Andreas Demosthenous

List of Publications by Year in descending order

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213 papers

3,171 citations

31 h-index

147801

214800 47 g-index

215 all docs

215 docs citations

215 times ranked 2407 citing authors

#	Article	IF	CITATIONS
1	Advances in Reversed Nested Miller Compensation. IEEE Transactions on Circuits and Systems Part 1: Regular Papers, 2007, 54, 1459-1470.	0.1	153
2	Practical Inductive Link Design for Biomedical Wireless Power Transfer: A Tutorial. IEEE Transactions on Biomedical Circuits and Systems, 2018, 12, 1112-1130.	4.0	107
3	An Integrated Implantable Stimulator That is Fail-Safe Without Off-Chip Blocking-Capacitors. IEEE Transactions on Biomedical Circuits and Systems, 2008, 2, 231-244.	4.0	99
4	Design Procedures for Three-Stage CMOS OTAs With Nested-Miller Compensation. IEEE Transactions on Circuits and Systems Part 1: Regular Papers, 2007, 54, 933-940.	0.1	85
5	Improved Reversed Nested Miller Frequency Compensation Technique With Voltage Buffer and Resistor. IEEE Transactions on Circuits and Systems Part 2: Express Briefs, 2007, 54, 382-386.	2.2	84
6	Current Conveyor-Based Square/Triangular Waveform Generators With Improved Linearity. IEEE Transactions on Instrumentation and Measurement, 2009, 58, 2174-2180.	4.7	81
7	Detection of the tau protein in human serum by a sensitive four-electrode electrochemical biosensor. Biosensors and Bioelectronics, 2017, 92, 482-488.	10.1	78
8	Design Methodology of Subthreshold Three-Stage CMOS OTAs Suitable for Ultra-Low-Power Low-Area and High Driving Capability. IEEE Transactions on Circuits and Systems I: Regular Papers, 2015, 62, 1453-1462.	5.4	72
9	High-Performance Four-Stage CMOS OTA Suitable for Large Capacitive Loads. IEEE Transactions on Circuits and Systems I: Regular Papers, 2015, 62, 2476-2484.	5.4	68
10	A Human–Machine Interface Using Electrical Impedance Tomography for Hand Prosthesis Control. IEEE Transactions on Biomedical Circuits and Systems, 2018, 12, 1322-1333.	4.0	68
11	Analytical comparison of reversed nested Miller frequency compensation techniques. International Journal of Circuit Theory and Applications, 2010, 38, 709-737.	2.0	65
12	A High Frame Rate Wearable EIT System Using Active Electrode ASICs for Lung Respiration and Heart Rate Monitoring. IEEE Transactions on Circuits and Systems I: Regular Papers, 2018, 65, 3810-3820.	5.4	65
13	A CMOS Magnitude/Phase Measurement Chip for Impedance Spectroscopy. IEEE Sensors Journal, 2013, 13, 2229-2236.	4.7	63
14	An Integrated Passive Phase-Shift Keying Modulator for Biomedical Implants With Power Telemetry Over a Single Inductive Link. IEEE Transactions on Biomedical Circuits and Systems, 2017, 11, 64-77.	4.0	60
15	An Integrated Analog Readout for Multi-Frequency Bioimpedance Measurements. IEEE Sensors Journal, 2014, 14, 2792-2800.	4.7	59
16	A CMOS Instrumentation Amplifier With 90-dB CMRR at 2-MHz Using Capacitive Neutralization: Analysis, Design Considerations, and Implementation. IEEE Transactions on Circuits and Systems I: Regular Papers, 2011, 58, 699-710.	5.4	54
17	Optimized Active Single-Miller Capacitor Compensation With Inner Half-Feedforward Stage for Very High-Load Three-Stage OTAs. IEEE Transactions on Circuits and Systems I: Regular Papers, 2016, 63, 1349-1359.	5.4	54
18	A 122 fps, 1 MHz Bandwidth Multi-Frequency Wearable EIT Belt Featuring Novel Active Electrode Architecture for Neonatal Thorax Vital Sign Monitoring. IEEE Transactions on Biomedical Circuits and Systems, 2019, 13, 927-937.	4.0	53

