Maysam Ghovanloo

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/2156237/publications.pdf

Version: 2024-02-01

295 papers	8,939 citations	57758 44 h-index	56724 83 g-index
299 all docs	299 docs citations	299 times ranked	5176 citing authors

#	Article	IF	Citations
1	Design and Optimization of Printed Spiral Coils for Efficient Transcutaneous Inductive Power Transmission. IEEE Transactions on Biomedical Circuits and Systems, 2007, 1, 193-202.	4.0	540
2	Design and Optimization of a 3-Coil Inductive Link for Efficient Wireless Power Transmission. IEEE Transactions on Biomedical Circuits and Systems, 2011, 5, 579-591.	4.0	505
3	The Circuit Theory Behind Coupled-Mode Magnetic Resonance-Based Wireless Power Transmission. IEEE Transactions on Circuits and Systems I: Regular Papers, 2012, 59, 2065-2074.	5.4	345
4	Fully integrated wideband high-current rectifiers for inductively powered devices. IEEE Journal of Solid-State Circuits, 2004, 39, 1976-1984.	5.4	259
5	Modeling and Optimization of Printed Spiral Coils in Air, Saline, and Muscle Tissue Environments. IEEE Transactions on Biomedical Circuits and Systems, 2009, 3, 339-347.	4.0	256
6	Optimal Design of Wireless Power Transmission Links for Millimeter-Sized Biomedical Implants. IEEE Transactions on Biomedical Circuits and Systems, 2016, 10, 125-137.	4.0	200
7	A Magneto-Inductive Sensor Based Wireless Tongue-Computer Interface. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2008, 16, 497-504.	4.9	198
8	An Integrated Power-Efficient Active Rectifier With Offset-Controlled High Speed Comparators for Inductively Powered Applications. IEEE Transactions on Circuits and Systems I: Regular Papers, 2011, 58, 1749-1760.	5.4	197
9	Dual-task motor performance with a tongue-operated assistive technology compared with hand operations. Journal of NeuroEngineering and Rehabilitation, 2012, 9, 1.	4.6	179
10	A Power-Efficient Wireless System With Adaptive Supply Control for Deep Brain Stimulation. IEEE Journal of Solid-State Circuits, 2013, 48, 2203-2216.	5.4	177
11	A Wide-Band Power-Efficient Inductive Wireless Link for Implantable Microelectronic Devices Using Multiple Carriers. IEEE Transactions on Circuits and Systems Part 1: Regular Papers, 2007, 54, 2211-2221.	0.1	171
12	An Inductively Powered Scalable 32-Channel Wireless Neural Recording System-on-a-Chip for Neuroscience Applications. IEEE Transactions on Biomedical Circuits and Systems, 2010, 4, 360-371.	4.0	161
13	An RFID-Based Closed-Loop Wireless Power Transmission System for Biomedical Applications. IEEE Transactions on Circuits and Systems II: Express Briefs, 2010, 57, 260-264.	3.0	134
14	A Modular 32-site wireless neural stimulation microsystem. IEEE Journal of Solid-State Circuits, 2004, 39, 2457-2466.	5.4	129
15	A Wireless Implantable Multichannel Microstimulating System-on-a-Chip With Modular Architecture. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2007, 15, 449-457.	4.9	125
16	A Triple-Loop Inductive Power Transmission System for Biomedical Applications. IEEE Transactions on Biomedical Circuits and Systems, 2016, 10, 138-148.	4.0	120
17	A Compact Large Voltage-Compliance High Output-Impedance Programmable Current Source for Implantable Microstimulators. IEEE Transactions on Biomedical Engineering, 2005, 52, 97-105.	4.2	117
18	A Power-Efficient Switched-Capacitor Stimulating System for Electrical/Optical Deep Brain Stimulation. IEEE Journal of Solid-State Circuits, 2015, 50, 360-374.	5.4	117

#	Article	IF	Citations
19	A Figure-of-Merit for Designing High-Performance Inductive Power Transmission Links. IEEE Transactions on Industrial Electronics, 2013, 60, 5292-5305.	7.9	115
20	An inductively powered scalable 32-channel wireless neural recording system-on-a-chip for neuroscience applications. , 2010, 2010, 120-121.		111
21	Optimization of Data Coils in a Multiband Wireless Link for Neuroprosthetic Implantable Devices. IEEE Transactions on Biomedical Circuits and Systems, 2010, 4, 301-310.	4.0	104
22	The Tongue Enables Computer and Wheelchair Control for People with Spinal Cord Injury. Science Translational Medicine, 2013, 5, 213ra166.	12.4	96
23	Robust Wireless Power Transmission to mm-Sized Free-Floating Distributed Implants. IEEE Transactions on Biomedical Circuits and Systems, 2017, 11, 692-702.	4.0	94
24	A Low-Noise Preamplifier with Adjustable Gain and Bandwidth for Biopotential Recording Applications. , 2007, , .		93
25	Evaluation of a wireless wearable tongueâ€“computer interface by individuals with high-level spinal cord injuries. Journal of Neural Engineering, 2010, 7, 026008.	3.5	90
26	Using Unconstrained Tongue Motion as an Alternative Control Mechanism for Wheeled Mobility. IEEE Transactions on Biomedical Engineering, 2009, 56, 1719-1726.	4.2	85
27	A 13.56-Mbps Pulse Delay Modulation Based Transceiver for Simultaneous Near-Field Data and Power Transmission. IEEE Transactions on Biomedical Circuits and Systems, 2015, 9, 1-11.	4.0	78
28	An Implantable Peripheral Nerve Recording and Stimulation System for Experiments on Freely Moving Animal Subjects. Scientific Reports, 2018, 8, 6115.	3.3	77
29	Design, fabrication, and packaging of an integrated, wirelessly-powered optrode array for optogenetics application. Frontiers in Systems Neuroscience, 2015, 9, 69.	2.5	76
30	An Integrated Full-Wave CMOS Rectifier With Built-In Back Telemetry for RFID and Implantable Biomedical Applications. IEEE Transactions on Circuits and Systems I: Regular Papers, 2008, 55, 3328-3334.	5.4	73
31	A Q-Modulation Technique for Efficient Inductive Power Transmission. IEEE Journal of Solid-State Circuits, 2015, 50, 2839-2848.	5.4	71
32	A Wireless Magnetoresistive Sensing System for an Intraoral Tongue-Computer Interface. IEEE Transactions on Biomedical Circuits and Systems, 2012, 6, 571-585.	4.0	65
33	A Trimodal Wireless Implantable Neural Interface System-on-Chip. IEEE Transactions on Biomedical Circuits and Systems, 2020, 14, 1207-1217.	4.0	58
34	Geometrical Design of a Scalable Overlapping Planar Spiral Coil Array to Generate a Homogeneous Magnetic Field. IEEE Transactions on Magnetics, 2013, 49, 2933-2945.	2.1	56
35	An adaptive reconfigurable active voltage doubler/rectifier for extended-range inductive power transmission. , 2012, , 286-288.		55
36	Evaluation of a Smartphone Platform as a Wireless Interface Between Tongue Drive System and Electric-Powered Wheelchairs. IEEE Transactions on Biomedical Engineering, 2012, 59, 1787-1796.	4.2	55

