

# Marvin Onabajo

## List of Publications by Year in descending order

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78  
papers

1,103  
citations

567281

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477307

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79  
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79  
docs citations

79  
times ranked

812  
citing authors

#	ARTICLE	IF	CITATIONS
1	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
2	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
3	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
4	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
5	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
6	A 1.16-V 5.8-to-13.5-ppm/Å°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
7	Reflective Parametric Frequency-Selective Limiters With Sub-dB Loss and $\hat{1}/4$ Watts Power Thresholds. IEEE Transactions on Microwave Theory and Techniques, 2021, 69, 2989-3000.	4.6	4
8	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
9	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
10	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
11	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
12	Capturing and recording cold chain temperature violations through parametric alarm-sensor tags. Applied Physics Letters, 2021, 119, .	3.3	10
13	Simulation and Experimental Evaluation of Energy Harvesting Circuits with Magnetolectric Antennas. , 2021, , .		3
14	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
15	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
16	Integration of a novel CMOS-compatible magnetolectric antenna with a low-noise amplifier and a tunable input matching. Analog Integrated Circuits and Signal Processing, 2020, 105, 407-415.	1.4	12
17	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
18	Modeling of Magnetolectric Antennas for Circuit Simulations in Magnetic Sensing Applications. , 2020, , .		11

#	ARTICLE	IF	CITATIONS
19	A Radio Frequency Magnetolectric Antenna Prototyping Platform for Neural Activity Monitoring Devices with Sensing and Energy Harvesting Capabilities. Electronics (Switzerland), 2020, 9, 2123.	3.1	11
20	RSSI Amplifier Design for a Feature Extraction Technique to Detect Seizures with Analog Computing. , 2020, , .		9
21	Noise Reduction via Chopper Stabilization of Fully Differential Temperature Sensors for Hardware Security Applications. , 2020, , .		2
22	Comparator Design and Calibration for Flash ADCs within Two-Step ADC Architectures. , 2019, , .		4
23	An FPGA Design Technique to Receive Multiple Wireless Protocols with the Same RF Front End. , 2019, , .		2
24	Sinusoidal Signal Generation Through Successive Integration. , 2019, , .		4
25	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
26	A Chopper Instrumentation Amplifier with Fully Symmetric Negative Capacitance Generation Feedback Loop and Online Digital Calibration for Input Impedance Boosting. , 2019, , .		0
27	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
28	Study of Performance Impact from Powering RF Receiver Front-End Circuits with a DC-DC Converter. , 2018, , .		1
29	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
30	Modeling of Thermal Coupling and Temperature Sensor Circuit Design Considerations for Hardware Trojan Detection. , 2018, , .		4
31	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
32	A Low-Power Complex Bandpass Gm-C Filter with Dynamic Range Expansion through Adaptive Biasing. , 2018, , .		7
33	Design Considerations and Experimental Verification of a 10.5mW 1GS/s Hybrid ADC for Portable Wireless Devices. , 2018, , .		1
34	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
35	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
36	Linear input range extension for low-voltage operational transconductance amplifiers in Gm-C filters. , 2017, , .		13

#	ARTICLE	IF	CITATIONS
37	Low-power low-noise amplifier IIP3 improvement under consideration of the cascode stage. , 2017, , .		4
38	A transmitter architecture for wireless medical devices in the MICS band. , 2017, , .		1
39	A low-power RF receiver front-end chip designed with methods to reduce third-order intermodulation distortion. , 2016, , .		3
40	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
41	A Tuning Technique for Temperature and Process Variation Compensation of Power Amplifiers with Digital Predistortion. , 2016, , .		4
42	Performance enhancement techniques and verification methods for radio frequency circuits and systems. , 2016, , .		2
43	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
44	An Optimization Platform for Digital Predistortion of Power Amplifiers. IEEE Design and Test, 2016, 33, 49-58.	1.2	4
45	On-chip digital calibration for automatic input impedance boosting during biopotential measurements. , 2015, , .		3
46	A simulation method for design and optimization of RF power amplifiers with digital predistortion. , 2015, , .		2
47	Inductorless linearization of low-power active mixers. , 2015, , .		9
48	Digitally programmable offset compensation of comparators in flash ADCs for hybrid ADC architectures. , 2015, , .		4
49	A low-power temperature-compensated relaxation oscillator for built-in test signal generation. , 2015, , .		7
50	A low-power hybrid ADC architecture for high-speed medium-resolution applications. , 2015, , .		6
51	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
52	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
53	A fully-differential CMOS low-pass notch filter for biosignal measurement devices with high interference rejection. , 2014, , .		13
54	Test signal generation for the calibration of analog front-end circuits in biopotential measurement applications. , 2014, , .		5

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55	A built-in calibration system to optimize third-order intermodulation performance of RF amplifiers. , 2014, , .		5
56	Power-efficient voltage tunable RF integrated magnetolectric inductors with FeGaB/Al <sub>2</sub> O <sub>3</sub> multilayer films. , 2014, , .		4
57	Instrumentation amplifier input capacitance cancellation for biopotential and bioimpedance measurements. , 2014, , .		10
58	A built-in calibration system with a reduced FFT engine for linearity optimization of low power LNA. , 2014, , .		2
59	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
60	A low-power temperature-compensated CMOS relaxation oscillator. Analog Integrated Circuits and Signal Processing, 2014, 79, 309-317.	1.4	12
61	Significantly Enhanced Inductance and Quality Factor of GHz Integrated Magnetic Solenoid Inductors With FeGaB/Al <sub>2</sub> O <sub>3</sub> Multilayer Films. IEEE Transactions on Electron Devices, 2014, 61, 1470-1476.	3.0	45
62	Design techniques for external capacitor-less LDOs with high PSR over wide frequency range. , 2014, , .		5
63	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
64	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
65	A current-mode flash ADC for low-power continuous-time sigma delta modulators. , 2013, , .		4
66	Input impedance matching optimization for adaptive low-power low-noise amplifiers. Analog Integrated Circuits and Signal Processing, 2013, 77, 583-592.	1.4	3
67	Linearization of subthreshold low-noise amplifiers. , 2013, , .		9
68	IIP3 Enhancement of Subthreshold Active Mixers. IEEE Transactions on Circuits and Systems II: Express Briefs, 2013, 60, 731-735.	3.0	13
69	A 10-bit 64MS/s SAR ADC using variable clock period method. , 2013, , .		1
70	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
71	Analog Circuit Design for Process Variation-Resilient Systems-on-a-Chip. , 2012, , .		44
72	Mismatch reduction technique for transistors with minimum channel length. Analog Integrated Circuits and Signal Processing, 2012, 70, 429-435.	1.4	4

#	ARTICLE	IF	CITATIONS
73	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
74	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
75	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
76	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
77	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
78	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