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19	5G Uniform Linear Arrays With Beamforming and Spatial Multiplexing at 28, 37, 64, and 71 GHz for Outdoor Urban Communication: A Two-Level Approach. IEEE Transactions on Vehicular Technology, 2017, 66, 9972-9985.	6.3	50
20	Humidity-to-Frequency Sensor in CMOS Technology With Wireless Readout. IEEE Sensors Journal, 2013, 13, 900-908.	4.7	49
21	Comparison of a new integrated current source with the modified Howland circuit for EIT applications. Physiological Measurement, 2009, 30, 999-1007.	2.1	48
22	A Stimulator ASIC Featuring Versatile Management for Vestibular Prostheses. IEEE Transactions on Biomedical Circuits and Systems, 2011, 5, 147-159.	4.0	46
23	Hand Gesture Recognition Using Three-Dimensional Electrical Impedance Tomography. IEEE Transactions on Circuits and Systems II: Express Briefs, 2020, 67, 1554-1558.	3.0	41
24	On Cuff Imbalance and Tripolar ENG Amplifier Configurations. IEEE Transactions on Biomedical Engineering, 2005, 52, 314-320.	4.2	40
25	Electrical Impedance Tomography for Biomedical Applications: Circuits and Systems Review. IEEE Open Journal of Circuits and Systems, 2021, 2, 380-397.	1.9	38
26	A Compact Rail-to-Rail Class-AB CMOS Buffer With Slew-Rate Enhancement. IEEE Transactions on Circuits and Systems II: Express Briefs, 2012, 59, 486-490.	3.0	33
27	Feature Extraction Using Extrema Sampling of Discrete Derivatives for Spike Sorting in Implantable Upper-Limb Neural Prostheses. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2014, 22, 716-726.	4.9	33
28	A Wideband Low-Distortion CMOS Current Driver for Tissue Impedance Analysis. IEEE Transactions on Circuits and Systems II: Express Briefs, 2015, 62, 154-158.	3.0	33
29	Active Books: The Design of an Implantable Stimulator That Minimizes Cable Count Using Integrated Circuits Very Close to Electrodes. IEEE Transactions on Biomedical Circuits and Systems, 2012, 6, 216-227.	4.0	32
30	A Tripolar Current-Steering Stimulator ASIC for Field Shaping in Deep Brain Stimulation. IEEE Transactions on Biomedical Circuits and Systems, 2012, 6, 197-207.	4.0	32
31	Platinum electrode noise in the ENG spectrum. Medical and Biological Engineering and Computing, 2008, 46, 997-1003.	2.8	31
32	High-Power CMOS Current Driver With Accurate Transconductance for Electrical Impedance Tomography. IEEE Transactions on Biomedical Circuits and Systems, 2014, 8, 575-583.	4.0	31
33	A comparison study of electrodes for neonate electrical impedance tomography. Physiological Measurement, 2009, 30, S73-S84.	2.1	29
34	An Adaptive Neural Spike Processor With Embedded Active Learning for Improved Unsupervised Sorting Accuracy. IEEE Transactions on Biomedical Circuits and Systems, 2018, 12, 665-676.	4.0	29
35	An Integrated Amplifier With Passive Neutralization of Myoelectric Interference From Neural Recording Tripoles. IEEE Sensors Journal, 2013, 13, 3236-3248.	4.7	27
36	Optimized Lateral Flow Immunoassay Reader for the Detection of Infectious Diseases in Developing Countries. Sensors, 2017, 17, 2673.	3.8	26