#	Article	IF	Citations
37	A 10.2 Mbps Pulse Harmonic Modulation Based Transceiver for Implantable Medical Devices. IEEE Journal of Solid-State Circuits, 2011, 46, 1296-1306.	5.4	53
38	An Adaptive Reconfigurable Active Voltage Doubler/Rectifier for Extended-Range Inductive Power Transmission. IEEE Transactions on Circuits and Systems II: Express Briefs, 2012, 59, 481-485.	3.0	53
39	An Inductively-Powered Wireless Neural Recording and Stimulation System for Freely-Behaving Animals. IEEE Transactions on Biomedical Circuits and Systems, 2019, 13, 413-424.	4.0	53
40	Unobtrusive and Wearable Systems for Automatic Dietary Monitoring. IEEE Transactions on Biomedical Engineering, 2017, 64, 2075-2089.	4.2	52
41	Three-Phase Time-Multiplexed Planar Power Transmission to Distributed Implants. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2016, 4, 263-272.	5.4	51
42	Analytical Modeling and Optimization of Small Solenoid Coils for Millimeter-Sized Biomedical Implants. IEEE Transactions on Microwave Theory and Techniques, 2017, 65, 1024-1035.	4.6	51
43	Active High Power Conversion Efficiency Rectifier With Built-In Dual-Mode Back Telemetry in Standard CMOS Technology. IEEE Transactions on Biomedical Circuits and Systems, 2008, 2, 184-192.	4.0	50
44	EnerCage: A Smart Experimental Arena With Scalable Architecture for Behavioral Experiments. IEEE Transactions on Biomedical Engineering, 2014, 61, 139-148.	4.2	50
45	Position and Orientation Insensitive Wireless Power Transmission for EnerCage-Homecage System. IEEE Transactions on Biomedical Engineering, 2017, 64, 2439-2449.	4.2	50
46	A High Frequency Active Voltage Doubler in Standard CMOS Using Offset-Controlled Comparators for Inductive Power Transmission. IEEE Transactions on Biomedical Circuits and Systems, 2013, 7, 213-224.	4.0	49
47	Introduction and preliminary evaluation of the Tongue Drive System: Wireless tongue-operated assistive technology for people with little or no upper-limb function. Journal of Rehabilitation Research and Development, 2008, 45, 921-930.	1.6	46
48	An Experimental Study of Voltage, Current, and Charge Controlled Stimulation Front-End Circuitry. , 2007, , .		45
49	Assessment of the Tongue-Drive System Using a Computer, a Smartphone, and a Powered-Wheelchair by People With Tetraplegia. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2016, 24, 68-78.	4.9	44
50	Wideband Near-Field Data Transmission Using Pulse Harmonic Modulation. IEEE Transactions on Circuits and Systems I: Regular Papers, 2011, 58, 186-195.	5.4	43
51	All-soft, battery-free, and wireless chemical sensing platform based on liquid metal for liquid- and gas-phase VOC detection. Lab on A Chip, 2017, 17, 2323-2329.	6.0	40
52	PANACEA: An Internet of Bio-NanoThings Application for Early Detection and Mitigation of Infectious Diseases. IEEE Access, 2020, 8, 140512-140523.	4.2	40
53	Energyâ€efficient switching scheme in SAR ADC for biomedical electronics. Electronics Letters, 2015, 51, 676-678.	1.0	39
54	A Smart Wirelessly Powered Homecage for Long-Term High-Throughput Behavioral Experiments. IEEE Sensors Journal, 2015, 15, 4905-4916.	4.7	39

