

# Maysam Ghovanloo

## List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

267  
papers

6,633  
citations

40  
h-index

72  
g-index

299  
ext. papers

7,879  
ext. citations

3.3  
avg, IF

6.54  
L-index

#	Paper	IF	Citations
267	Design and optimization of printed spiral coils for efficient transcutaneous inductive power transmission. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , <b>2007</b> , 1, 193-202	5.1	418
266	Design and Optimization of a 3-Coil Inductive Link for Efficient Wireless Power Transmission. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , <b>2011</b> , 99, 1	5.1	401
265	The Circuit Theory Behind Coupled-Mode Magnetic Resonance-Based Wireless Power Transmission. <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , <b>2012</b> , 59, 2065-2074	3.9	271
264	. <i>IEEE Journal of Solid-State Circuits</i> , <b>2004</b> , 39, 1976-1984	5.5	216
263	Modeling and optimization of printed spiral coils in air, saline, and muscle tissue environments. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , <b>2009</b> , 3, 339-47	5.1	182
262	An Integrated Power-Efficient Active Rectifier With Offset-Controlled High Speed Comparators for Inductively Powered Applications. <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , <b>2011</b> , 58, 1749-1760	3.9	158
261	Optimal Design of Wireless Power Transmission Links for Millimeter-Sized Biomedical Implants. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , <b>2016</b> , 10, 125-37	5.1	152
260	. <i>IEEE Transactions on Circuits and Systems Part 1: Regular Papers</i> , <b>2007</b> , 54, 2211-2221		143
259	A magneto-inductive sensor based wireless tongue-computer interface. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , <b>2008</b> , 16, 497-504	4.8	141
258	A Power-Efficient Wireless System With Adaptive Supply Control for Deep Brain Stimulation. <i>IEEE Journal of Solid-State Circuits</i> , <b>2013</b> , 48, 2203-2216	5.5	130
257	Dual-task motor performance with a tongue-operated assistive technology compared with hand operations. <i>Journal of NeuroEngineering and Rehabilitation</i> , <b>2012</b> , 9, 1	5.3	110
256	An Inductively Powered Scalable 32-Channel Wireless Neural Recording System-on-a-Chip for Neuroscience Applications. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , <b>2010</b> , 4, 360-71	5.1	110
255	An RFID-Based Closed-Loop Wireless Power Transmission System for Biomedical Applications. <i>IEEE Transactions on Circuits and Systems II: Express Briefs</i> , <b>2010</b> , 57, 260-264	3.5	107
254	A wireless implantable multichannel microstimulating system-on-a-chip with modular architecture. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , <b>2007</b> , 15, 449-57	4.8	103
253	An Inductively Powered Scalable 32-Channel Wireless Neural Recording System-on-a-Chip for Neuroscience Applications. <i>Digest of Technical Papers - IEEE International Solid-State Circuits Conference</i> , <b>2010</b> , 2010, 120-121	4	102
252	A Modular 32-site wireless neural stimulation microsystem. <i>IEEE Journal of Solid-State Circuits</i> , <b>2004</b> , 39, 2457-2466	5.5	100
251	A Figure-of-Merit for Designing High-Performance Inductive Power Transmission Links. <i>IEEE Transactions on Industrial Electronics</i> , <b>2012</b> , 60, 5292-5305	8.9	94

