuits, 2014, 49, 486-501.	5.4	150
2	Ultra-compact dual-band smart NEMS magnetolectric antennas for simultaneous wireless energy harvesting and magnetic field sensing. Nature Communications, 2021, 12, 3141.	12.8	95
3	Attenuation-Predistortion Linearization of CMOS OTAs With Digital Correction of Process Variations in OTA-C Filter Applications. IEEE Journal of Solid-State Circuits, 2010, 45, 351-367.	5.4	84
4	NanoNeuroRFID: A Wireless Implantable Device Based on Magnetolectric Antennas. IEEE Journal of Electromagnetics, RF and Microwaves in Medicine and Biology, 2019, 3, 206-215.	3.4	66
5	A 1.16-V 5.8-to-13.5-ppm/°C Curvature-Compensated CMOS Bandgap Reference Circuit With a Shared Offset-Cancellation Method for Internal Amplifiers. IEEE Journal of Solid-State Circuits, 2021, 56, 267-276.	5.4	49
6	A 25 MHz Bandwidth 5th-Order Continuous-Time Low-Pass Sigma-Delta Modulator With 67.7 dB SNDR Using Time-Domain Quantization and Feedback. IEEE Journal of Solid-State Circuits, 2010, 45, 1795-1808.	5.4	48
7	Significantly Enhanced Inductance and Quality Factor of GHz Integrated Magnetic Solenoid Inductors With $\text{FeGaB}/\text{Al}_2\text{O}_3$ Multilayer Films. IEEE Transactions on Electron Devices, 2014, 61, 1470-1476.	3.0	45
8	Analog Circuit Design for Process Variation-Resilient Systems-on-a-Chip. , 2012, , .		44
9	An Analog Front-End Chip With Self-Calibrated Input Impedance for Monitoring of Biosignals via Dry Electrode-Skin Interfaces. IEEE Transactions on Circuits and Systems I: Regular Papers, 2017, 64, 2666-2678.	5.4	34
10	Electrothermal Design Procedure to Observe RF Circuit Power and Linearity Characteristics With a Homodyne Differential Temperature Sensor. IEEE Transactions on Circuits and Systems I: Regular Papers, 2011, 58, 458-469.	5.4	30
11	Accurate and Efficient On-Chip Spectral Analysis for Built-In Testing and Calibration Approaches. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2014, 22, 497-506.	3.1	20
12	Analysis and Demonstration of an IIP3 Improvement Technique for Low-Power RF Low-Noise Amplifiers. IEEE Transactions on Circuits and Systems I: Regular Papers, 2018, 65, 859-869.	5.4	20
13	Review of Analog-To-Digital Conversion Characteristics and Design Considerations for the Creation of Power-Efficient Hybrid Data Converters. Journal of Low Power Electronics and Applications, 2018, 8, 12.	2.0	18
14	A Low-Power BFSK Transmitter Architecture for Biomedical Applications. IEEE Transactions on Circuits and Systems I: Regular Papers, 2020, 67, 1527-1540.	5.4	17
15	A 0.77 mW 2.4 GHz RF Front-End With $-4.5$ dBm In-Band IIP3 Through Inherent Filtering. IEEE Microwave and Wireless Components Letters, 2016, 26, 352-354.	3.2	16
16	A Low-Power High-Speed Hybrid ADC With Merged Sample-and-Hold and DAC Functions for Efficient Subranging Time-Interleaved Operation. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2017, 25, 3193-3206.	3.1	16
17	A chip-less and battery-less subharmonic tag for wireless sensing with parametrically enhanced sensitivity and dynamic range. Scientific Reports, 2021, 11, 3782.	3.3	16
18	An On-Chip Loopback Block for RF Transceiver Built-In Test. IEEE Transactions on Circuits and Systems II: Express Briefs, 2009, 56, 444-448.	3.0	14

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19	Systematic Synthesis and Design of Ultralow Threshold 2:1 Parametric Frequency Dividers. IEEE Transactions on Microwave Theory and Techniques, 2020, 68, 3497-3509.	4.6	14
20	IIP3 Enhancement of Subthreshold Active Mixers. IEEE Transactions on Circuits and Systems II: Express Briefs, 2013, 60, 731-735.	3.0	13
21	A fully-differential CMOS low-pass notch filter for biosignal measurement devices with high interference rejection. , 2014, , .		13
22	Linear input range extension for low-voltage operational transconductance amplifiers in Gm-C filters. , 2017, , .		13
23	A low-power temperature-compensated CMOS relaxation oscillator. Analog Integrated Circuits and Signal Processing, 2014, 79, 309-317.	1.4	12