#	Article	IF	Citations
55	Wireless opto-electro neural interface for experiments with small freely behaving animals. Journal of Neural Engineering, 2018, 15, 046032.	3.5	39
56	Enhanced Wireless Power Transmission Using Strong Paramagnetic Response. IEEE Transactions on Magnetics, 2014, 50, 96-103.	2.1	38
57	An Inductively-Powered Wireless Neural Recording System With a Charge Sampling Analog Front-End. IEEE Sensors Journal, 2016, 16, 475-484.	4.7	38
58	Feasibility Study on Active Back Telemetry and Power Transmission Through an Inductive Link for Millimeter-Sized Biomedical Implants. IEEE Transactions on Biomedical Circuits and Systems, 2017, 11, 1366-1376.	4.0	38
59	Chip-Scale Coils for Millimeter-Sized Bio-Implants. IEEE Transactions on Biomedical Circuits and Systems, 2018, 12, 1088-1099.	4.0	38
60	Quantitative and Comparative Assessment of Learning in a Tongue-Operated Computer Input Device. IEEE Transactions on Information Technology in Biomedicine, 2011, 15, 747-757.	3.2	37
61	Towards a Smart Experimental Arena for Long-Term Electrophysiology Experiments. IEEE Transactions on Biomedical Circuits and Systems, 2012, 6, 414-423.	4.0	37
62	A Multicycle Q-Modulation for Dynamic Optimization of Inductive Links. IEEE Transactions on Industrial Electronics, 2016, 63, 5091-5100.	7.9	37
63	Towards a Reduced-Wire Interface for CMUT-Based Intravascular Ultrasound Imaging Systems. IEEE Transactions on Biomedical Circuits and Systems, 2017, 11, 400-410.	4.0	37
64	A Dual-Mode Human Computer Interface Combining Speech and Tongue Motion for People with Severe Disabilities. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2013, 21, 979-991.	4.9	36
65	An Overview of Data Telemetry in Inductively Powered Implantable Biomedical Devices. IEEE Communications Magazine, 2019, 57, 74-80.	6.1	36
66	A 20-Mb/s Pulse Harmonic Modulation Transceiver for Wideband Near-Field Data Transmission. IEEE Transactions on Circuits and Systems II: Express Briefs, 2013, 60, 382-386.	3.0	35
67	A Dual-Band Wireless Power Transmission System for Evaluating mm-Sized Implants. IEEE Transactions on Biomedical Circuits and Systems, 2019, 13, 595-607.	4.0	34
68	Chronic Electrical Stimulation Promotes the Excitability and Plasticity of ESC-derived Neurons following Glutamate-induced Inhibition In vitro. Scientific Reports, 2018, 8, 10957.	3.3	33
69	A mm-Sized Free-Floating Wirelessly Powered Implantable Optical Stimulation Device. IEEE Transactions on Biomedical Circuits and Systems, 2019, 13, 608-618.	4.0	33
70	Tongue drive: a wireless tongue- operated means for people with severe disabilities to communicate their intentions. , 2012, 50, 128-135.		32
71	Real-time swallowing detection based on tracheal acoustics. , 2014, , .		32
72	A Power-Efficient Wireless Capacitor Charging System Through an Inductive Link. IEEE Transactions on Circuits and Systems II: Express Briefs, 2013, 60, 707-711.	3.0	31

#	Article	IF	Citations
73	Fabrication and Microassembly of a mm-Sized Floating Probe for a Distributed Wireless Neural Interface. Micromachines, 2016, 7, 154.	2.9	31
74	A mm-sized free-floating wirelessly powered implantable optical stimulating system-on-a-chip. , 2018, , .		31
75	Fully-Integrated CMOS Power Regulator for Telemetry-Powered Implantable Biomedical Microsystems. , 2006, , .		30
76	Using Pulse Width Modulation for Wireless Transmission of Neural Signals in Multichannel Neural Recording Systems. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2009, 17, 354-363.	4.9	30
77	Analysis, design, and implementation of a high-efficiency full-wave rectifier in standard CMOS technology. Analog Integrated Circuits and Signal Processing, 2009, 60, 71-81.	1.4	30
78	Tongue-Controlled Computer Game: A New Approach for Rehabilitation of Tongue Motor Function. Archives of Physical Medicine and Rehabilitation, 2014, 95, 524-530.	0.9	30
79	Quantitative and Comparative Assessment of Learning in a Tongue-Operated Computer Input Deviceâ€“Part II: Navigation Tasks. IEEE Transactions on Information Technology in Biomedicine, 2012, 16, 633-643.	3.2	29
80	A Wideband Dual-Antenna Receiver for Wireless Recording From Animals Behaving in Large Arenas. IEEE Transactions on Biomedical Engineering, 2013, 60, 1993-2004.	4.2	29
81	A Wirelessly-Powered Homecage With Segmented Copper Foils and Closed-Loop Power Control. IEEE Transactions on Biomedical Circuits and Systems, 2016, 10, 979-989.	4.0	29
82	A Deep Neural Network-Based Permanent Magnet Localization for Tongue Tracking. IEEE Sensors Journal, 2019, 19, 9324-9331.	4.7	29
83	A low-noise clockless simultaneous 32-channel wireless neural recording system with adjustable resolution. Analog Integrated Circuits and Signal Processing, 2011, 66, 417-431.	1.4	27
84	Towards a 1.1 mm² free-floating wireless implantable neural recording SoC. , 2018, , .		27
85	Simultaneous Multimodal PC Access for People With Disabilities by Integrating Head Tracking, Speech Recognition, and Tongue Motion. IEEE Transactions on Biomedical Circuits and Systems, 2018, 12, 192-201.	4.0	26
86	Qualitative assessment of Tongue Drive System by people with high-level spinal cord injury. Journal of Rehabilitation Research and Development, 2014, 51, 451-466.	1.6	25
87	Direct Digital Demultiplexing of Analog TDM Signals for Cable Reduction in Ultrasound Imaging Catheters. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2016, 63, 1078-1085.	3.0	25
88	Multimodal Speech Capture System for Speech Rehabilitation and Learning. IEEE Transactions on Biomedical Engineering, 2017, 64, 2639-2649.	4.2	25
89	Antennas for Intraoral Tongue Drive System at 2.4 GHz: Design, Characterization, and Comparison. IEEE Transactions on Microwave Theory and Techniques, 2018, 66, 2546-2555.	4.6	25
90	An automated behavior analysis system for freely moving rodents using depth image. Medical and Biological Engineering and Computing, 2018, 56, 1807-1821.	2.8	25

