

Maysam Ghovanloo

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/2156237/maysam-ghovanloo-publications-by-year.pdf>

Version: 2024-04-19

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

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	Introduction to Wireless Power Transfer 2021 , 1-14		0
266	Inductive Link: Basic Theoretical Model 2021 , 15-52		
265	Inductive Link: Practical Aspects 2021 , 53-75		
264	Back Telemetry 2021 , 77-91		
263	Adaptive Circuits to Track the Optimum Operating Point (OOP) 2021 , 129-148		
262	Closed-Loop WPT Links 2021 , 149-187		
261	System Design Examples 2021 , 189-216		
260	Microfabrication, Coil Characterization, and Hermetic Packaging of Millimeter-Sized Free-Floating Neural Probes. <i>IEEE Sensors Journal</i> , 2021 , 21, 13837-13848	4	3
259	An omnidirectional WPT platform for distributed fully implanted neural recording systems. <i>International Journal of Applied Electromagnetics and Mechanics</i> , 2021 , 66, 339-357	0.4	
258	Wearable and non-invasive assistive technologies 2021 , 593-627		1
257	Design and Preliminary Evaluation of a Tongue-Operated Exoskeleton System for Upper Limb Rehabilitation. <i>International Journal of Environmental Research and Public Health</i> , 2021 , 18,	4.6	1
256	Analytical layout optimization of printed planar coil with variable trace width for inductive wireless power transfer. <i>International Journal of Applied Electromagnetics and Mechanics</i> , 2021 , 67, 113-129	0.4	
255	Guest Editorial Selected Papers from the 2021 IEEE International Solid-State Circuits Conference. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , 2021 , 15, 1221-1223	5.1	
254	Highly Integrated Guidewire Ultrasound Imaging System-on-a-Chip. <i>IEEE Journal of Solid-State Circuits</i> , 2020 , 55, 1310-1323	5.5	4
253	A Power-Efficient Bridge Readout Circuit for Implantable, Wearable, and IoT Applications. <i>IEEE Sensors Journal</i> , 2020 , 20, 9955-9962	4	3
252	2020 ,		3
251	A Trimodal Wireless Implantable Neural Interface System-on-Chip. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , 2020 , 14, 1207-1217	5.1	23

250	Toward a High-Throughput Wireless Smart Arena for Behavioral Experiments on Small Animals. <i>IEEE Transactions on Biomedical Engineering</i> , 2020 , 67, 2359-2369	5	3
249	A mm-Sized Free-Floating Wireless Implantable Opto-Electro Stimulation Device. <i>Micromachines</i> , 2020 , 11,	3.3	2
248	PANACEA: An Internet of Bio-NanoThings Application for Early Detection and Mitigation of Infectious Diseases. <i>IEEE Access</i> , 2020 , 8, 140512-140523	3.5	17
247	An Adaptive Impedance Matching Transmitter for a Wireless Intraoral Tongue-Controlled Assistive Technology. <i>IEEE Transactions on Circuits and Systems II: Express Briefs</i> , 2020 , 67, 240-244	3.5	3
246	A Reconfigurable Passive Voltage Multiplier for Wireless Mobile IoT Applications. <i>IEEE Transactions on Circuits and Systems II: Express Briefs</i> , 2020 , 67, 615-619	3.5	5
245	A Multiphase Resonance-Based Boosting Rectifier With Dual Outputs for Wireless Power Transmission. <i>IEEE Transactions on Power Electronics</i> , 2020 , 35, 2680-2689	7.2	9
244	Supply-Inverted Bipolar Pulser and Tx/Rx Switch for CMUTs Above the Process Limit for High Pressure Pulse Generation. <i>IEEE Sensors Journal</i> , 2019 , 19, 12050-12058	4	
243	Analytical Modeling of Small, Solenoidal, and Implantable Coils With Ferrite Tube Core. <i>IEEE Microwave and Wireless Components Letters</i> , 2019 , 29, 237-239	2.6	8
242	A Reconfigurable Passive RF-to-DC Converter for Wireless IoT Applications. <i>IEEE Transactions on Circuits and Systems II: Express Briefs</i> , 2019 , 66, 1800-1804	3.5	15
241	Inductively coupled, mm-sized, single channel optical neuro-stimulator with intensity enhancer. <i>Microsystems and Nanoengineering</i> , 2019 , 5, 23	7.7	8
240	Optimal Design of Passive Resonating Wireless Sensors for Wearable and Implantable Devices. <i>IEEE Sensors Journal</i> , 2019 , 19, 7460-7470	4	10
239	A Dual-Band Wireless Power Transmission System for Evaluating mm-Sized Implants. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , 2019 , 13, 595-607	5.1	20
238	An Overview of Data Telemetry in Inductively Powered Implantable Biomedical Devices. <i>IEEE Communications Magazine</i> , 2019 , 57, 74-80	9.1	22
237	Early Decoding of Tongue-Hand Movement from EEG Recordings Using Dynamic Functional Connectivity Graphs 2019 ,		4
236	A mm-Sized Free-Floating Wirelessly Powered Implantable Optical Stimulation Device. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , 2019 , 13, 608-618	5.1	21
235	A Stand-Alone Intraoral Tongue-Controlled Computer Interface for People With Tetraplegia. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , 2019 , 13, 848-857	5.1	5
234	A Deep Neural Network-Based Permanent Magnet Localization for Tongue Tracking. <i>IEEE Sensors Journal</i> , 2019 , 19, 9324-9331	4	15
233	A Software-Defined Radio Receiver for Wireless Recording From Freely Behaving Animals. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , 2019 , 13, 1645-1654	5.1	3