250	A Power-Efficient Switched-Capacitor Stimulating System for Electrical/Optical Deep Brain Stimulation. <i>IEEE Journal of Solid-State Circuits</i> , <b>2015</b> , 50, 360-374	5.5	92
249	A compact large voltage-compliance high output-impedance programmable current source for implantable microstimulators. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2005</b> , 52, 97-105	5	92
248	A Triple-Loop Inductive Power Transmission System for Biomedical Applications. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , <b>2016</b> , 10, 138-48	5.1	89
247	Optimization of data coils in a multiband wireless link for neuroprosthetic implantable devices. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , <b>2010</b> , 4, 301-10	5.1	81
246	Evaluation of a wireless wearable tongue-computer interface by individuals with high-level spinal cord injuries. <i>Journal of Neural Engineering</i> , <b>2010</b> , 7, 26008	5	74
245	A Low-Noise Preamplifier with Adjustable Gain and Bandwidth for Biopotential Recording Applications <b>2007</b> ,		72
244	Using unconstrained tongue motion as an alternative control mechanism for wheeled mobility. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2009</b> , 56, 1719-26	5	68
243	The tongue enables computer and wheelchair control for people with spinal cord injury. <i>Science Translational Medicine</i> , <b>2013</b> , 5, 213ra166	17.5	66
242	Robust Wireless Power Transmission to mm-Sized Free-Floating Distributed Implants. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , <b>2017</b> , 11, 692-702	5.1	61
241	A Q-Modulation Technique for Efficient Inductive Power Transmission. <i>IEEE Journal of Solid-State Circuits</i> , <b>2015</b> , 50, 2839-2848	5.5	57
240	An Integrated Full-Wave CMOS Rectifier With Built-In Back Telemetry for RFID and Implantable Biomedical Applications. <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , <b>2008</b> , 55, 3328-3334 <sup>3.9</sup>		57
239	A 13.56-mbps pulse delay modulation based transceiver for simultaneous near-field data and power transmission. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , <b>2015</b> , 9, 1-11	5.1	55
238	Design, fabrication, and packaging of an integrated, wirelessly-powered optrode array for optogenetics application. <i>Frontiers in Systems Neuroscience</i> , <b>2015</b> , 9, 69	3.5	52
237	A wireless magnetoresistive sensing system for an intraoral tongue-computer interface. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , <b>2012</b> , 6, 571-85	5.1	51
236	An Adaptive Reconfigurable Active Voltage Doubler/Rectifier for Extended-Range Inductive Power Transmission. <i>IEEE Transactions on Circuits and Systems II: Express Briefs</i> , <b>2012</b> , 59, 481-485	3.5	46
235	An Implantable Peripheral Nerve Recording and Stimulation System for Experiments on Freely Moving Animal Subjects. <i>Scientific Reports</i> , <b>2018</b> , 8, 6115	4.9	45
234	Geometrical Design of a Scalable Overlapping Planar Spiral Coil Array to Generate a Homogeneous Magnetic Field. <i>IEEE Transactions on Magnetics</i> , <b>2012</b> , 49, 2933-2945	2	45
233	A 10.2 Mbps Pulse Harmonic Modulation Based Transceiver for Implantable Medical Devices. <i>IEEE Journal of Solid-State Circuits</i> , <b>2011</b> , 46, 1296-1306	5.5	45

232	Evaluation of a smartphone platform as a wireless interface between tongue drive system and electric-powered wheelchairs. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2012</b> , 59, 1787-96	5	43
231	EnerCage: a smart experimental arena with scalable architecture for behavioral experiments. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2014</b> , 61, 139-48	5	42
230	Active High Power Conversion Efficiency Rectifier With Built-In Dual-Mode Back Telemetry in Standard CMOS Technology. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , <b>2008</b> , 2, 184-92	5.1	42
229	Unobtrusive and Wearable Systems for Automatic Dietary Monitoring. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2017</b> , 64, 2075-2089	5	41
228	A high frequency active voltage doubler in standard CMOS using offset-controlled comparators for inductive power transmission. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , <b>2013</b> , 7, 213-24	5.1	41
227	Introduction and preliminary evaluation of the Tongue Drive System: wireless tongue-operated assistive technology for people with little or no upper-limb function. <i>Journal of Rehabilitation Research and Development</i> , <b>2008</b> , 45, 921-30		40
226	Three-Phase Time-Multiplexed Planar Power Transmission to Distributed Implants. <i>IEEE Journal of Emerging and Selected Topics in Power Electronics</i> , <b>2016</b> , 4, 263-272	5.6	38
225	Position and Orientation Insensitive Wireless Power Transmission for EnerCage-HomeCage System. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2017</b> , 64, 2439-2449	5	37
224	An Experimental Study of Voltage, Current, and Charge Controlled Stimulation Front-End Circuitry <b>2007</b> ,		36
223	Analytical Modeling and Optimization of Small Solenoid Coils for Millimeter-Sized Biomedical Implants. <i>IEEE Transactions on Microwave Theory and Techniques</i> , <b>2017</b> , 65, 1024-1035	4.1	35
222	Energy-efficient switching scheme in SAR ADC for biomedical electronics. <i>Electronics Letters</i> , <b>2015</b> , 51, 676-678	1.1	35
221	An Inductively-Powered Wireless Neural Recording and Stimulation System for Freely-Behaving Animals. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , <b>2019</b> , 13, 413-424	5.1	35
220	A Multi-Cycle Q-Modulation for Dynamic Optimization of Inductive Links. <i>IEEE Transactions on Industrial Electronics</i> , <b>2016</b> , 63, 5091-5100	8.9	34
219	Wireless opto-electro neural interface for experiments with small freely behaving animals. <i>Journal of Neural Engineering</i> , <b>2018</b> , 15, 046032	5	34
218	Towards a smart experimental arena for long-term electrophysiology experiments. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , <b>2012</b> , 6, 414-23	5.1	33
217	Quantitative and comparative assessment of learning in a tongue-operated computer input device. <i>IEEE Transactions on Information Technology in Biomedicine</i> , <b>2011</b> , 15, 747-57		33
216	An Adaptive Reconfigurable Active Voltage Doubler/Rectifier for Extended-Range Inductive Power Transmission. <i>IEEE Transactions on Circuits and Systems II: Express Briefs</i> , <b>2012</b> , 286-288	3.5	32
215	An Inductively-Powered Wireless Neural Recording System with a Charge Sampling Analog Front-End. <i>IEEE Sensors Journal</i> , <b>2016</b> , 16, 475-484	4	31