#	Article	IF	Citations
91	A Reconfigurable Passive RF-to-DC Converter for Wireless IoT Applications. IEEE Transactions on Circuits and Systems II: Express Briefs, 2019, 66, 1800-1804.	3.0	25
92	An Arch-Shaped Intraoral Tongue Drive System with Built-in Tongue-Computer Interfacing SoC. Sensors, 2014, 14, 21565-21587.	3.8	24
93	A wireless slanted optrode array with integrated micro leds for optogenetics. , 2014, , .		24
94	Toward Silent-Speech Control of Consumer Wearables. Computer, 2015, 48, 54-62.	1.1	24
95	A Low-Power Wearable Stand-Alone Tongue Drive System for People With Severe Disabilities. IEEE Transactions on Biomedical Circuits and Systems, 2018, 12, 58-67.	4.0	24
96	A Reduced-Wire ICE Catheter ASIC With Tx Beamforming and Rx Time-Division Multiplexing. IEEE Transactions on Biomedical Circuits and Systems, 2018, 12, 1246-1255.	4.0	24
97	Towards a Switched-Capacitor based Stimulator for efficient deep-brain stimulation. , 2010, 2010, 2927-30.		23
98	Force and complexity of tongue task training influences behavioral measures of motor learning. European Journal of Oral Sciences, 2012, 120, 46-53.	1.5	23
99	12.7 A power-management ASIC with Q-modulation capability for efficient inductive power transmission. , 2015, , .		23
100	A Vision-Based Respiration Monitoring System for Passive Airway Resistance Estimation. IEEE Transactions on Biomedical Engineering, 2016, 63, 1904-1913.	4.2	23
101	Power Management in Wireless Power-Sipping Devices: A Survey. IEEE Circuits and Systems Magazine, 2017, 17, 64-82.	2.3	23
102	Tongue Operated Assistive Technologies. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 4376-9.	0.5	22
103	A Wireless Tongue-Computer Interface Using Stereo Differential Magnetic Field Measurement. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 5724-7.	0.5	22
104	Wireless control of powered wheelchairs with tongue motion using tongue drive assistive technology. , 2008, 2008, 4199-202.		22
105	Towards a magnetic localization system for 3-D tracking of tongue movements in speech-language therapy. , 2009, 2009, 563-6.		21
106	Joint Magnetic Calibration and Localization Based on Expectation Maximization for Tongue Tracking. IEEE Transactions on Biomedical Engineering, 2018, 65, 52-63.	4.2	21
107	Wireless Communication of Intraoral Devices and Its Optimal Frequency Selection. IEEE Transactions on Microwave Theory and Techniques, 2014, 62, 3205-3215.	4.6	20
108	Adaptive Matching Transmitter With Dual-Band Antenna for Intraoral Tongue Drive System. IEEE Transactions on Biomedical Circuits and Systems, 2018, 12, 1279-1288.	4.0	20

#	Article	IF	Citations
109	Time to address the problems at the neural interface. Journal of Neural Engineering, 2014, 11, 020201.	3.5	19
110	An Adaptive Averaging Low Noise Front-End for Central and Peripheral Nerve Recording. IEEE Transactions on Circuits and Systems II: Express Briefs, 2018, 65, 839-843.	3.0	19
111	A passive quantitative measurement of airway resistance using depth data. , 2014, 2014, 5743-7.		18
112	A Magnetic Wireless Tongue-Computer Interface. , 2007, , .		17
113	Incorporating Back Telemetry in a Full-Wave CMOS Rectifier for RFID and Biomedical Applications. , 2007, , .		17
114	Motivational conditions influence tongue motor performance. European Journal of Oral Sciences, 2013, 121, 111-116.	1.5	17
115	Optimal Design of a Resonance-Based Voltage Boosting Rectifier for Wireless Power Transmission. IEEE Transactions on Industrial Electronics, 2018, 65, 1645-1654.	7.9	17
116	The Helping Hand: An Assistive Manipulation Framework Using Augmented Reality and Tongue-Drive Interfaces. , 2018, 2018, 2158-2161.		17
117	Design and Optimization of Printed Spiral Coils for Efficient Inductive Power Transmission. , 2007, , .		16
118	Fully integrated power-efficient AC-to-DC converter design in inductively-powered biomedical applications. , 2011, , .		16
119	Command detection and classification in tongue drive assistive technology. , 2011, 2011, 5465-8.		16
120	A multimodal human computer interface combining head movement, speech and tongue motion for people with severe disabilities. , 2015, , .		16
121	Towards a kinect-based behavior recognition and analysis system for small animals. , 2015, , .		16
122	Optimization of Tongue Gesture Processing Algorithm for Standalone Multimodal Tongue Drive System. IEEE Sensors Journal, 2019, 19, 2704-2712.	4.7	16
123	Optimal design of a 3-coil inductive link for millimeter-sized biomedical implants. , 2016, , .		15
124	Highly Integrated Guidewire Ultrasound Imaging System-on-a-Chip. IEEE Journal of Solid-State Circuits, 2020, 55, 1310-1323.	5.4	15
125	A clockless ultra low-noise low-power wireless implantable neural recording system. , 2008, , .		14
126	Wireless control of smartphones with tongue motion using tongue drive assistive technology. , 2010, 2010, 5250-3.		14