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37	Frequency Splitting Analysis and Compensation Method for Inductive Wireless Powering of Implantable Biosensors. Sensors, 2016, 16, 1229.	3.8	24
38	Toward On-Demand Deep Brain Stimulation Using Online Parkinson's Disease Prediction Driven by Dynamic Detection. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2017, 25, 2441-2452.	4.9	24
39	Torso shape detection to improve lung monitoring. Physiological Measurement, 2018, 39, 074001.	2.1	22
40	Towards a High Accuracy Wearable Hand Gesture Recognition System Using EIT., 2018,,.		22
41	An Implantable Versatile Electrode-Driving ASIC for Chronic Epidural Stimulation in Rats. IEEE Transactions on Biomedical Circuits and Systems, 2015, 9, 387-400.	4.0	21
42	Integrated Circuits for Medical Ultrasound Applications: Imaging and Beyond. IEEE Transactions on Biomedical Circuits and Systems, 2021, 15, 838-858.	4.0	21
43	Wideband Fully-Programmable Dual-Mode CMOS Analogue Front-End for Electrical Impedance Spectroscopy. Sensors, 2016, 16, 1159.	3.8	20
44	A low-voltage, low-power, high-linearity cmos four-quadrant analog multiplier. , 2007, , .		19
45	Advances in Microelectronics for Implantable Medical Devices. Advances in Electronics, 2014, 2014, 1-21.	1.9	19
46	A Multichannel High-Frequency Power-Isolated Neural Stimulator With Crosstalk Reduction. IEEE Transactions on Biomedical Circuits and Systems, 2018, 12, 940-953.	4.0	19
47	Passive Neutralization of Myoelectric Interference From Neural Recording Tripoles. IEEE Transactions on Biomedical Engineering, 2007, 54, 1067-1074.	4.2	18
48	A multi-frequency bioimpedance measurement ASIC for electrical impedance tomography. , 2011, , .		17
49	A Capacitive Humidity Sensor Suitable for CMOS Integration. IEEE Sensors Journal, 2013, 13, 4487-4495.	4.7	17
50	A CMOS Smart Temperature and Humidity Sensor with Combined Readout. Sensors, 2014, 14, 17192-17211.	3.8	17
51	A Sinusoidal Current Driver With an Extended Frequency Range and Multifrequency Operation for Bioimpedance Applications. IEEE Transactions on Biomedical Circuits and Systems, 2015, 9, 401-411.	4.0	17
52	Detecting colorectal cancer using electrical impedance spectroscopy: an <i>ex vivo</i> feasibility study. Physiological Measurement, 2017, 38, 1278-1288.	2.1	17
53	An Ultra-Energy-Efficient Wide-Bandwidth Video Pipeline ADC Using Optimized Architectural Partitioning. IEEE Transactions on Circuits and Systems Part 1: Regular Papers, 2006, 53, 2485-2497.	0.1	16
54	A Fully Integrated Fail-safe Stimulator Output Stage Dedicated to FES Stimulation. , 2007, , .		16

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55	An Integrated Stimulator With DC-Isolation and Fine Current Control for Implanted Nerve Tripoles. IEEE Journal of Solid-State Circuits, 2011, 46, 1701-1714.	5.4	16
56	Flexible active electrode arrays with ASICs that fit inside the rat's spinal canal. Biomedical Microdevices, 2015, 17, 106.	2.8	16
57	On the application of frequency selective common mode feedback for multifrequency EIT. Physiological Measurement, 2015, 36, 1337-1350.	2.1	16
58	Floating voltage-controlled current sources for electrical impedance tomography. , 2007, , .		15
59	A Synchronous Chopping Demodulator and Implementation for High-Frequency Inductive Position Sensors. IEEE Transactions on Instrumentation and Measurement, 2009, 58, 3693-3701.	4.7	15
60	A High-Power CMOS Class-D Amplifier for Inductive-Link Medical Transmitters. IEEE Transactions on Power Electronics, 2015, 30, 4477-4488.	7.9	15
61	High-Power Integrated Stimulator Output Stages With Floating Discharge Over a Wide Voltage Range for Nerve Stimulation. IEEE Transactions on Biomedical Circuits and Systems, 2010, 4, 39-48.	4.0	14
62	A fast passive phase shift keying modulator for inductively coupled implanted medical devices. , 2012, , .		14
63	Wearable sensors for patient-specific boundary shape estimation to improve the forward model for electrical impedance tomography (EIT) of neonatal lung function. Physiological Measurement, 2014, 35, 1149-1161.	2.1	14
64	A Vestibular Prosthesis With Highly-Isolated Parallel Multichannel Stimulation. IEEE Transactions on Biomedical Circuits and Systems, 2015, 9, 124-137.	4.0	14
65	Time Stamp – A Novel Time-to-Digital Demodulation Method for Bioimpedance Implant Applications. IEEE Transactions on Biomedical Circuits and Systems, 2020, 14, 997-1007.	4.0	14
66	An Imaged Based Method for Universal Performance Evaluation of Electrical Impedance Tomography Systems. IEEE Transactions on Biomedical Circuits and Systems, 2021, 15, 464-473.	4.0	14
67	Design of a CMOS active electrode IC for wearable electrical impedance tomography systems. , 2016, , .		13
68	A CMOS current driver with built-in common-mode signal reduction capability for EIT., 2017,,.		13
69	A Non-Linear Feedback Current Driver With Automatic Phase Compensation for Bioimpedance Applications. IEEE Transactions on Circuits and Systems II: Express Briefs, 2018, 65, 1340-1344.	3.0	13
70	A Framework for Adapting Deep Brain Stimulation Using Parkinsonian State Estimates. Frontiers in Neuroscience, 2020, 14, 499.	2.8	13
71	Accurate, Very Low Computational Complexity Spike Sorting Using Unsupervised Matched Subspace Learning. IEEE Transactions on Biomedical Circuits and Systems, 2020, 14, 221-231.	4.0	13
72	Optimizing Speech Recognition Using a Computational Model of Human Hearing: Effect of Noise Type and Efferent Time Constants. IEEE Access, 2020, 8, 56711-56719.	4.2	13