232	Automated High-Throughput Hermetic Failure Monitoring System for Millimeter-Sized Wireless Implantable Medical Devices 2019 ,		4
231	Towards a mm-Sized Free-Floating Wireless Implantable Opto-Electro Stimulation Device 2019 ,		3
230	Optimization of Tongue Gesture Processing Algorithm for Standalone Multimodal Tongue Drive System. <i>IEEE Sensors Journal</i> , 2019 , 19, 2704-2712	4	10
229	An Impulse Radio PWM-Based Wireless Data Acquisition Sensor Interface. <i>IEEE Sensors Journal</i> , 2019 , 19, 603-614	4	5
228	An Inductively-Powered Wireless Neural Recording and Stimulation System for Freely-Behaving Animals. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , 2019 , 13, 413-424	5.1	35
227	Antennas for Intraoral Tongue Drive System at 2.4 GHz: Design, Characterization, and Comparison. <i>IEEE Transactions on Microwave Theory and Techniques</i> , 2018 , 66, 2546-2555	4.1	19
226	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> , 2018 , 12, 192-201	5.1	19
225	A Low-Power Wearable Stand-Alone Tongue Drive System for People With Severe Disabilities. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , 2018 , 12, 58-67	5.1	16
224	A mm-sized free-floating wirelessly powered implantable optical stimulating system-on-a-chip 2018 ,		20
223	An automated behavior analysis system for freely moving rodents using depth image. <i>Medical and Biological Engineering and Computing</i> , 2018 , 56, 1807-1821	3.1	18
222	Joint Magnetic Calibration and Localization Based on Expectation Maximization for Tongue Tracking. <i>IEEE Transactions on Biomedical Engineering</i> , 2018 , 65, 52-63	5	17
221	Supply-Doubled Pulse-Shaping High Voltage Pulser for CMUT Arrays. <i>IEEE Transactions on Circuits and Systems II: Express Briefs</i> , 2018 , 65, 306-310	3.5	9
220	Optimal Design of a Resonance-Based Voltage Boosting Rectifier for Wireless Power Transmission. <i>IEEE Transactions on Industrial Electronics</i> , 2018 , 65, 1645-1654	8.9	12
219	Chronic Electrical Stimulation Promotes the Excitability and Plasticity of ESC-derived Neurons following Glutamate-induced Inhibition In vitro. <i>Scientific Reports</i> , 2018 , 8, 10957	4.9	16
218	2018 ,		8
217	Chip-Scale Coils for Millimeter-Sized Bio-Implants. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , 2018 , 12, 1088-1099	5.1	28
216	An Implantable Peripheral Nerve Recording and Stimulation System for Experiments on Freely Moving Animal Subjects. <i>Scientific Reports</i> , 2018 , 8, 6115	4.9	45
215	Single-chip reduced-wire active catheter system with programmable transmit beamforming and receive time-division multiplexing for intracardiac echocardiography 2018 ,		4