#	Article	IF	Citations
127	Detecting food intake acoustic events in noisy recordings using template matching. , 2016, , .		14
128	A dual-mode passive rectifier for wide-range input power flow. , 2017, , .		14
129	Stimulation Efficiency with Decaying Exponential Waveforms in a Wirelessly-Powered Switched-Capacitor Discharge Stimulation System. IEEE Transactions on Biomedical Engineering, 2017, 65, 1-1.	4.2	14
130	26.8 A Trimodal Wireless Implantable Neural Interface System-on-Chip. , 2020, , .		14
131	Evaluation of a closed loop inductive power transmission system on an awake behaving animal subject. , 2011, 2011, 7658-61.		13
132	Multichannel Wireless Neural Recording AFE Architectures: Analysis, Modeling, and Tradeoffs. IEEE Design and Test, 2016, 33, 24-36.	1.2	13
133	Supply-Doubled Pulse-Shaping High Voltage Pulser for CMUT Arrays. IEEE Transactions on Circuits and Systems II: Express Briefs, 2018, 65, 306-310.	3.0	13
134	Optimal Design of Passive Resonating Wireless Sensors for Wearable and Implantable Devices. IEEE Sensors Journal, 2019, 19, 7460-7470.	4.7	13
135	A Reconfigurable Passive Voltage Multiplier for Wireless Mobile IoT Applications. IEEE Transactions on Circuits and Systems II: Express Briefs, 2020, 67, 615-619.	3.0	13
136	Safety and Efficacy of Medically Performed Tongue Piercing in People with Tetraplegia for Use with Tongue-Operated Assistive Technology. Topics in Spinal Cord Injury Rehabilitation, 2015, 21, 61-76.	1.8	13
137	Tracheal activity recognition based on acoustic signals. , 2014, 2014, 1436-9.		12
138	Toward an Ultralow-Power Onboard Processor for Tongue Drive System. IEEE Transactions on Circuits and Systems II: Express Briefs, 2015, 62, 174-178.	3.0	12
139	Comparing the Use of Single Versus Multiple Combined Abilities in Conducting Complex Computer Tasks Hands-Free. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2018, 26, 1868-1877.	4.9	12
140	An Independent Tongue-Operated Assistive System for Both Access and Mobility. IEEE Sensors Journal, 2018, 18, 9401-9409.	4.7	12
141	A Stand-Alone Intraoral Tongue-Controlled Computer Interface for People With Tetraplegia. IEEE Transactions on Biomedical Circuits and Systems, 2019, 13, 848-857.	4.0	12
142	Analytical Modeling of Small, Solenoidal, and Implantable Coils With Ferrite Tube Core. IEEE Microwave and Wireless Components Letters, 2019, 29, 237-239.	3.2	12
143	Inductively coupled, mm-sized, single channel optical neuro-stimulator with intensity enhancer. Microsystems and Nanoengineering, 2019, 5, 23.	7.0	12
144	A Power-Efficient Bridge Readout Circuit for Implantable, Wearable, and IoT Applications. IEEE Sensors Journal, 2020, 20, 9955-9962.	4.7	12

#	Article	IF	Citations
145	Using Fitts's law for evaluating Tongue Drive System as a pointing device for computer access. , 2010, 2010, 4403-6.		11
146	Tongue-controlled robotic rehabilitation: A feasibility study in people with stroke. Journal of Rehabilitation Research and Development, 2016, 53, 989-1006.	1.6	11
147	Tongue implant for assistive technologies: Test of migration, tissue reactivity and impact on tongue function. Archives of Oral Biology, 2016, 71, 1-9.	1.8	11
148	A High-Voltage Output Driver for Implantable Biomedical Stimulators and I/O Applications. , 2006, , .		10
149	Millimeter-scale integrated and wirewound coils for powering implantable neural microsystems. , 2017, , .		10
150	A Bio-Impedance Measurement IC for Neural Interface Applications. , 2018, , .		10
151	An Impulse Radio PWM-Based Wireless Data Acquisition Sensor Interface. IEEE Sensors Journal, 2019, 19, 603-614.	4.7	10
152	A Multiphase Resonance-Based Boosting Rectifier With Dual Outputs for Wireless Power Transmission. IEEE Transactions on Power Electronics, 2020, 35, 2680-2689.	7.9	10
153	A multichannel monolithic wireless microstimulator. , 2004, 2004, 4197-200.		9
154	A 15-Channel Wireless Neural Recording System Based on Time Division Multiplexing of Pulse Width Modulated Signals. , 2006, , .		9
155	Using Pulse Width Modulation for Wireless Transmission of Neural Signals in a Multichannel Neural Recording System. , 2007, , .		9
156	Optimization of a multiband wireless link for neuroprosthetic implantable devices. , 2008, , .		9
157	A wideband PWM-FSK receiver for wireless implantable neural recording applications. , 2008, , .		9
158	A comprehensive method for magnetic sensor calibration: A precise system for 3-D tracking of the tongue movements. , 2012, 2012, 1153-1156.		9
159	Design, modeling and characterization of a 35MHz 1-D CMUT phased array. , 2013, , .		9
160	Design of frequency-division multiplexing front-end receiver electronics for CMUT-on-CMOS based intracardiac echocardiography. , 2014, , .		9
161	Toward a distributed free-floating wireless implantable neural recording system. , 2016, 2016, 4495-4498.		9
162	A Software-Defined Radio Receiver for Wireless Recording From Freely Behaving Animals. IEEE Transactions on Biomedical Circuits and Systems, 2019, 13, 1645-1654.	4.0	9