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73	Towards More Efficient DNN-Based Speech Enhancement Using Quantized Correlation Mask. IEEE Access, 2021, 9, 24350-24362.	4.2	13
74	A low-power CMOS analog voltage buffer using compact adaptive biasing. , 2007, , .		12
75	Constant-Resistance CMOS Input Sampling Switch for GSM/WCDMA High Dynamic Range \$Delta Sigma\$ Modulators. IEEE Transactions on Circuits and Systems I: Regular Papers, 2008, 55, 3234-3245.	5.4	12
76	Towards the development of an electrochemical biosensor for hCG \hat{I}^2 detection. Physiological Measurement, 2008, 29, S241-S254.	2.1	12
77	Minimizing Stimulus Current in a Wearable Pudendal Nerve Stimulator Using Computational Models. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2016, 24, 506-515.	4.9	12
78	A Multi-Channel Stimulator With High-Resolution Time-to-Current Conversion for Vagal-Cardiac Neuromodulation. IEEE Transactions on Biomedical Circuits and Systems, 2021, 15, 1186-1195.	4.0	12
79	Design of an Implant for Preventing Incontinence After Spinal Cord Injury. Artificial Organs, 2008, 32, 586-591.	1.9	11
80	A high output impedance CMOS current driver for bioimpedance measurements. , 2010, , .		11
81	An ASIC for Recording and Stimulation in Stacked Microchannel Neural Interfaces. IEEE Transactions on Biomedical Circuits and Systems, 2019, 13, 259-270.	4.0	11
82	A Smart Dual-Mode Calorimetric Flow Sensor. IEEE Sensors Journal, 2020, 20, 1499-1508.	4.7	11
83	A Biasing Approach to Design Ultra-Low-Power Standard-Cell-Based Analog Building Blocks for Nanometer SoCs. IEEE Access, 2022, 10, 25892-25900.	4.2	11
84	Generalized Analysis of Random Common-Mode Rejection Performance of CMOS Current Feedback Instrumentation Amplifiers. IEEE Transactions on Circuits and Systems I: Regular Papers, 2015, 62, 2137-2146.	5.4	10
85	Toward adaptive deep brain stimulation in Parkinson's disease: a review. Neurodegenerative Disease Management, 2018, 8, 115-136.	2.2	9
86	Analog Integrated Current Drivers for Bioimpedance Applications: A Review. Sensors, 2019, 19, 756.	3.8	9
87	Impact of neuroanatomical variations and electrode orientation on stimulus current in a device for migraine: a computational study. Journal of Neural Engineering, 2020, 17, 016006.	3. 5	9
88	Recent advances in the design of implantable stimulator output stages. , 2007, , .		8
89	Towards an optimized design for tetrapolar affinity-based impedimetric immunosensors for lab-on-a-chip applications. , 2008, , .		8
90	Non-Invasive Detection of Mechanical Alternans Utilizing Photoplethysmography. IEEE Journal of Biomedical and Health Informatics, 2019, 23, 2409-2416.	6.3	8