214	Wideband Near-Field Data Transmission Using Pulse Harmonic Modulation. <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , <b>2011</b> , 58, 186-195	3.9	31
213	A Smart Wirelessly Powered Homecage for Long-Term High-Throughput Behavioral Experiments. <i>IEEE Sensors Journal</i> , <b>2015</b> , 15, 4905-4916	4	30
212	Chip-Scale Coils for Millimeter-Sized Bio-Implants. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , <b>2018</b> , 12, 1088-1099	5.1	28
211	Enhanced Wireless Power Transmission Using Strong Paramagnetic Response. <i>IEEE Transactions on Magnetics</i> , <b>2014</b> , 50,	2	28
210	A Power-Efficient Wireless Capacitor Charging System Through an Inductive Link. <i>IEEE Transactions on Circuits and Systems II: Express Briefs</i> , <b>2013</b> , 60, 707-711	3.5	28
209	A 20-Mb/s Pulse Harmonic Modulation Transceiver for Wideband Near-Field Data Transmission. <i>IEEE Transactions on Circuits and Systems II: Express Briefs</i> , <b>2013</b> , 60, 382-386	3.5	28
208	Feasibility Study on Active Back Telemetry and Power Transmission Through an Inductive Link for Millimeter-Sized Biomedical Implants. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , <b>2017</b> , 11, 1366-1376	5.1	28
207	All-soft, battery-free, and wireless chemical sensing platform based on liquid metal for liquid- and gas-phase VOC detection. <i>Lab on A Chip</i> , <b>2017</b> , 17, 2323-2329	7.2	27
206	Assessment of the Tongue-Drive System Using a Computer, a Smartphone, and a Powered-Wheelchair by People With Tetraplegia. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , <b>2016</b> , 24, 68-78	4.8	27
205	A wideband dual-antenna receiver for wireless recording from animals behaving in large arenas. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2013</b> , 60, 1993-2004	5	27
204	Fully-Integrated CMOS Power Regulator for Telemetry-Powered Implantable Biomedical Microsystems <b>2006</b> ,		27
203	Fabrication and Microassembly of a mm-Sized Floating Probe for a Distributed Wireless Neural Interface. <i>Micromachines</i> , <b>2016</b> , 7,	3.3	27
202	Tongue-controlled computer game: a new approach for rehabilitation of tongue motor function. <i>Archives of Physical Medicine and Rehabilitation</i> , <b>2014</b> , 95, 524-30	2.8	26
201	Towards a Reduced-Wire Interface for CMUT-Based Intravascular Ultrasound Imaging Systems. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , <b>2017</b> , 11, 400-410	5.1	26
200	Using pulse width modulation for wireless transmission of neural signals in multichannel neural recording systems. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , <b>2009</b> , 17, 354-63	4.8	26
199	Tongue drive: a wireless tongue- operated means for people with severe disabilities to communicate their intentions <b>2012</b> , 50, 128-135		24
198	A dual-mode human computer interface combining speech and tongue motion for people with severe disabilities. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , <b>2013</b> , 21, 979-91	4.8	24
197	A low-noise clockless simultaneous 32-channel wireless neural recording system with adjustable resolution. <i>Analog Integrated Circuits and Signal Processing</i> , <b>2011</b> , 66, 417-431	1.2	24