#	Article	IF	Citations
163	A Wireless Pharmaceutical Compliance Monitoring System Based on Magneto-Inductive Sensors. IEEE Sensors Journal, 2007, 7, 1711-1719.	4.7	8
164	A high efficiency full-wave rectifier in standard CMOS Technology. Midwest Symposium on Circuits and Systems, 2007, , .	1.0	8
165	A wireless implantable switched-capacitor based optogenetic stimulating system. , 2014, 2014, 878-81.		8
166	Time-division multiplexing for cable reduction in ultrasound imaging catheters. , 2015, , .		8
167	Advanced wireless power and data transmission techniques for implantable medical devices. , 2015, , .		8
168	A closed-loop wireless homecage for optogenetic stimulation experiments. , 2015, , .		8
169	Single-Chip Reduced-Wire CMUT-on-CMOS System for Intracardiac Echocardiography. , 2018, , .		8
170	Triple-Band Transmitter with a Shared Dual-Band Antenna and Adaptive Matching for an Intraoral Tongue Drive System. , 2018, , .		8
171	A miniaturized, wirelessly-powered, reflector-coupled single channel opto neurostimulator. , 2018, , .		8
172	Single-chip reduced-wire active catheter system with programmable transmit beamforming and receive time-division multiplexing for intracardiac echocardiography. , 2018, , .		8
173	A wireless magnetoresistive sensing system for an intra-oral tongue-computer interface. , 2012, , .		7
174	A dual slope charge sampling analog front-end for a wireless neural recording system. , 2014, 2014, 3134-7.		7
175	Older Adultsâ€™ Perceptions of a Neckwear Health Technology. Proceedings of the Human Factors and Ergonomics Society, 2014, 58, 1815-1819.	0.3	7
176	Efficacy Assessment of multimodal Tongue Drive System (mTDS) in Comparison to Keyboard and Mouse (KnM). Archives of Physical Medicine and Rehabilitation, 2017, 98, e163-e164.	0.9	7
177	Improving Upper Extremity Function and Quality of Life with a Tongue Driven Exoskeleton: A Pilot Study Quantifying Stroke Rehabilitation. Stroke Research and Treatment, 2017, 2017, 1-13.	0.8	7
178	Preliminary Test of a Wireless Magnetic Tongue Tracking System for Silent Speech Interface. , 2018, , .		7
179	An Adaptive Impedance Matching Transmitter for a Wireless Intraoral Tongue-Controlled Assistive Technology. IEEE Transactions on Circuits and Systems II: Express Briefs, 2020, 67, 240-244.	3.0	7
180	Toward a High-Throughput Wireless Smart Arena for Behavioral Experiments on Small Animals. IEEE Transactions on Biomedical Engineering, 2020, 67, 2359-2369.	4.2	7

#	Article	IF	Citations
181	A closed loop wireless power transmission system using a commercial RFID transceiver for biomedical applications. , 2009, 2009, 3841-4.		6
182	An overview of the recent wideband transcutaneous wireless communication techniques. , 2011, 2011, 5864-7.		6
183	Towards a smart experimental arena for long-term electrophysiology experiments. , 2011, , .		6
184	A high-performance analog front-end for an intraoral tongue-operated assistive technology. , 2011, , .		6
185	Preliminary assessment of Tongue Drive System in medium term usage for computer access and wheelchair control. , 2011, 2011, 5766-9.		6
186	A figure-of-merit for design of high performance inductive power transmission links for implantable microelectronic devices. , 2012, 2012, 847-50.		6
187	Toward a reduced-wire readout system for ultrasound imaging. , 2014, 2014, 5080-4.		6
188	Source separation for target enhancement of food intake acoustics from noisy recordings. , 2015, , .		6
189	A wirelessly-powered homecage with animal behavior analysis and closed-loop power control. , 2016, 2016, 6323-6326.		6
190	Towards a free-floating wireless implantable optogenetic stimulating system. , 2017, , .		6
191	Simultaneous Multimodal Access to Wheelchair and Computer for People with Tetraplegia. , 2018, , .		6
192	Early Decoding of Tongue-Hand Movement from EEG Recordings Using Dynamic Functional Connectivity Graphs. , 2019, , .		6
193	Design and Fabricate Neckwear to Improve the Elderly Patientsâ€™ Medical Compliance. Lecture Notes in Computer Science, 2015, , 222-234.	1.3	6
194	A Wideband Wireless Neural Stimulation Platform for High-Density Microelectrode Arrays. , 2006, 2006, 4404-7.		5
195	Using Magneto-Inductive Sensors to Detect Tongue Position in a Wireless Assistive Technology for People with Severe Disabilities. , 2007, , .		5
196	In vivo testing of a low noise 32-channel wireless neural recording system. , 2009, 2009, 1608-11.		5
197	Modeling and optimization of printed spiral coils in air and muscle tissue environments. , 2009, 2009, 6387-90.		5
198	New ergonomic headset for tongue-drive system with wireless smartphone interface. , 2011, 2011, 7344-7.		5

#	Article	IF	Citations
199	Development and preliminary evaluation of an intraoral tongue drive system. , 2012, 2012, 1157-60.		5
200	A 13-bit noise shaping SARâ€“ADC with dual-polarity digital calibration. Analog Integrated Circuits and Signal Processing, 2013, 75, 459-465.	1.4	5
201	A PWM-IR-UWB transceiver for low-power data communication. , 2014, , .		5
202	Development of a Tongue-Piercing Method for Use With Assistive Technology. JAMA Dermatology, 2014, 150, 453.	4.1	5
203	Towards a robust data link for intraoral tongue drive system using triple bands and adaptive matching. , 2017, , .		5
204	Towards a mm-Sized Free-Floating Wireless Implantable Opto-Electro Stimulation Device. , 2019, , .		5
205	Microfabrication, Coil Characterization, and Hermetic Packaging of Millimeter-Sized Free-Floating Neural Probes. IEEE Sensors Journal, 2021, 21, 13837-13848.	4.7	5
206	A back telemetry-capable active high efficiency rectifier in standard CMOS process. , 2008, , .		4
207	Evaluation of the tongue drive system by individuals with high-level spinal cord injury. , 2009, 2009, 555-8.		4
208	An efficient 13.56 MHz active back-telemetry rectifier in standard CMOS technology. , 2010, , .		4
209	Tongue-operated assistive technology with access to common smartphone applications via Bluetooth link. , 2012, 2012, 4054-7.		4
210	Guest Editorial: IEEE AWPL Special Cluster on Wireless Power and Data Telemetry for Medical Applications. IEEE Antennas and Wireless Propagation Letters, 2012, 11, 1638-1641.	4.0	4
211	An apparatus for improving upper limb function by engaging synchronous tongue motion. , 2013, , .		4
212	Smartphone-compatible robust classification algorithm for the Tongue Drive System. , 2014, , .		4
213	Towards a three-phase time-multiplexed planar power transmission to distributed implants. , 2015, , .		4
214	A multi-cycle Q-modulation technique for wirelessly-powered biomedical implants. , 2015, , .		4
215	Ultra-Thin Wireless Power Module with Integration of Wireless Inductive Link and Supercapacitors. , 2016, , .		4
216	Magnetic implants in the tongue for assistive technologies: Tests of migration; oromotor function; and tissue response in miniature pigs. Archives of Oral Biology, 2017, 81, 81-89.	1.8	4