#	Article	IF	Citations
91	Tripolar-cuff deviation from ideal model: Assessment by bioelectric field simulations and saline-bath experiments. Medical Engineering and Physics, 2008, 30, 550-562.	1.7	7
92	Comparison of tetrapolar injection-measurement techniques for coplanar affinity-based impedimetric immunosensors. , 2008, , .		7
93	A wide-input linear range sub-threshold transconductor for sub-Hz filtering. , 2010, , .		7
94	The Effects of Fabrication Process on the Performance of a CMOS Based Capacitive Humidity Sensor. ECS Transactions, 2011, 35, 71-78.	0.5	7
95	Complementary Detection for Hardware Efficient On-Site Monitoring of Parkinsonian Progress. IEEE Journal on Emerging and Selected Topics in Circuits and Systems, 2018, 8, 603-615.	3.6	7
96	A Low-Power, Wireless, Capacitive Sensing Frontend Based on a Self-Oscillating Inductive Link. IEEE Transactions on Circuits and Systems I: Regular Papers, 2018, 65, 2645-2656.	5. 4	7
97	CMOS Image Sensor for Lateral Flow Immunoassay Readers. IEEE Transactions on Circuits and Systems II: Express Briefs, 2018, 65, 1405-1409.	3.0	7
98	Short-Range Quality-Factor Modulation (SQuirM) for Low Power High Speed Inductive Data Transfer. IEEE Transactions on Circuits and Systems I: Regular Papers, 2019, 66, 3254-3265.	5.4	7
99	Deep Analysis of EIT Dataset to Classify Apnea and Non-Apnea Cases in Neonatal Patients. IEEE Access, 2021, 9, 25131-25139.	4.2	7
100	An Integrated Bidirectional Multi-Channel Opto-Electro Arbitrary Waveform Stimulator for Treating Motor Neurone Disease. , $2021, \ldots$		7
101	A Goertzel Filter-Based System for Fast Simultaneous Multi-Frequency EIS. IEEE Transactions on Circuits and Systems II: Express Briefs, 2021, 68, 3133-3137.	3.0	7
102	Development of an in-line magnetometer for flow chemistry and its demonstration for magnetic nanoparticle synthesis. Lab on A Chip, 2021, 21, 3775-3783.	6.0	7
103	Dictionary selection for compressed sensing of EEG signals using sparse binary matrix and spatiotemporal sparse Bayesian learning. Biomedical Physics and Engineering Express, 2020, 6, 065024.	1.2	7
104	The Effect of Interference Source Proximity on Cuff Imbalance. IEEE Transactions on Biomedical Engineering, 2006, 53, 354-357.	4.2	6
105	"Sweet Spots" in Moderate Inversion for MOSFET Squarer Transconductors. IEEE Transactions on Circuits and Systems Part 2: Express Briefs, 2007, 54, 479-483.	2.2	6
106	Stimulation management for a multichannel vestibular neural prosthesis. , 2010, , .		6
107	A novel front-end for impedance spectroscopy. , 2011, , .		6
108	Output stage of a current-steering multipolar and multisite deep brain stimulator., 2013,,.		6

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109	Advances in Scalable Implantable Systems for Neurostimulation Using Networked ASICs. IEEE Design and Test, 2016, 33, 8-23.	1.2	6
110	A 32-by-32 CMOS microelectrode array for capacitive biosensing and impedance spectroscopy. , 2017, , .		6
111	Effect of auditory efferent time-constant duration on speech recognition in noise. Journal of the Acoustical Society of America, 2018, 143, EL112-EL115.	1.1	6
112	New Year Editorial. IEEE Transactions on Circuits and Systems I: Regular Papers, 2018, 65, 1-2.	5.4	6
113	Compressive sensing in electrical impedance tomography for breathing monitoring. Physiological Measurement, 2019, 40, 034010.	2.1	6
114	1.2-V Energy-Efficient Wireless CMOS Potentiostat for Amperometric Measurements. IEEE Transactions on Circuits and Systems II: Express Briefs, 2020, 67, 1700-1704.	3.0	6
115	Model Selection Based Algorithm in Neonatal Chest EIT. IEEE Transactions on Biomedical Engineering, 2021, 68, 2752-2763.	4.2	6
116	Optimization of bipolar and tetrapolar impedance biosensors. , 2010, , .		5
117	An implantable humidity-to-frequency sensor in CMOS technology. , 2011, , .		5
118	Towards a closed-loop transmitter system with integrated class-D amplifier for coupling-insensitive powering of implants. , 2012 , , .		5
119	Controlled silicon IC thinning on individual die level for active implant integration using a purely mechanical process. , 2014, , .		5
120	An Implantable Stimulator With Safety Sensors in Standard CMOS Process for Active Books. IEEE Sensors Journal, 2016, 16, 7161-7172.	4.7	5
121	Towards a thoracic conductive phantom for EIT. Medical Engineering and Physics, 2020, 77, 88-94.	1.7	5
122	Thoracic shape changes in newborns due to their position. Scientific Reports, 2021, 11, 4446.	3.3	5
123	Comparison of Transconductance Reduction Techniques for the Design of a Very Large Time-Constant CMOS Integrator., 2006,,.		4
124	An integrated common-mode feedback topology for multi-frequency bioimpedance imaging. , 2009, , .		4
125	Towards an adaptive modified quasi-tripole amplifier configuration for EMG neutralization in neural recording tripoles. , 2010 , , .		4
126	Developing a Wafer Level Gold-Polysilicon Eutectic Bond Process to Protect Sensitive Electronic Devices. ECS Transactions, 2010, 33, 83-92.	0.5	4