214	2018,		19
213	Stimulation Efficiency With Decaying Exponential Waveforms in a Wirelessly Powered Switched-Capacitor Discharge Stimulation System. <i>IEEE Transactions on Biomedical Engineering</i> , 2018 , 65, 1095-1106	5	10
212	An Adaptive Averaging Low Noise Front-End for Central and Peripheral Nerve Recording. <i>IEEE Transactions on Circuits and Systems II: Express Briefs</i> , 2018 , 65, 839-843	3.5	13
211	Single-Chip Reduced-Wire CMUT-on-CMOS System for Intracardiac Echocardiography 2018,		4
210	Towards Phoneme Landmarks Identification for American-English using a Multimodal Speech Capture System 2018,		2
209	Preliminary Test of a Wireless Magnetic Tongue Tracking System for Silent Speech Interface 2018,		4
208	Toward A Robust Multi-Antenna Receiver for Wireless Recording From Freely-Behaving Animals 2018,		3
207	Online Predictive Modeling for the Thermal Effect of Implantable Devices 2018,		3
206	Simultaneous Multimodal Access to Wheelchair and Computer for People with Tetraplegia 2018,		2
205	A Reduced-Wire ICE Catheter ASIC With Tx Beamforming and Rx Time-Division Multiplexing. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , 2018 , 12, 1246-1255	5.1	16
204	Hands-Free Assistive Manipulator Using Augmented Reality and Tongue Drive System 2018,		1
203	Development and Preliminary Assessment of an Arch-Shaped Stand-Alone Intraoral Tongue Drive System for People with Tetraplegia 2018,		2
202	A Bio-Impedance Measurement IC for Neural Interface Applications 2018,		7
201	Toward an Energy-Efficient Bridge-to-Digital Intracranial Pressure Sensing Interface 2018,		1
200	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</i> , 2018 , 2018, 2158-2161	0.9	10
199	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</i> , 2018,	4.8	9
198	An Independent Tongue-Operated Assistive System for Both Access and Mobility. <i>IEEE Sensors Journal</i> , 2018 , 18, 9401-9409	4	6
197	Adaptive Matching Transmitter With Dual-Band Antenna for Intraoral Tongue Drive System. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , 2018 , 12, 1279-1288	5.1	12

196	Wireless opto-electro neural interface for experiments with small freely behaving animals. <i>Journal of Neural Engineering</i> , 2018 , 15, 046032	5	34
195	Triple-Band Transmitter with a Shared Dual-Band Antenna and Adaptive Matching for an Intraoral Tongue Drive System 2018 ,		6
194	Multimodal Speech Capture System for Speech Rehabilitation and Learning. <i>IEEE Transactions on Biomedical Engineering</i> , 2017 , 64, 2639-2649	5	16
193	Unobtrusive and Wearable Systems for Automatic Dietary Monitoring. <i>IEEE Transactions on Biomedical Engineering</i> , 2017 , 64, 2075-2089	5	41
192	Position and Orientation Insensitive Wireless Power Transmission for EnerCage-HomeCage System. <i>IEEE Transactions on Biomedical Engineering</i> , 2017 , 64, 2439-2449	5	37
191	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> , 2017 , 81, 81-89	2.8	1
190	Robust Wireless Power Transmission to mm-Sized Free-Floating Distributed Implants. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , 2017 , 11, 692-702	5.1	61
189	Tapping into tongue motion to substitute or augment upper limbs 2017 ,		3
188	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> , 2017 , 17, 2323-2329	7.2	27
187	Analytical Modeling and Optimization of Small Solenoid Coils for Millimeter-Sized Biomedical Implants. <i>IEEE Transactions on Microwave Theory and Techniques</i> , 2017 , 65, 1024-1035	4.1	35
186	A Dual-Mode Magnetic-Acoustic System for Monitoring Fluid Intake Behavior in Animals. <i>IEEE Transactions on Biomedical Engineering</i> , 2017 , 64, 2090-2097	5	2
185	Towards a free-floating wireless implantable optogenetic stimulating system 2017 ,		6
184	Optimizing three-phase three-layer coil array for omnidirectional wireless power transfer 2017 ,		1
183	A Real-Time Embedded FPGA Processor for a Stand-Alone Dual-Mode Assistive Device 2017 ,		2
182	Towards a Reduced-Wire Interface for CMUT-Based Intravascular Ultrasound Imaging Systems. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , 2017 , 11, 400-410	5.1	26
181	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> , 2017 , 11, 1366-1376	5.1	28
180	. <i>IEEE Circuits and Systems Magazine</i> , 2017 , 17, 64-82	3.2	15
179	Efficacy Assessment of multimodal Tongue Drive System (mTDS) in Comparison to Keyboard and Mouse (KnM). <i>Archives of Physical Medicine and Rehabilitation</i> , 2017 , 98, e163-e164	2.8	4