#	Article	IF	Citations
217	Tapping into tongue motion to substitute or augment upper limbs. Proceedings of SPIE, 2017, , .	0.8	4
218	Optimizing three-phase three-layer coil array for omnidirectional wireless power transfer. , 2017, , .		4
219	Toward A Robust Multi-Antenna Receiver for Wireless Recording From Freely-Behaving Animals. , 2018, , .		4
220	Online Predictive Modeling for the Thermal Effect of Implantable Devices. , 2018, , .		4
221	Automated High-Throughput Hermetic Failure Monitoring System for Millimeter-Sized Wireless Implantable Medical Devices. , 2019, , .		4
222	A mm-Sized Free-Floating Wireless Implantable Opto-Electro Stimulation Device. Micromachines, 2020, 11, 621.	2.9	4
223	Design and Preliminary Evaluation of a Tongue-Operated Exoskeleton System for Upper Limb Rehabilitation. International Journal of Environmental Research and Public Health, 2021, 18, 8708.	2.6	4
224	Centimeter-Range Inductive Radios. Integrated Circuits and Systems, 2015, , 313-341.	0.2	4
225	A novel pulse-based modulation technique for wideband low power communication with neuroprosthetic devices. , 2010, 2010, 5326-9.		3
226	Radiation characterization of an intra-oral wireless device at multiple ISM bands: 433 MHZ, 915 MHZ, and 2.42 GHz. , 2010, 2010, 1425-8.		3
227	Using speech recognition to enhance the Tongue Drive System functionality in computer access. , 2011, 2011, 6393-6.		3
228	Intraoral tongue drive system demonstration. , 2012, , .		3
229	Real time control of a wireless powering and tracking system for long-term and large-area electrophysiology experiments. , 2012, , .		3
230	A smart cage for behavioral experiments on small freely behaving animal subjects. , 2013, , .		3
231	Motor performance of tongue with a computer-integrated system under different levels of background physical exertion. Ergonomics, 2013, 56, 1733-1744.	2.1	3
232	Modeling and optimization of mm-sized solenoid coils for biomedical implants. , 2016, , .		3
233	Front-end electronics for cable reduction in Intracardiac Echocardiography (ICE) catheters. , 2016, , .		3
234	An embedded FPGA accelerator for a stand-alone dual-mode assistive device. , 2017, , .		3

#	Article	IF	Citations
235	Standalone Assistive System to Employ Multiple Remaining Abilities in People with Tetraplegia. , 2018, , .		3
236	Hands-Free Assistive Manipulator Using Augmented Reality and Tongue Drive System. , 2018, , .		3
237	Development and Preliminary Assessment of an Arch-Shaped Stand-Alone Intraoral Tongue Drive System for People with Tetraplegia. , 2018, , .		3
238	Implantable and Wearable Sensors for Assistive Technologies. , 2023, , 449-473.		3
239	Power-Efficient Wireless Neural Stimulating System Design for Implantable Medical Devices. IEIE Transactions on Smart Processing and Computing, 2015, 4, 133-140.	0.4	3
240	An Ultrasound Imaging Front-End System-on-a-Chip with Element-Level Impedance Matching for Acoustic Reflectivity Reduction. , 2021, , .		3
241	Wideband flexible transmitter and receiver pair for implantable wireless neural recording applications. , 2007, , .		2
242	A quadratic particle swarm optimization method for magnetic tracking of tongue motion in speech disorders. , 2008, 2008, 4222-5.		2
243	A highly modular, wireless, implantable interface to the cortex. , 2009, , .		2
244	Effects of additional workload on hand and tongue performance. , 2010, 2010, 6611-4.		2
245	Quantitative assessment of magnetic sensor signal processing algorithms in a wireless tongue-operated assistive technology. , 2012, 2012, 3692-5.		2
246	Guest Editorial Closing the Loop via Advanced Neurotechnologies. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2012, 20, 407-409.	4.9	2
247	A smart homecage system with 3D tracking for long-term behavioral experiments. , 2014, 2014, 2016-9.		2
248	Developing a Tongue Controlled Exoskeleton for a Wrist Tracking Exercise: A Preliminary Study1. Journal of Medical Devices, Transactions of the ASME, 2015, 9, .	0.7	2
249	On-chip reduced wire transceiver for high frequency CMUT imaging system. , 2015, , .		2
250	Joint power and thermal management for implantable devices. , 2015, , .		2
251	Energy management integrated circuits for wireless power transmission. , 2015, , 87-111.		2
252	A Dual-Mode Magneticâ€“Acoustic System for Monitoring Fluid Intake Behavior in Animals. IEEE Transactions on Biomedical Engineering, 2017, 64, 2090-2097.	4.2	2