196	Analysis, design, and implementation of a high-efficiency full-wave rectifier in standard CMOS technology. <i>Analog Integrated Circuits and Signal Processing</i> , <b>2009</b> , 60, 71-81	1.2	24
195	A Trimodal Wireless Implantable Neural Interface System-on-Chip. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , <b>2020</b> , 14, 1207-1217	5.1	23
194	An Overview of Data Telemetry in Inductively Powered Implantable Biomedical Devices. <i>IEEE Communications Magazine</i> , <b>2019</b> , 57, 74-80	9.1	22
193	Qualitative assessment of tongue drive system by people with high-level spinal cord injury. <i>Journal of Rehabilitation Research and Development</i> , <b>2014</b> , 51, 451-65		22
192	Quantitative and comparative assessment of learning in a tongue-operated computer input device--part II: navigation tasks. <i>IEEE Transactions on Information Technology in Biomedicine</i> , <b>2012</b> , 16, 633-43		22
191	A Wirelessly-Powered Homecage With Segmented Copper Foils and Closed-Loop Power Control. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , <b>2016</b> , 10, 979-989	5.1	21
190	A mm-Sized Free-Floating Wirelessly Powered Implantable Optical Stimulation Device. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , <b>2019</b> , 13, 608-618	5.1	21
189	Force and complexity of tongue task training influences behavioral measures of motor learning. <i>European Journal of Oral Sciences</i> , <b>2012</b> , 120, 46-53	2.3	21
188	A Dual-Band Wireless Power Transmission System for Evaluating mm-Sized Implants. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , <b>2019</b> , 13, 595-607	5.1	20
187	A mm-sized free-floating wirelessly powered implantable optical stimulating system-on-a-chip <b>2018</b> ,		20
186	A wireless slanted optrode array with integrated micro leds for optogenetics <b>2014</b> ,		20
185	Real-time swallowing detection based on tracheal acoustics <b>2014</b> ,		20
184	Antennas for Intraoral Tongue Drive System at 2.4 GHz: Design, Characterization, and Comparison. <i>IEEE Transactions on Microwave Theory and Techniques</i> , <b>2018</b> , 66, 2546-2555	4.1	19
183	Simultaneous Multimodal PC Access for People With Disabilities by Integrating Head Tracking, Speech Recognition, and Tongue Motion. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , <b>2018</b> , 12, 192-201	5.1	19
182	<b>2018</b> ,		19
181	An automated behavior analysis system for freely moving rodents using depth image. <i>Medical and Biological Engineering and Computing</i> , <b>2018</b> , 56, 1807-1821	3.1	18
180	Towards a Switched-Capacitor based Stimulator for efficient deep-brain stimulation. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2010</b> , 2010, 2927-30	0.9	18
179	12.7 A power-management ASIC with Q-modulation capability for efficient inductive power transmission <b>2015</b> ,		17

178	Joint Magnetic Calibration and Localization Based on Expectation Maximization for Tongue Tracking. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2018</b> , 65, 52-63	5	17
177	A passive quantitative measurement of airway resistance using depth data. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2014</b> , 2014, 5743-7	0.9	17
176	Tongue operated assistive technologies. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society</i> , <b>2007</b> , 2007, 4376-9		17
175	PANACEA: An Internet of Bio-NanoThings Application for Early Detection and Mitigation of Infectious Diseases. <i>IEEE Access</i> , <b>2020</b> , 8, 140512-140523	3.5	17
174	Multimodal Speech Capture System for Speech Rehabilitation and Learning. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2017</b> , 64, 2639-2649	5	16
173	A Low-Power Wearable Stand-Alone Tongue Drive System for People With Severe Disabilities. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , <b>2018</b> , 12, 58-67	5.1	16
172	Chronic Electrical Stimulation Promotes the Excitability and Plasticity of ESC-derived Neurons following Glutamate-induced Inhibition In vitro. <i>Scientific Reports</i> , <b>2018</b> , 8, 10957	4.9	16
171	An arch-shaped intraoral tongue drive system with built-in tongue-computer interfacing SoC. <i>Sensors</i> , <b>2014</b> , 14, 21565-87	3.8	16
170	A Reduced-Wire ICE Catheter ASIC With Tx Beamforming and Rx Time-Division Multiplexing. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , <b>2018</b> , 12, 1246-1255	5.1	16
169	A Reconfigurable Passive RF-to-DC Converter for Wireless IoT Applications. <i>IEEE Transactions on Circuits and Systems II: Express Briefs</i> , <b>2019</b> , 66, 1800-1804	3.5	15
168	A Deep Neural Network-Based Permanent Magnet Localization for Tongue Tracking. <i>IEEE Sensors Journal</i> , <b>2019</b> , 19, 9324-9331	4	15
167	Motivational conditions influence tongue motor performance. <i>European Journal of Oral Sciences</i> , <b>2013</b> , 121, 111-6	2.3	15
166	. <i>IEEE Circuits and Systems Magazine</i> , <b>2017</b> , 17, 64-82	3.2	15
165	Wireless Communication of Intraoral Devices and Its Optimal Frequency Selection. <i>IEEE Transactions on Microwave Theory and Techniques</i> , <b>2014</b> , 62, 3205-3215	4.1	15
164	Direct Digital Demultiplexing of Analog TDM Signals for Cable Reduction in Ultrasound Imaging Catheters. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , <b>2016</b> , 63, 1078-85	3.2	15
163	Wireless control of powered wheelchairs with tongue motion using tongue drive assistive technology. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2008</b> , 2008, 4199-202	0.9	14
162	A wireless tongue-computer interface using stereo differential magnetic field measurement. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society</i> , <b>2007</b> , 2007, 5724-7		14
161	A multimodal human computer interface combining head movement, speech and tongue motion for people with severe disabilities <b>2015</b> ,		13