178	Millimeter-scale integrated and wirewound coils for powering implantable neural microsystems 2017 ,		9
177	An automated tracking system for Y-maze behavioral test using kinect depth imaging 2017 ,		1
176	A dual-mode passive rectifier for wide-range input power flow 2017 ,		8
175	An embedded FPGA accelerator for a stand-alone dual-mode assistive device 2017 ,		2
174	Towards a robust data link for intraoral tongue drive system using triple bands and adaptive matching 2017 ,		5
173	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> , 2017 , 2017, 3603860	1.7	3
172	A Wirelessly-Powered Homecage With Segmented Copper Foils and Closed-Loop Power Control. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , 2016 , 10, 979-989	5.1	21
171	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</i> , 2016 , 2016, 4495-4498	0.9	5
170	A wirelessly-powered homecage 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</i> , 2016 , 2016, 6323-6326	0.9	5
169	Tongue implant for assistive technologies: Test of migration, tissue reactivity and impact on tongue function. <i>Archives of Oral Biology</i> , 2016 , 71, 1-9	2.8	5
168	Inductive Power Transmission Systems 2016 , 1-12		
167	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> , 2016 , 24, 68-78	4.8	27
166	A Triple-Loop Inductive Power Transmission System for Biomedical Applications. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , 2016 , 10, 138-48	5.1	89
165	Optimal Design of Wireless Power Transmission Links for Millimeter-Sized Biomedical Implants. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , 2016 , 10, 125-37	5.1	152
164	A Vision-Based Respiration Monitoring System for Passive Airway Resistance Estimation. <i>IEEE Transactions on Biomedical Engineering</i> , 2016 , 63, 1904-1913	5	12
163	Multichannel Wireless Neural Recording AFE Architectures: Analysis, Modeling, and Tradeoffs. <i>IEEE Design and Test</i> , 2016 , 33, 24-36	1.4	10
162	Three-Phase Time-Multiplexed Planar Power Transmission to Distributed Implants. <i>IEEE Journal of Emerging and Selected Topics in Power Electronics</i> , 2016 , 4, 263-272	5.6	38
161	An Inductively-Powered Wireless Neural Recording System with a Charge Sampling Analog Front-End. <i>IEEE Sensors Journal</i> , 2016 , 16, 475-484	4	31

160	Tongue-controlled robotic rehabilitation: A feasibility study in people with stroke. <i>Journal of Rehabilitation Research and Development</i> , 2016 , 53, 989-1006		8
159	Fabrication and Microassembly of a mm-Sized Floating Probe for a Distributed Wireless Neural Interface. <i>Micromachines</i> , 2016 , 7,	3.3	27
158	Modeling and optimization of mm-sized solenoid coils for biomedical implants 2016 ,		1
157	Towards a wireless multimodal speech capture system 2016 ,		1
156	Optimal design of a 3-coil inductive link for millimeter-sized biomedical implants 2016 ,		12
155	A Multi-Cycle Q-Modulation for Dynamic Optimization of Inductive Links. <i>IEEE Transactions on Industrial Electronics</i> , 2016 , 63, 5091-5100	8.9	34
154	Detecting food intake acoustic events in noisy recordings using template matching 2016 ,		7
153	Direct Digital Demultiplexing of Analog TDM Signals for Cable Reduction in Ultrasound Imaging Catheters. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2016 , 63, 1078-85	3.2	15
152	Ultra-Thin Wireless Power Module with Integration of Wireless Inductive Link and Supercapacitors 2016 ,		2
151	Energy management integrated circuits for wireless power transmission 2015 , 87-111		1
150	Corrections to A Power-Efficient Switched-Capacitor Stimulating System for Electrical/Optical Deep-Brain Stimulation [Jan 15 360-374]. <i>IEEE Journal of Solid-State Circuits</i> , 2015 , 50, 1736-1736	5.5	
149	Energy-efficient switching scheme in SAR ADC for biomedical electronics. <i>Electronics Letters</i> , 2015 , 51, 676-678	1.1	35
148	12.7 A power-management ASIC with Q-modulation capability for efficient inductive power transmission 2015 ,		17
147	A Smart Wirelessly Powered Homecage for Long-Term High-Throughput Behavioral Experiments. <i>IEEE Sensors Journal</i> , 2015 , 15, 4905-4916	4	30
146	A Q-Modulation Technique for Efficient Inductive Power Transmission. <i>IEEE Journal of Solid-State Circuits</i> , 2015 , 50, 2839-2848	5.5	57
145	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> , 2015 , 9, 1-11	5.1	55
144	Towards a three-phase time-multiplexed planar power transmission to distributed implants 2015 ,		3
143	Design, fabrication, and packaging of an integrated, wirelessly-powered optrode array for optogenetics application. <i>Frontiers in Systems Neuroscience</i> , 2015 , 9, 69	3.5	52