#	Article	IF	Citations
253	A Real-Time Embedded FPGA Processor for a Stand-Alone Dual-Mode Assistive Device. , 2017, , .		2
254	A feasibility study for MRI guided CMUT-based intracardiac echocardiography catheters. , 2017, , .		2
255	Towards Phoneme Landmarks Identification for American-English using a Multimodal Speech Capture System. , 2018, , .		2
256	Power Efficiency and Power Delivery Measurement in Inductive Links with Arbitrary Source and Load Impedance Values. , 2018, , .		2
257	Toward an Energy-Efficient Bridge-to-Digital Intracranial Pressure Sensing Interface. , 2018, , .		2
258	Supply-Inverted Bipolar Pulser and Tx/Rx Switch for CMUTs Above the Process Limit for High Pressure Pulse Generation. IEEE Sensors Journal, 2019, 19, 12050-12058.	4.7	2
259	Wearable and non-invasive assistive technologies. , 2021, , 593-627.		2
260	Back Telemetry. , 2021, , 77-91.		2
261	An Adaptive Element-Level Impedance-Matched ASIC With Improved Acoustic Reflectivity for Medical Ultrasound Imaging. IEEE Transactions on Biomedical Circuits and Systems, 2022, 16, 492-501.	4.0	2
262	A Magneto-Inductive Sensor Based Wireless Pharmaceutical Compliance Monitoring System. , 2007, , .		1
263	Tracking tongue movements for environment control using particle swarm optimization. , 2008, , .		1
264	Introduction to the Special Issue on the 2011 IEEE International Solid-State Circuits Conference. IEEE Journal of Solid-State Circuits, 2012, 47, 3-7.	5.4	1
265	Potential barriers in adoption of a medication compliance neckwear by elderly population. , 2013, 2013, 4678-81.		1
266	Near-Field Wireless Power and Data Transmission to Implantable Neuroprosthetic Devices. , 2014, , 189-215.		1
267	Towards a wireless multimodal speech capture system. , 2016, , .		1
268	An automated tracking system for Y-maze behavioral test using kinect depth imaging. , 2017, , .		1
269	Wireless coil array sensors for monitoring hermetic failure of millimeter-sized biomedical implants. , 2017, , .		1
270	A feasibility study for MRI guided CMUT-based intracardiac echocardiography catheters. , 2017, , .		1

#	Article	IF	Citations
271	Highly-integrated guidewire vascular ultrasound imaging system-on-a-chip. , 2018, , .		1
272	Preliminary Assessment of a Novel Intraoral-Tongue Operated Assistive Technology with Computer Interface. , 2020, , .		1
273	Design of Reactive Resonant Shielding for Multi-EnerCage-HC System. , 2020, , .		1
274	Introduction to Wireless Power Transfer. , 2021, , 1-14.		1
275	Finite Element Analysis of Planar Micromachined Silicon Electrodes for Cortical Stimulation. , 2006, , .		0
276	Guest Editorialâ€"Selected Papers From the 2011 IEEE International Solid-State Circuits Conference (ISSCC). IEEE Transactions on Biomedical Circuits and Systems, 2011, 5, 501-502.	4.0	0
277	Guest Editorial - Selected Papers from the 2012 IEEE International Solid-State Circuits Conference (ISSCC). IEEE Transactions on Biomedical Circuits and Systems, 2012, 6, 521-522.	4.0	0
278	Wireless hippocampal neural recording via a multiple input RF receiver to construct place-specific firing fields. , 2012, 2012, 763-6.		0
279	Guest Editorialâ€"Selected Papers from the 2013 IEEE International Solid-State Circuits Conference (ISSCC). IEEE Transactions on Biomedical Circuits and Systems, 2013, 7, 733-734.	4.0	0
280	Live demonstration: A smart homecage system with behavior analysis and closed-loop optogenetic stimulation capacibilities. , 2015, , .		0
281	Corrections to â€œA Power-Efficient Switched-Capacitor Stimulating System for Electrical/Optical Deep-Brain Stimulationâ€•[Jan 15 360-374]. IEEE Journal of Solid-State Circuits, 2015, 50, 1736-1736.	5.4	0
282	Beyond supply-voltage bootstrapped pulser for driving CMUT arrays in ultrasound imaging. , 2017, , .		0
283	Modeling of mm-sized solenoid coils with ferrite tube core for biomedical implants. , 2017, , .		0
284	Notice of Removal: Supply-inverted bipolar pulser and Tx/Rx switch for CMUTs capable of tolerating voltage levels above process limit. , 2017, , .		0
285	Guest Editorial Selected Papers From the 2018 IEEE International Solid-State Circuits Conference. IEEE Transactions on Biomedical Circuits and Systems, 2018, 12, 1217-1219.	4.0	0
286	Deep Convolutional Neural Networks for Automated Convulsion Scoring using RGB-D Images. , 2018, , .		0
287	An omnidirectional WPT platform for distributed fully implanted neural recording systems. International Journal of Applied Electromagnetics and Mechanics, 2021, 66, 339-357.	0.6	0
288	Analytical layout optimization of printed planar coil with variable trace width for inductive wireless power transfer. International Journal of Applied Electromagnetics and Mechanics, 2021, 67, 113-129.	0.6	0

#	Article	IF	Citations
289	Inductive Link: Basic Theoretical Model. , 2021, , 15-52.		0
290	Inductive Link: Practical Aspects. , 2021, , 53-75.		0
291	Adaptive Circuits to Track the Optimum Operating Point (OOP). , 2021, , 129-148.		0
292	Closed-Loop WPT Links. , 2021, , 149-187.		0
293	System Design Examples. , 2021, , 189-216.		0
294	Guest Editorial Selected Papers from the 2021 IEEE International Solid-State Circuits Conference. IEEE Transactions on Biomedical Circuits and Systems, 2021, 15, 1221-1223.	4.0	0
295	A Wideband Wireless Neural Stimulation Platform for High-Density Microelectrode Arrays. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2006, , .	0.5	0