160	Command detection and classification in tongue drive assistive technology. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2011, 2011, 5465-8</i>	0.9	13
159	Towards a magnetic localization system for 3-D tracking of tongue movements in speech-language therapy. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2009, 2009, 563-6</i>	0.9	13
158	Design and Optimization of Printed Spiral Coils for Efficient Inductive Power Transmission <b>2007,</b>		13
157	An Adaptive Averaging Low Noise Front-End for Central and Peripheral Nerve Recording. <i>IEEE Transactions on Circuits and Systems II: Express Briefs, 2018, 65, 839-843</i>	3.5	13
156	Optimal Design of a Resonance-Based Voltage Boosting Rectifier for Wireless Power Transmission. <i>IEEE Transactions on Industrial Electronics, 2018, 65, 1645-1654</i>	8.9	12
155	A Vision-Based Respiration Monitoring System for Passive Airway Resistance Estimation. <i>IEEE Transactions on Biomedical Engineering, 2016, 63, 1904-1913</i>	5	12
154	Toward Silent-Speech Control of Consumer Wearables. <i>Computer, 2015, 48, 54-62</i>	1.6	12
153	Towards a kinect-based behavior recognition and analysis system for small animals <b>2015,</b>		12
152	Fully integrated power-efficient AC-to-DC converter design in inductively-powered biomedical applications <b>2011,</b>		12
151	Optimal design of a 3-coil inductive link for millimeter-sized biomedical implants <b>2016,</b>		12
150	Adaptive Matching Transmitter With Dual-Band Antenna for Intraoral Tongue Drive System. <i>IEEE Transactions on Biomedical Circuits and Systems, 2018, 12, 1279-1288</i>	5.1	12
149	Evaluation of a closed loop inductive power transmission system on an awake behaving animal subject. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2011, 2011, 7658-61</i>	0.9	11
148	Optimal Design of Passive Resonating Wireless Sensors for Wearable and Implantable Devices. <i>IEEE Sensors Journal, 2019, 19, 7460-7470</i>	4	10
147	Multichannel Wireless Neural Recording AFE Architectures: Analysis, Modeling, and Tradeoffs. <i>IEEE Design and Test, 2016, 33, 24-36</i>	1.4	10
146	Stimulation Efficiency With Decaying Exponential Waveforms in a Wirelessly Powered Switched-Capacitor Discharge Stimulation System. <i>IEEE Transactions on Biomedical Engineering, 2018, 65, 1095-1106</i>	5	10
145	Tracheal activity recognition based on acoustic signals. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2014, 2014, 1436-9</i>	0.9	10
144	Incorporating Back Telemetry in a Full-Wave CMOS Rectifier for RFID and Biomedical Applications <b>2007,</b>		10
143	Optimization of Tongue Gesture Processing Algorithm for Standalone Multimodal Tongue Drive System. <i>IEEE Sensors Journal, 2019, 19, 2704-2712</i>	4	10