142	A multimodal human computer interface combining head movement, speech and tongue motion for people with severe disabilities 2015 ,		13
141	Toward Silent-Speech Control of Consumer Wearables. <i>Computer</i> , 2015 , 48, 54-62	1.6	12
140	Time-division multiplexing for cable reduction in ultrasound imaging catheters 2015 ,		6
139	Advanced wireless power and data transmission techniques for implantable medical devices 2015 ,		5
138	Source separation for target enhancement of food intake acoustics from noisy recordings 2015 ,		5
137	Joint power and thermal management for implantable devices 2015 ,		2
136	A closed-loop wireless homecage for optogenetic stimulation experiments 2015 ,		6
135	A multi-cycle Q-modulation technique for wirelessly-powered biomedical implants 2015 ,		4
134	Towards a kinect-based behavior recognition and analysis system for small animals 2015 ,		12
133	A Power-Efficient Switched-Capacitor Stimulating System for Electrical/Optical Deep Brain Stimulation. <i>IEEE Journal of Solid-State Circuits</i> , 2015 , 50, 360-374	5.5	92
132	Toward an Ultralow-Power Onboard Processor for Tongue Drive System. <i>IEEE Transactions on Circuits and Systems II: Express Briefs</i> , 2015 , 62, 174-178	3.5	9
131	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</i> , 2015 , 21, 61-76	1.5	9
130	Design and Fabricate Neckwear to Improve the Elderly Patients' Medical Compliance. <i>Lecture Notes in Computer Science</i> , 2015 , 222-234	0.9	5
129	Centimeter-Range Inductive Radios. <i>Integrated Circuits and Systems</i> , 2015 , 313-341	0.2	2
128	Power-Efficient Wireless Neural Stimulating System Design for Implantable Medical Devices. <i>IEIE Transactions on Smart Processing and Computing</i> , 2015 , 4, 133-140	1.2	2
127	Near-Field Wireless Power and Data Transmission to Implantable Neuroprosthetic Devices 2014 , 189-215		1
126	EnerCage: a smart experimental arena with scalable architecture for behavioral experiments. <i>IEEE Transactions on Biomedical Engineering</i> , 2014 , 61, 139-48	5	42
125	Inductive Coupling 2014 , 174-208		4

124	Tongue-controlled computer game: a new approach for rehabilitation of tongue motor function. <i>Archives of Physical Medicine and Rehabilitation</i> , 2014 , 95, 524-30	2.8	26
123	Enhanced Wireless Power Transmission Using Strong Paramagnetic Response. <i>IEEE Transactions on Magnetics</i> , 2014 , 50,	2	28
122	A wireless slanted optrode array with integrated micro leds for optogenetics 2014 ,		20
121	Older Adults' Perceptions of a Neckwear Health Technology. <i>Proceedings of the Human Factors and Ergonomics Society</i> , 2014 , 58, 1815-1819	0.4	5
120	A PWM-IR-UWB transceiver for low-power data communication 2014 ,		4
119	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> , 2014 , 2014, 3134-7	0.9	4
118	Qualitative assessment of tongue drive system by people with high-level spinal cord injury. <i>Journal of Rehabilitation Research and Development</i> , 2014 , 51, 451-65		22
117	An arch-shaped intraoral tongue drive system with built-in tongue-computer interfacing SoC. <i>Sensors</i> , 2014 , 14, 21565-87	3.8	16
116	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</i> , 2014 , 2014, 878-81	0.9	6
115	Wireless Communication of Intraoral Devices and Its Optimal Frequency Selection. <i>IEEE Transactions on Microwave Theory and Techniques</i> , 2014 , 62, 3205-3215	4.1	15
114	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> , 2014 , 2014, 5080-4	0.9	3
113	Real-time swallowing detection based on tracheal acoustics 2014 ,		20
112	2014 ,		5
111	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> , 2014 , 2014, 2016-9	0.9	2
110	Smartphone-compatible robust classification algorithm for the Tongue Drive System 2014 ,		3
109	Development of a tongue-piercing method for use with assistive technology. <i>JAMA Dermatology</i> , 2014 , 150, 453-4	5.1	3
108	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</i> , 2014 , 2014, 1436-9	0.9	10
107	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> , 2014 , 2014, 5743-7	0.9	17