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127	Safety of multi-channel stimulation implants: a single blocking capacitor per channel is not sufficient after single-fault failure. Medical and Biological Engineering and Computing, 2012, 50, 403-410.	2.8	4
128	Dimensionality reduction using asynchronous sampling of first derivative features for real-time and computationally efficient neural spike sorting. , 2013 , , .		4
129	A dedicated electrode driving ASIC for epidural spinal cord stimulation in rats. , 2013, , .		4
130	Wireless paper-based biosensor reader for the detection of infectious diseases at the point of care. , 2016, , .		4
131	Effect of model complexity on fiber activation estimates in a wearable neuromodulator for migraine. , $2017, \dots$		4
132	Single-pulse harmonic modulation for short range biomedical inductive data transfer. , 2017, , .		4
133	Effect of nerve variations on the stimulus current level in a wearable neuromodulator for migraine: A modeling study., 2017,,.		4
134	Influence of cellular structures of skin on fiber activation thresholds and computation cost. Biomedical Physics and Engineering Express, 2018, 5, 015015.	1.2	4
135	Adaptive Electrical Impedance Tomography Resolution Enhancement Using Statistically Quantized Projected Image Sub-Bands. IEEE Access, 2020, 8, 99797-99805.	4.2	4
136	A Versatile Hermetically Sealed Microelectronic Implant for Peripheral Nerve Stimulation Applications. Frontiers in Neuroscience, 2021, 15, 681021.	2.8	4
137	mmWave V2V Localization in MU-MIMO Hybrid Beamforming. IEEE Open Journal of Vehicular Technology, 2022, 3, 210-220.	4.9	4
138	Insertion Guidance Based on Impedance Measurements of a Cochlear Electrode Array. Frontiers in Computational Neuroscience, $0,16,.$	2.1	4
139	A fail-safe ASIC for implantable neural stimulation. Solid-State Circuits Conference, 2008 ESSCIRC 2008 34th European, 2007, , .	0.0	3
140	A signal conditioner for high-frequency inductive position sensors. , 2008, , .		3
141	A dual-mode neural stimulator capable of delivering constant current in current-mode and high stimulus charge in semi-voltage-mode. , 2010, , .		3
142	Design of a stimulator ASIC for an implantable vestibular neural prosthesis. , 2010, , .		3
143	Towards an optimized wearable neuromodulation device for urinary incontinence. , 2012, , .		3
144	An implantable 3-D vestibular stimulator with neural recording. , 2012, , .		3