24	Integration of a novel CMOS-compatible magnetoelectric antenna with a low-noise amplifier and a tunable input matching. Analog Integrated Circuits and Signal Processing, 2020, 105, 407-415.	1.4	12
25	Survey of Robustness Enhancement Techniques for Wireless Systems-on-a-Chip and Study of Temperature as Observable for Process Variations. Journal of Electronic Testing: Theory and Applications (JETTA), 2011, 27, 225-240.	1.2	11
26	Modeling of Magnetoelectric Antennas for Circuit Simulations in Magnetic Sensing Applications. , 2020, , .		11
27	A Radio Frequency Magnetoelectric Antenna Prototyping Platform for Neural Activity Monitoring Devices with Sensing and Energy Harvesting Capabilities. Electronics (Switzerland), 2020, 9, 2123.	3.1	11
28	Instrumentation amplifier input capacitance cancellation for biopotential and bioimpedance measurements. , 2014, , .		10
29	Efficient Broadband Current-Mode Adder- Quantizer Design for Continuous-Time Sigma-Delta Modulators. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2015, 23, 1920-1930.	3.1	10
30	Capturing and recording cold chain temperature violations through parametric alarm-sensor tags. Applied Physics Letters, 2021, 119, .	3.3	10
31	Linearization of subthreshold low-noise amplifiers. , 2013, , .		9
32	Inductorless linearization of low-power active mixers. , 2015, , .		9
33	RSSI Amplifier Design for a Feature Extraction Technique to Detect Seizures with Analog Computing. , 2020, , .		9
34	Wide Dynamic Range CMOS Amplifier Design for RF Signal Power Detection via Electro-Thermal Coupling. Journal of Electronic Testing: Theory and Applications (JETTA), 2014, 30, 101-109.	1.2	8
35	Buck Circuit Design With Pseudo-Constant Frequency and Constant On-Time for High Current Point-of-Load Regulation. IEEE Transactions on Circuits and Systems I: Regular Papers, 2021, 68, 4062-4075.	5.4	8
36	Minimum Energy Analysis and Experimental Verification of a Latch-Based Subthreshold FPGA. IEEE Transactions on Circuits and Systems II: Express Briefs, 2012, 59, 942-946.	3.0	7

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37	A low-power temperature-compensated relaxation oscillator for built-in test signal generation. , 2015, , .		7
38	A Low-Power Complex Bandpass Gm-C Filter with Dynamic Range Expansion through Adaptive Biasing. , 2018, , .		7
39	A low-power hybrid ADC architecture for high-speed medium-resolution applications. , 2015, , .		6
40	Test signal generation for the calibration of analog front-end circuits in biopotential measurement applications. , 2014, , .		5
41	A built-in calibration system to optimize third-order intermodulation performance of RF amplifiers. , 2014, , .		5
42	Design techniques for external capacitor-less LDOs with high PSR over wide frequency range. , 2014, , .		5
43	Strategic Test Cost Reduction with On-Chip Measurement Circuitry for RF Transceiver Front-Ends - An Overview. Midwest Symposium on Circuits and Systems, 2006, , .	1.0	4
44	Mismatch reduction technique for transistors with minimum channel length. Analog Integrated Circuits and Signal Processing, 2012, 70, 429-435.	1.4	4
45	A current-mode flash ADC for low-power continuous-time sigma delta modulators. , 2013, , .		4
46	Power-efficient voltage tunable RF integrated magnetolectric inductors with FeGaB/Al<math>\times 2</math>/O<math>\times 3</math>/multilayer films. , 2014, , .		4
47	Digitally programmable offset compensation of comparators in flash ADCs for hybrid ADC architectures. , 2015, , .		4
48	A Tuning Technique for Temperature and Process Variation Compensation of Power Amplifiers with Digital Predistortion. , 2016, , .		4
49	An Optimization Platform for Digital Predistortion of Power Amplifiers. IEEE Design and Test, 2016, 33, 49-58.	1.2	4
50	Low-power low-noise amplifier IIP3 improvement under consideration of the cascode stage. , 2017, , .		4
51	Modeling of Thermal Coupling and Temperature Sensor Circuit Design Considerations for Hardware Trojan Detection. , 2018, , .		4
52	Comparator Design and Calibration for Flash ADCs within Two-Step ADC Architectures. , 2019, , .		4