106	A 13-bit Noise Shaping SAR-ADC with Dual-Polarity Digital Calibration. <i>Analog Integrated Circuits and Signal Processing</i> , 2013 , 75, 459-465	1.2	4
105	A Power-Efficient Wireless Capacitor Charging System Through an Inductive Link. <i>IEEE Transactions on Circuits and Systems II: Express Briefs</i> , 2013 , 60, 707-711	3.5	28
104	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> , 2013 , 60, 382-386	3.5	28
103	A Power-Efficient Wireless System With Adaptive Supply Control for Deep Brain Stimulation. <i>IEEE Journal of Solid-State Circuits</i> , 2013 , 48, 2203-2216	5.5	130
102	Motivational conditions influence tongue motor performance. <i>European Journal of Oral Sciences</i> , 2013 , 121, 111-6	2.3	15
101	A wideband dual-antenna receiver for wireless recording from animals behaving in large arenas. <i>IEEE Transactions on Biomedical Engineering</i> , 2013 , 60, 1993-2004	5	27
100	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> , 2013 , 7, 213-24	5.1	41
99	Design, modeling and characterization of a 35MHz 1-D CMUT phased array 2013 ,		6
98	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> , 2013 , 21, 979-91	4.8	24
97	The tongue enables computer and wheelchair control for people with spinal cord injury. <i>Science Translational Medicine</i> , 2013 , 5, 213ra166	17.5	66
96	A smart cage for behavioral experiments on small freely behaving animal subjects 2013 ,		2
95	Potential barriers in adoption of a medication compliance neckwear by elderly population. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2013 , 2013, 4678-81	0.9	
94	An apparatus for improving upper limb function by engaging synchronous tongue motion 2013 ,		3
93	Motor performance of tongue with a computer-integrated system under different levels of background physical exertion. <i>Ergonomics</i> , 2013 , 56, 1733-44	2.9	3
92	Guest Editorial Selected Papers from the 2013 IEEE International Solid-State Circuits Conference (ISSCC). <i>IEEE Transactions on Biomedical Circuits and Systems</i> , 2013 , 7, 733-734	5.1	
91	Force and complexity of tongue task training influences behavioral measures of motor learning. <i>European Journal of Oral Sciences</i> , 2012 , 120, 46-53	2.3	21
90	Introduction to the Special Issue on the 2011 IEEE International Solid-State Circuits Conference. <i>IEEE Journal of Solid-State Circuits</i> , 2012 , 47, 3-7	5.5	1
89	Evaluation of a smartphone platform as a wireless interface between tongue drive system and electric-powered wheelchairs. <i>IEEE Transactions on Biomedical Engineering</i> , 2012 , 59, 1787-96	5	43

88	Dual-task motor performance with a tongue-operated assistive technology compared with hand operations. <i>Journal of NeuroEngineering and Rehabilitation</i> , 2012 , 9, 1	5.3	110
87	Geometrical Design of a Scalable Overlapping Planar Spiral Coil Array to Generate a Homogeneous Magnetic Field. <i>IEEE Transactions on Magnetics</i> , 2012 , 49, 2933-2945	2	45
86	A Figure-of-Merit for Designing High-Performance Inductive Power Transmission Links. <i>IEEE Transactions on Industrial Electronics</i> , 2012 , 60, 5292-5305	8.9	94
85	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> , 2012 , 16, 633-43		22
84	Intraoral tongue drive system demonstration 2012 ,		2
83	Real time control of a wireless powering and tracking system for long-term and large-area electrophysiology experiments 2012 ,		3
82	A wireless magnetoresistive sensing system for an intra-oral tongue-computer interface 2012 ,		3
81	Towards a smart experimental arena for long-term electrophysiology experiments. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , 2012 , 6, 414-23	5.1	33
80	The Circuit Theory Behind Coupled-Mode Magnetic Resonance-Based Wireless Power Transmission. <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , 2012 , 59, 2065-2074	3.9	271
79	An Adaptive Reconfigurable Active Voltage Doubler/Rectifier for Extended-Range Inductive Power Transmission. <i>IEEE Transactions on Circuits and Systems II: Express Briefs</i> , 2012 , 59, 481-485	3.5	46
78	A wireless magnetoresistive sensing system for an intraoral tongue-computer interface. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , 2012 , 6, 571-85	5.1	51
77	Development and preliminary evaluation of an intraoral Tongue Drive 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> , 2012 , 2012, 1157-60	0.9	4
76	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> , 2012 , 2012, 847-50	0.9	3
75	Tongue drive: a wireless tongue- operated means for people with severe disabilities to communicate their intentions 2012 , 50, 128-135		24
74	An Adaptive Reconfigurable Active Voltage Doubler/Rectifier for Extended-Range Inductive Power Transmission. <i>IEEE Transactions on Circuits and Systems II: Express Briefs</i> , 2012 , 286-288	3.5	32
73	Tongue-operated assistive technology with access to common smartphone applications via Bluetooth link. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2012 , 2012, 1051-5	0.9	2
72	Quantitative assessment of magnetic sensor signal processing algorithms in a wireless tongue-operated 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> , 2012 , 2012, 3132-5	0.9	2
71	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</i> , 2012 , 2012, 1153-1156	0.9	8