#	Article	lF	Citations
145	CMOS analog power meter and delay line for automatic efficiency optimization in medical power transmitters. , 2013 , , .		3
146	Design of a wideband CMOS impedance spectroscopy ASIC analog front-end for multichannel biosensor interfaces., 2015, 2015, 885-8.		3
147	Towards a Universal Methodology for Performance Evaluation of Electrical Impedance Tomography Systems using Full Reference SNR. , 2020, , .		3
148	Auditory filter-bank compression improves estimation of signal-to-noise ratio for speech in noise. Journal of the Acoustical Society of America, 2020, 147, 3197-3208.	1.1	3
149	A Power Efficient Time-to-Current Stimulator for Vagal-Cardiac Connection after Heart Transplantation., 2021,,.		3
150	Generation of Anatomically Inspired Human Airway Tree Using Electrical Impedance Tomography: A Method to Estimate Regional Lung Filling Characteristics. IEEE Transactions on Medical Imaging, 2022, 41, 1125-1137.	8.9	3
151	Implantable Stimulator Failures: Causes, Outcomes, and Solutions. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 5787-90.	0.5	2
152	A readout system for inductive position sensors. , 2007, , .		2
153	An ENG Amplifier with Passive EMG Neutralization. , 2007, , .		2
154	Adaptive EMG neutralization using the modified QT., 2008,,.		2
155	Prediction-Based Incremental Refinement for Binomially-Factorized Discrete Wavelet Transforms. IEEE Transactions on Signal Processing, 2010, 58, 4441-4447.	5.3	2
156	A DC-isolated fine-controlled neural stimulator. , 2010, , .		2
157	A telemetry operated vestibular prosthesis. , 2012, , .		2
158	Vestibular prosthesis design for restoring balance. Analog Integrated Circuits and Signal Processing, 2013, 77, 319-332.	1.4	2
159	Design of an implantable stimulator ASIC with self-adapting supply. , 2013, , .		2
160	Evaluation and optimization of the mechanical strength of bonds between metal foil and aluminium pads on thin ASICs using gold ball studs as micro-rivets. , 2014, , .		2
161	Efficiency optimization of class-D biomedical inductive wireless power transfer systems by means of frequency adjustment., 2015, 2015, 5473-6.		2
162	Design considerations and optimization of calorimetric flow sensor for respiratory monitoring. , 2016, , .		2

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163	An implantable wireless multi-channel neural prosthesis for epidural stimulation. , 2016, , .		2
164	Design of sEMG assembly to detect external anal sphincter activity: a proof of concept. Physiological Measurement, 2017, 38, L17-L27.	2.1	2
165	An Energy-Efficient 1.2V 4-Channel Wireless CMOS Potentiostat for Amperometric Biosensors. , 2018, , .		2
166	Towards a System for Tracking Drug Delivery Using Frequency Excited Gold Nanoparticles. Sensors, 2019, 19, 4750.	3.8	2
167	Live Demonstration: A Wearable Torso Shape Detection Belt for Lung Respiration Monitoring. , 2019, , .		2
168	A Power-Efficient Current Generator with Common Mode Signal Autozero Feedback for Bioimpedance Measurement Applications. , 2019, , .		2
169	Monitoring Myocardial Edema Tissue with Electrical Impedance Spectroscopy. , 2020, , .		2
170	A Fast and Reliable Three-Dimensional Centerline Tracing: Application to Virtual Cochlear Implant Surgery. IEEE Access, 2020, 8, 167757-167766.	4.2	2
171	An Active Microchannel Neural Interface with Artifact Reduction. , 2021, , .		2
172	A Discrete Wavelet Transform-Based Voice Activity Detection and Noise Classification with Sub-Band Selection. , 2021, , .		2
173	A Safe Transmission Strategy for Power and Data Recovery in Biomedical Implanted Devices. , 2007, , .		1
174	Myoelectric and Common-Mode Interference Rejection in a Quasi-Tripole Amplifier Configuration. , 2007, , .		1
175	A 14-mW, 153.6-MHz clock-rate Δ∑ modulator for WCDMA with 77-dB SFDR using constant resistance CMOS input sampling switch. Solid-State Circuits Conference, 2008 ESSCIRC 2008 34th European, 2007, , .	0.0	1
176	A DC coupled signal acquisition system with ultra-wide input range. , 2008, , .		1
177	Design of a stimulator ASIC for active electrode books. , 2010, , .		1
178	A stimulator ASIC with capability of neural recording during inter-phase delay. , 2011, , .		1
179	CBSC-based pipelined analog-to-digital converters: Power dissipation bound analysis. , 2012, , .		1
180	Analog-to-digital converters power dissipation limits of CBSC-based pipelined., 2013,,.		1