53	Sinusoidal Signal Generation Through Successive Integration. , 2019, , .		4
54	Reflective Parametric Frequency-Selective Limiters With Sub-dB Loss and $\frac{1}{4}$ Watts Power Thresholds. IEEE Transactions on Microwave Theory and Techniques, 2021, 69, 2989-3000.	4.6	4

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55	An Ultra-Low Power RSSI Amplifier for EEG Feature Extraction to Detect Seizures. IEEE Transactions on Circuits and Systems II: Express Briefs, 2022, 69, 329-333.	3.0	4
56	A 30% Efficient High-Output Voltage Fully Integrated Self-Biased Gate RF Rectifier Topology for Neural Implants. IEEE Journal of Solid-State Circuits, 2022, 57, 3324-3335.	5.4	4
57	Input impedance matching optimization for adaptive low-power low-noise amplifiers. Analog Integrated Circuits and Signal Processing, 2013, 77, 583-592.	1.4	3
58	On-chip digital calibration for automatic input impedance boosting during biopotential measurements. , 2015, , .		3
59	A low-power RF receiver front-end chip designed with methods to reduce third-order intermodulation distortion. , 2016, , .		3
60	Instrumentation amplifier and current injection circuit design for input impedance boosting in biopotential and bioimpedance measurements. Analog Integrated Circuits and Signal Processing, 2016, 88, 289-302.	1.4	3
61	Simulation and Experimental Evaluation of Energy Harvesting Circuits with Magnetoelectric Antennas. , 2021, , .		3
62	A built-in calibration system with a reduced FFT engine for linearity optimization of low power LNA. , 2014, , .		2
63	A simulation method for design and optimization of RF power amplifiers with digital predistortion. , 2015, , .		2
64	Performance enhancement techniques and verification methods for radio frequency circuits and systems. , 2016, , .		2
65	An FPGA Design Technique to Receive Multiple Wireless Protocols with the Same RF Front End. , 2019, , .		2
66	On-Chip Thermal Profiling to Detect Malicious Activity: System-Level Concepts and Design of Key Building Blocks. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2021, 29, 530-543.	3.1	2
67	Noise Reduction via Chopper Stabilization of Fully Differential Temperature Sensors for Hardware Security Applications. , 2020, , .		2
68	Shared Offset Cancellation and Chopping Techniques to Enhance the Voltage Accuracy of Multi-Amplifier Systems for Feedback Sensing in Power Management Applications. IEEE Transactions on Circuits and Systems I: Regular Papers, 2022, 69, 1051-1064.	5.4	2
69	A 0.061 nJ/b 10 Mbps Hybrid BF-PSK Receiver for Internet of Things Applications. IEEE Transactions on Circuits and Systems I: Regular Papers, 2022, 69, 1919-1931.	5.4	2
70	A 10-bit 64MS/s SAR ADC using variable clock period method. , 2013, , .		1
71	A transmitter architecture for wireless medical devices in the MICS band. , 2017, , .		1
72	Study of Performance Impact from Powering RF Receiver Front-End Circuits with a DC-DC Converter. , 2018, , .		1

#	ARTICLE	IF	CITATIONS
73	Design techniques for mitigation of intermodulation distortion components in CMOS RF receiver front-end circuits with subthreshold operation. Analog Integrated Circuits and Signal Processing, 2018, 94, 335-346.	1.4	1
74	Design Considerations and Experimental Verification of a 10.5mW 1GS/s Hybrid ADC for Portable Wireless Devices. , 2018, , .		1
75	Modeling and Simulation of Circuit-Level Nonidealities for an Analog Computing Design Approach With Application to EEG Feature Extraction. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2023, 42, 229-242.	2.7	1
76	A Chopper Instrumentation Amplifier with Fully Symmetric Negative Capacitance Generation Feedback Loop and Online Digital Calibration for Input Impedance Boosting. , 2019, , .		0
77	Analysis and Experimental Validation of Large-Signal Linearization for Low-Power Complex OTA-C Filters. IEEE Open Journal of Circuits and Systems, 2021, 2, 398-406.	1.9	0
78	Digitally Assisted Performance Tuning of Analog/RF Circuits with an On-Chip FFT Engine. Advances in Computer and Electrical Engineering Book Series, 2015, , 236-267.	0.3	0