70	Wireless hippocampal neural recording via a multiple input RF receiver to construct place-specific firing fields. <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, 763-6</i>	0.9	
69	Wideband Near-Field Data Transmission Using Pulse Harmonic Modulation. <i>IEEE Transactions on Circuits and Systems I: Regular Papers, 2011, 58, 186-195</i>	3.9	31
68	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, 2011, 2011, 7344-7</i>	0.9	5
67	A 10.2 Mbps Pulse Harmonic Modulation Based Transceiver for Implantable Medical Devices. <i>IEEE Journal of Solid-State Circuits, 2011, 46, 1296-1306</i>	5.5	45
66	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, 2011, 58, 1749-1760</i>	3.9	158
65	Design and Optimization of a 3-Coil Inductive Link for Efficient Wireless Power Transmission. <i>IEEE Transactions on Biomedical Circuits and Systems, 2011, 99, 1</i>	5.1	401
64	Guest Editorial Selected Papers From the 2011 IEEE International Solid-State Circuits Conference (ISSCC). <i>IEEE Transactions on Biomedical Circuits and Systems, 2011, 5, 501-502</i>	5.1	
63	Quantitative and comparative assessment of learning in a tongue-operated computer input device. <i>IEEE Transactions on Information Technology in Biomedicine, 2011, 15, 747-57</i>		33
62	A low-noise clockless simultaneous 32-channel wireless neural recording system with adjustable resolution. <i>Analog Integrated Circuits and Signal Processing, 2011, 66, 417-431</i>	1.2	24
61	Fully integrated power-efficient AC-to-DC converter design in inductively-powered biomedical applications 2011,		12
60	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
59	An overview of the recent wideband transcutaneous wireless communication techniques. <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, 5864-7</i>	0.9	5
58	Using speech recognition to enhance the Tongue Drive System functionality in 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, 2011, 2011, 6393-6</i>	0.9	3
57	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
56	Towards a smart experimental arena for long-term electrophysiology experiments 2011,		4
55	A high-performance analog front-end for an intraoral tongue-operated assistive technology 2011,		5
54	Preliminary assessment of Tongue Drive System in medium term usage for computer access and wheelchair control. <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, 5766-9</i>	0.9	3
53	A novel pulse-based modulation technique for wideband low power communication with neuroprosthetic devices. <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, 5324-8</i>	0.9	3

52	Radiation characterization of an intra-oral wireless device at multiple ISM bands: 433 MHZ, 915 MHZ, and 2.42 GHz. <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, 1425-8</i>	0.9	2
51	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
50	Evaluation of a wireless wearable tongue-computer interface by individuals with high-level spinal cord injuries. <i>Journal of Neural Engineering, 2010, 7, 26008</i>	5	74
49	Effects of additional workload on hand and tongue performance. <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, 6611-4</i>	0.9	2
48	An Inductively Powered Scalable 32-Channel Wireless Neural Recording System-on-a-Chip for Neuroscience Applications. <i>IEEE Transactions on Biomedical Circuits and Systems, 2010, 4, 360-71</i>	5.1	110
47	An RFID-Based Closed-Loop Wireless Power Transmission System for Biomedical Applications. <i>IEEE Transactions on Circuits and Systems II: Express Briefs, 2010, 57, 260-264</i>	3.5	107
46	Optimization of data coils in a multiband wireless link for neuroprosthetic implantable devices. <i>IEEE Transactions on Biomedical Circuits and Systems, 2010, 4, 301-10</i>	5.1	81
45	An efficient 13.56 MHz active back-telemetry rectifier in standard CMOS technology 2010,		3
44	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, 2010, 2010, 2927-30</i>	0.9	18
43	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
42	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, 2010, 2010, 120-121</i>	4	102
41	In vivo testing of a low noise 32-channel 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, 2009, 2009, 1608-11</i>	0.9	4
40	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, 2009, 2009, 6387-90</i>	0.9	1
39	Using pulse width modulation for wireless transmission of neural signals in multichannel neural recording systems. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2009, 17, 354-63</i>	4.8	26
38	Using unconstrained tongue motion as an alternative control mechanism for wheeled mobility. <i>IEEE Transactions on Biomedical Engineering, 2009, 56, 1719-26</i>	5	68
37	Analysis, design, and implementation of a high-efficiency full-wave rectifier in standard CMOS technology. <i>Analog Integrated Circuits and Signal Processing, 2009, 60, 71-81</i>	1.2	24
36	Modeling and optimization of printed spiral coils in air, saline, and muscle tissue environments. <i>IEEE Transactions on Biomedical Circuits and Systems, 2009, 3, 339-47</i>	5.1	182
35	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