142	The Helping Hand: An Assistive Manipulation Framework Using Augmented Reality and Tongue-Drive Interfaces. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2018, 2018, 2158-2161</i>	0.9	10
141	Supply-Doubled Pulse-Shaping High Voltage Pulser for CMUT Arrays. <i>IEEE Transactions on Circuits and Systems II: Express Briefs, 2018, 65, 306-310</i>	3.5	9
140	Millimeter-scale integrated and wirewound coils for powering implantable neural microsystems <b>2017,</b>		9
139	Toward an Ultralow-Power Onboard Processor for Tongue Drive System. <i>IEEE Transactions on Circuits and Systems II: Express Briefs, 2015, 62, 174-178</i>	3.5	9
138	A Magnetic Wireless Tongue-Computer Interface <b>2007,</b>		9
137	Safety and efficacy of medically performed tongue piercing in people with tetraplegia for use with tongue-operated assistive technology. <i>Topics in Spinal Cord Injury Rehabilitation, 2015, 21, 61-76</i>	1.5	9
136	A Multiphase Resonance-Based Boosting Rectifier With Dual Outputs for Wireless Power Transmission. <i>IEEE Transactions on Power Electronics, 2020, 35, 2680-2689</i>	7.2	9
135	Comparing the Use of Single vs. Multiple Combined Abilities in Conducting Complex Computer Tasks Hands-free. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2018,</i>	4.8	9
134	Analytical Modeling of Small, Solenoidal, and Implantable Coils With Ferrite Tube Core. <i>IEEE Microwave and Wireless Components Letters, 2019, 29, 237-239</i>	2.6	8
133	Inductively coupled, mm-sized, single channel optical neuro-stimulator with intensity enhancer. <i>Microsystems and Nanoengineering, 2019, 5, 23</i>	7.7	8
132	<b>2018,</b>		8
131	A dual-mode passive rectifier for wide-range input power flow <b>2017,</b>		8
130	Wireless control of smartphones with tongue motion using tongue drive assistive technology. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2010, 2010, 5250-3</i>	0.9	8
129	A comprehensive method for magnetic sensor calibration: a precise system for 3-D tracking of the tongue movements. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2012, 2012, 1153-1156</i>	0.9	8
128	A Wireless Pharmaceutical Compliance Monitoring System Based on Magneto-Inductive Sensors. <i>IEEE Sensors Journal, 2007, 7, 1711-1719</i>	4	8
127	A multichannel monolithic wireless microstimulator. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2004, 2004, 4197-200</i>		8
126	Tongue-controlled robotic rehabilitation: A feasibility study in people with stroke. <i>Journal of Rehabilitation Research and Development, 2016, 53, 989-1006</i>		8
125	Optimization of a multiband wireless link for neuroprosthetic implantable devices <b>2008,</b>		7

124	Detecting food intake acoustic events in noisy recordings using template matching <b>2016,</b>		7
123	A Bio-Impedance Measurement IC for Neural Interface Applications <b>2018,</b>		7
122	Towards a free-floating wireless implantable optogenetic stimulating system <b>2017,</b>		6
121	Time-division multiplexing for cable reduction in ultrasound imaging catheters <b>2015,</b>		6
120	A closed-loop wireless homepage for optogenetic stimulation experiments <b>2015,</b>		6
119	A wireless implantable switched-capacitor based optogenetic stimulating system. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2014, 2014, 878-81</i>	0.9	6
118	Design, modeling and characterization of a 35MHz 1-D CMUT phased array <b>2013,</b>		6
117	Using Fitts's law for evaluating Tongue Drive System as a pointing device for computer access. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2010, 2010, 4403-6</i>	0.9	6
116	A closed loop wireless power transmission system using a commercial RFID transceiver for biomedical applications. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2009, 2009, 3841-4</i>	0.9	6
115	A high efficiency full-wave rectifier in standard CMOS Technology. <i>Midwest Symposium on Circuits and Systems, 2007,</i>	1	6
114	A High-Voltage Output Driver for Implantable Biomedical Stimulators and I/O Applications <b>2006,</b>		6
113	A 15-Channel Wireless Neural Recording System Based on Time Division Multiplexing of Pulse Width Modulated Signals <b>2006,</b>		6
112	An Independent Tongue-Operated Assistive System for Both Access and Mobility. <i>IEEE Sensors Journal, 2018, 18, 9401-9409</i>	4	6
111	Triple-Band Transmitter with a Shared Dual-Band Antenna and Adaptive Matching for an Intraoral Tongue Drive System <b>2018,</b>		6
110	Toward a distributed free-floating wireless implantable neural recording system. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2016, 2016, 4495-4498</i>	0.9	5
109	A wirelessly-powered homepage with animal behavior analysis and closed-loop power control. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2016, 2016, 6323-6326</i>	0.9	5
108	Tongue implant for assistive technologies: Test of migration, tissue reactivity and impact on tongue function. <i>Archives of Oral Biology, 2016, 71, 1-9</i>	2.8	5
107	A Stand-Alone Intraoral Tongue-Controlled Computer Interface for People With Tetraplegia. <i>IEEE Transactions on Biomedical Circuits and Systems, 2019, 13, 848-857</i>	5.1	5