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181	Output stage of a dynamic current steering deep brain stimulator. , 2015, , .		1
182	An integrated CMOS current driver using nonlinear feedback for bioimpedance applications. , 2015, , .		1
183	An improved wideband CMOS current driver for bioimpedance applications. , 2016, , .		1
184	Update From the Editor-in-Chief. IEEE Transactions on Circuits and Systems I: Regular Papers, 2017, 64, 1-2.	5.4	1
185	A highly accurate spike sorting processor with reconfigurable embedded frames for unsupervised and adaptive analysis of neural signals. , 2017, , .		1
186	A Capacitance-to-Digits Readout Circuit for Integrated Humidity Sensors for Monitoring the In-Package Humidity of Ultra-Small Medical Implants. , 2018, , .		1
187	Asymmetrical Sensing Configuration for Improved Sensitivity in Calorimetric High Flow Measurements in Constant Power Mode. , 2018, , .		1
188	CMOS Differential Stage with Improved DC Gain, CMRR and PSRR Performance., 2019,,.		1
189	Locating Functionalized Gold Nanoparticles Using Electrical Impedance Tomography. IEEE Transactions on Biomedical Engineering, 2021, PP, 1-1.	4.2	1
190	Cross-sectional chest circumference and shape development in infants. BMC Research Notes, 2022, 15, .	1.4	1
191	A Low-Power Recursive I/Q Signal Generator and Current Driver for Bioimpedance Applications. IEEE Transactions on Circuits and Systems II: Express Briefs, 2022, 69, 4108-4112.	3.0	1
192	An Implantable Phase Locked Loop MEMS-Based Readout System for Heart Transplantation. IEEE Transactions on Circuits and Systems II: Express Briefs, 2022, 69, 4168-4172.	3.0	1
193	A Segmented Analog Calibration Scheme for Low-Power Multi-Bit Pipeline ADCs. , 2006, , .		O
194	A Miniaturized, Power-Efficent Stimulator Output Stage Based on the Bridge Rectifier Circuit., 2006, , .		0
195	A synchronous chopping technique and implementation for high-frequency precision sensing. , 2008, ,		O
196	An integrated design for the front-end of an inductive position sensor. , 2008, , .		0
197	A fast and safe discharge circuit for implantable stimulators using a depletion transistor. , 2009, , .		O
198	Comparision of methods for interference neutralisation in tripolar nerve recording cuffs. , 2010, , .		O

#	Article	IF	CITATIONS
199	A current generator circuit for tripolar stimulation and insensitive to temperature and supply variations. , 2010, , .		0
200	Achieving electric field steering in deep brain stimulation. , 2011, , .		0
201	A wideband CMOS current driver for bioimpedance applications with output DC regulation. , 2013, , .		0
202	A 1-Wire& $\#$ x00AE; communication interface between a control hub and locally powered epidural stimulators., 2013,,.		0
203	Suitable compensation circuits for on-chip interference reduction in neural tripolar recordings., 2013,,.		0
204	Q-enhancement with on-chip inductor optimization for reconfigurable Δ-Σ radio-frequency ADC., 2015,,.		0
205	Compact pixel architecture for CMOS lateral flow immunoassay readout systems. , 2017, , .		0
206	Outgoing Editorial. IEEE Transactions on Circuits and Systems I: Regular Papers, 2019, 66, 4555-4556.	5.4	0
207	Live Demonstration: Performance Evaluation of Electrical Impedance Tomography Systems using a Color-Coded Full Reference SNR Method. , 2020, , .		0
208	Live Demonstration: A Wearable Multi-Sensory Platform for Closed-Loop Optical Stimulation Control in Treating Muscle Paralysis. , 2020, , .		0
209	Real Time Non-Invasive Hemodynamic Assessment of Ventricular Tachycardia. IEEE Access, 2020, 8, 138652-138660.	4.2	0
210	RF Wireless Power Transfer for EIT Neonate Lung Function Monitoring. , 2021, , .		0
211	Electrical Biosensors: Peripheral Nerve Sensors. , 2015, , 1-21.		0
212	Electrical Biosensors: Peripheral Nerve Sensors. , 2022, , 65-85.		0
213	Design of a CMOS Analog Front-End for Wearable A-Mode Ultrasound Hand Gesture Recognition. , 2022, , .		O