34	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
33	Evaluation of the tongue drive system by individuals with high-level spinal cord injury. <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, 555-8</i>	0.9	2
32	A magneto-inductive sensor based wireless tongue-computer interface. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2008, 16, 497-504</i>	4.8	141
31	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, 2008, 55, 3328-3334</i>	3.9	57
30	2008,		4
29	A quadratic particle swarm optimization method for magnetic tracking of tongue motion in speech disorders. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2008, 2008, 4222-5</i>	0.9	2
28	A clockless ultra low-noise low-power wireless implantable neural recording system 2008,		1
27	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, 2008, 2, 184-92</i>	5.1	42
26	Optimization of a multiband wireless link for neuroprosthetic implantable devices 2008,		7
25	A wideband PWM-FSK receiver for wireless implantable neural recording applications 2008,		1
24	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, 2008, 2008, 4199-202</i>	0.9	14
23	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, 2008, 45, 921-30</i>		40
22	A high efficiency full-wave rectifier in standard CMOS Technology. <i>Midwest Symposium on Circuits and Systems, 2007,</i>	1	6
21	Design and Optimization of Printed Spiral Coils for Efficient Inductive Power Transmission 2007,		13
20	. <i>IEEE Transactions on Circuits and Systems Part 1: Regular Papers, 2007, 54, 2211-2221</i>		143
19	A wireless implantable multichannel microstimulating system-on-a-chip with modular architecture. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2007, 15, 449-57</i>	4.8	103
18	Tongue operated assistive technologies. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 4376-9</i>		17
17	Using Pulse Width Modulation for Wireless Transmission of Neural Signals in a Multichannel Neural Recording System 2007,		5

16	Design and optimization of printed spiral coils for efficient transcutaneous inductive power transmission. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , 2007 , 1, 193-202	5.1	418
15	A Low-Noise Preamplifier with Adjustable Gain and Bandwidth for Biopotential Recording Applications 2007 ,		72
14	A Magnetic Wireless Tongue-Computer Interface 2007 ,		9
13	Using Magneto-Inductive Sensors to Detect Tongue Position in a Wireless Assistive Technology for People with Severe Disabilities 2007 ,		3
12	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> , 2007 , 2007, 5724-7		14
11	A Wireless Pharmaceutical Compliance Monitoring System Based on Magneto-Inductive Sensors. <i>IEEE Sensors Journal</i> , 2007 , 7, 1711-1719	4	8
10	An Experimental Study of Voltage, Current, and Charge Controlled Stimulation Front-End Circuitry 2007 ,		36
9	Incorporating Back Telemetry in a Full-Wave CMOS Rectifier for RFID and Biomedical Applications 2007 ,		10
8	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> , 2006 , 2006, 4404-7		5
7	A High-Voltage Output Driver for Implantable Biomedical Stimulators and I/O Applications 2006 ,		6
6	A 15-Channel Wireless Neural Recording System Based on Time Division Multiplexing of Pulse Width Modulated Signals 2006 ,		6
5	Fully-Integrated CMOS Power Regulator for Telemetry-Powered Implantable Biomedical Microsystems 2006 ,		27
4	A compact large voltage-compliance high output-impedance programmable current source for implantable microstimulators. <i>IEEE Transactions on Biomedical Engineering</i> , 2005 , 52, 97-105	5	92
3	A multichannel monolithic wireless microstimulator. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society</i> , 2004 , 2004, 4197-200		8
2	A Modular 32-site wireless neural stimulation microsystem. <i>IEEE Journal of Solid-State Circuits</i> , 2004 , 39, 2457-2466	5.5	100
1	. <i>IEEE Journal of Solid-State Circuits</i> , 2004 , 39, 1976-1984	5.5	216