106	Older Adults' Perceptions of a Neckwear Health Technology. <i>Proceedings of the Human Factors and Ergonomics Society</i> , <b>2014</b> , 58, 1815-1819	0.4	5
105	Towards a robust data link for intraoral tongue drive system using triple bands and adaptive matching <b>2017</b> ,		5
104	Advanced wireless power and data transmission techniques for implantable medical devices <b>2015</b> ,		5
103	Source separation for target enhancement of food intake acoustics from noisy recordings <b>2015</b> ,		5
102	<b>2014</b> ,		5
101	New ergonomic headset for Tongue-Drive System with wireless smartphone interface. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2011</b> , 2011, 7344-7	0.9	5
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99	A high-performance analog front-end for an intraoral tongue-operated assistive technology <b>2011</b> ,		5
98	A wideband wireless neural stimulation platform for high-density microelectrode arrays. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society</i> , <b>2006</b> , 2006, 4404-7		5
97	Using Pulse Width Modulation for Wireless Transmission of Neural Signals in a Multichannel Neural Recording System <b>2007</b> ,		5
96	Design and Fabricate Neckwear to Improve the Elderly Patients' Medical Compliance. <i>Lecture Notes in Computer Science</i> , <b>2015</b> , 222-234	0.9	5
95	An Impulse Radio PWM-Based Wireless Data Acquisition Sensor Interface. <i>IEEE Sensors Journal</i> , <b>2019</b> , 19, 603-614	4	5
94	A Reconfigurable Passive Voltage Multiplier for Wireless Mobile IoT Applications. <i>IEEE Transactions on Circuits and Systems II: Express Briefs</i> , <b>2020</b> , 67, 615-619	3.5	5
93	Highly Integrated Guidewire Ultrasound Imaging System-on-a-Chip. <i>IEEE Journal of Solid-State Circuits</i> , <b>2020</b> , 55, 1310-1323	5.5	4
92	Single-chip reduced-wire active catheter system with programmable transmit beamforming and receive time-division multiplexing for intracardiac echocardiography <b>2018</b> ,		4
91	Early Decoding of Tongue-Hand Movement from EEG Recordings Using Dynamic Functional Connectivity Graphs <b>2019</b> ,		4
90	Inductive Coupling <b>2014</b> , 174-208		4
89	A 13-bit Noise Shaping SAR-ADC with Dual-Polarity Digital Calibration. <i>Analog Integrated Circuits and Signal Processing</i> , <b>2013</b> , 75, 459-465	1.2	4

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87	A multi-cycle Q-modulation technique for wirelessly-powered biomedical implants <b>2015</b> ,		4
86	A PWM-IR-UWB transceiver for low-power data communication <b>2014</b> ,		4
85	A dual slope charge sampling analog front-end for a wireless neural recording system. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2014</b> , 2014, 3134-7	0.9	4
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81	<b>2008</b> ,		4
80	Automated High-Throughput Hermetic Failure Monitoring System for Millimeter-Sized Wireless Implantable Medical Devices <b>2019</b> ,		4
79	Single-Chip Reduced-Wire CMUT-on-CMOS System for Intracardiac Echocardiography <b>2018</b> ,		4
78	Preliminary Test of a Wireless Magnetic Tongue Tracking System for Silent Speech Interface <b>2018</b> ,		4
77	Tapping into tongue motion to substitute or augment upper limbs <b>2017</b> ,		3
76	A Power-Efficient Bridge Readout Circuit for Implantable, Wearable, and IoT Applications. <i>IEEE Sensors Journal</i> , <b>2020</b> , 20, 9955-9962	4	3
75	<b>2020</b> ,		3
74	A Software-Defined Radio Receiver for Wireless Recording From Freely Behaving Animals. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , <b>2019</b> , 13, 1645-1654	5.1	3
73	Improving Upper Extremity Function and Quality of Life with a Tongue Driven Exoskeleton: A Pilot Study Quantifying Stroke Rehabilitation. <i>Stroke Research and Treatment</i> , <b>2017</b> , 2017, 3603860	1.7	3
72	Towards a three-phase time-multiplexed planar power transmission to distributed implants <b>2015</b> ,		3
71	Toward a reduced-wire readout system for ultrasound imaging. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2014</b> , 2014, 5080-4	0.9	3

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69	Development of a tongue-piercing method for use with assistive technology. <i>JAMA Dermatology</i> , <b>2014</b> , 150, 453-4	5.1	3
68	Real time control of a wireless powering and tracking system for long-term and large-area electrophysiology experiments <b>2012</b> ,		3
67	A wireless magneto-resistive sensing system for an intra-oral tongue-computer interface <b>2012</b> ,		3
66	A figure-of-merit for design of high performance inductive power transmission links for implantable microelectronic devices. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2012</b> , 2012, 847-50	0.9	3
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59	Using Magneto-Inductive Sensors to Detect Tongue Position in a Wireless Assistive Technology for People with Severe Disabilities <b>2007</b> ,		3
58	Toward a High-Throughput Wireless Smart Arena for Behavioral Experiments on Small Animals. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2020</b> , 67, 2359-2369	5	3
57	Microfabrication, Coil Characterization, and Hermetic Packaging of Millimeter-Sized Free-Floating Neural Probes. <i>IEEE Sensors Journal</i> , <b>2021</b> , 21, 13837-13848	4	3
56	Towards a mm-Sized Free-Floating Wireless Implantable Opto-Electro Stimulation Device <b>2019</b> ,		3
55	An Adaptive Impedance Matching Transmitter for a Wireless Intraoral Tongue-Controlled Assistive Technology. <i>IEEE Transactions on Circuits and Systems II: Express Briefs</i> , <b>2020</b> , 67, 240-244	3.5	3
54	Toward A Robust Multi-Antenna Receiver for Wireless Recording From Freely-Behaving Animals <b>2018</b> ,		3
53	Online Predictive Modeling for the Thermal Effect of Implantable Devices <b>2018</b> ,		3

52	A Dual-Mode Magnetic-Acoustic System for Monitoring Fluid Intake Behavior in Animals. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2017</b> , 64, 2090-2097	5	2
51	A Real-Time Embedded FPGA Processor for a Stand-Alone Dual-Mode Assistive Device <b>2017</b> ,		2
50	An embedded FPGA accelerator for a stand-alone dual-mode assistive device <b>2017</b> ,		2
49	Joint power and thermal management for implantable devices <b>2015</b> ,		2
48	A smart homepage system with 3D tracking for long-term behavioral experiments. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2014</b> , 2014, 2016-9	0.9	2
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38	Power-Efficient Wireless Neural Stimulating System Design for Implantable Medical Devices. <i>IEIE Transactions on Smart Processing and Computing</i> , <b>2015</b> , 4, 133-140	1.2	2
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36	Ultra-Thin Wireless Power Module with Integration of Wireless Inductive Link and Supercapacitors <b>2016</b> ,		2
35	Towards Phoneme Landmarks Identification for American-English using a Multimodal Speech Capture System <b>2018</b> ,		2

34	Simultaneous Multimodal Access to Wheelchair and Computer for People with Tetraplegia <b>2018</b> ,		2
33	Development and Preliminary Assessment of an Arch-Shaped Stand-Alone Intraoral Tongue Drive System for People with Tetraplegia <b>2018</b> ,		2
32	Magnetic implants in the tongue for assistive technologies: Tests of migration; oromotor function; and tissue response in miniature pigs. <i>Archives of Oral Biology</i> , <b>2017</b> , 81, 81-89	2.8	1
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30	Near-Field Wireless Power and Data Transmission to Implantable Neuroprosthetic Devices <b>2014</b> , 189-215		1
29	Introduction to the Special Issue on the 2011 IEEE International Solid-State Circuits Conference. <i>IEEE Journal of Solid-State Circuits</i> , <b>2012</b> , 47, 3-7	5.5	1
28	Optimizing three-phase three-layer coil array for omnidirectional wireless power transfer <b>2017</b> ,		1
27	An automated tracking system for Y-maze behavioral test using kinect depth imaging <b>2017</b> ,		1
26	Modeling and optimization of printed spiral coils in air and muscle tissue environments. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2009</b> , 2009, 6387-90	0.9	1
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24	A wideband PWM-FSK receiver for wireless implantable neural recording applications <b>2008</b> ,		1
23	Modeling and optimization of mm-sized solenoid coils for biomedical implants <b>2016</b> ,		1
22	Towards a wireless multimodal speech capture system <b>2016</b> ,		1
21	Wearable and non-invasive assistive technologies <b>2021</b> , 593-627		1
20	Hands-Free Assistive Manipulator Using Augmented Reality and Tongue Drive System <b>2018</b> ,		1
19	Toward an Energy-Efficient Bridge-to-Digital Intracranial Pressure Sensing Interface <b>2018</b> ,		1
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