

Warren M Grill

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266
papers

10,226
citations

53
h-index

91
g-index

308
ext. papers

12,515
ext. citations

4
avg, IF

6.73
L-index

#	Paper	IF	Citations
266	Cellular effects of deep brain stimulation: model-based analysis of activation and inhibition. <i>Journal of Neurophysiology</i> , 2004 , 91, 1457-69	3.2	592
265	Modeling the excitability of mammalian nerve fibers: influence of afterpotentials on the recovery cycle. <i>Journal of Neurophysiology</i> , 2002 , 87, 995-1006	3.2	461
264	Implanted neural interfaces: biochallenges and engineered solutions. <i>Annual Review of Biomedical Engineering</i> , 2009 , 11, 1-24	12	374
263	Selection of stimulus parameters for deep brain stimulation. <i>Clinical Neurophysiology</i> , 2004 , 115, 2431-41	4.3	315
262	Extracellular stimulation of central neurons: influence of stimulus waveform and frequency on neuronal output. <i>Journal of Neurophysiology</i> , 2002 , 88, 1592-604	3.2	285
261	Electrical properties of implant encapsulation tissue. <i>Annals of Biomedical Engineering</i> , 1994 , 22, 23-33	4.7	254
260	Excitation of central nervous system neurons by nonuniform electric fields. <i>Biophysical Journal</i> , 1999 , 76, 878-88	2.9	253
259	Deep brain stimulation creates an informational lesion of the stimulated nucleus. <i>NeuroReport</i> , 2004 , 15, 1137-40	1.7	247
258	Bioelectronic medicines: a research roadmap. <i>Nature Reviews Drug Discovery</i> , 2014 , 13, 399-400	64.1	201
257	Selective microstimulation of central nervous system neurons. <i>Annals of Biomedical Engineering</i> , 2000 , 28, 219-33	4.7	171
256	Tapping into spinal circuits to restore motor function. <i>Brain Research Reviews</i> , 1999 , 30, 27-51		157
255	Closed-loop control of deep brain stimulation: a simulation study. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2011 , 19, 15-24	4.8	148
254	Analysis of the quasi-static approximation for calculating potentials generated by neural stimulation. <i>Journal of Neural Engineering</i> , 2008 , 5, 44-53	5	131
253	Deep brain stimulation reduces neuronal entropy in the MPTP-primate model of Parkinson's disease. <i>Journal of Neurophysiology</i> , 2008 , 100, 2807-18	3.2	122
252	Finite element analysis of the current-density and electric field generated by metal microelectrodes. <i>Annals of Biomedical Engineering</i> , 2001 , 29, 227-35	4.7	121
251	Deep brain stimulation alleviates parkinsonian bradykinesia by regularizing pallidal activity. <i>Journal of Neurophysiology</i> , 2010 , 104, 911-21	3.2	119
250	Effective deep brain stimulation suppresses low-frequency network oscillations in the basal ganglia by regularizing neural firing patterns. <i>Journal of Neuroscience</i> , 2012 , 32, 15657-68	6.6	117

249	Current density distributions, field distributions and impedance analysis of segmented deep brain stimulation electrodes. <i>Journal of Neural Engineering</i> , 2005 , 2, 139-47	5	115
248	Energy-efficient waveform shapes for neural stimulation revealed with a genetic algorithm. <i>Journal of Neural Engineering</i> , 2010 , 7, 046009	5	105
247	Mechanisms of deep brain stimulation in movement disorders as revealed by changes in stimulus frequency. <i>Neurotherapeutics</i> , 2008 , 5, 14-25	6.4	101
246	Impedance characteristics of deep brain stimulation electrodes in vitro and in vivo. <i>Journal of Neural Engineering</i> , 2009 , 6, 046008	5	100
245	Modularity of motor output evoked by intraspinal microstimulation in cats. <i>Journal of Neurophysiology</i> , 2004 , 91, 502-14	3.2	99
244	Mechanisms and models of spinal cord stimulation for the treatment of neuropathic pain. <i>Brain Research</i> , 2014 , 1569, 19-31	3.7	96
243	Clinical response to varying the stimulus parameters in deep brain stimulation for essential tremor. <i>Movement Disorders</i> , 2006 , 21, 1920-8	7	92
242	Simultaneous transcranial magnetic stimulation and single-neuron recording in alert non-human primates. <i>Nature Neuroscience</i> , 2014 , 17, 1130-6	25.5	88
241	Technology of deep brain stimulation: current status and future directions. <i>Nature Reviews Neurology</i> , 2021 , 17, 75-87	15	87
240	Improved efficacy of temporally non-regular deep brain stimulation in Parkinson's disease. <i>Experimental Neurology</i> , 2013 , 239, 60-7	5.7	86
239	Stimulus features underlying reduced tremor suppression with temporally patterned deep brain stimulation. <i>Journal of Neurophysiology</i> , 2012 , 107, 364-83	3.2	80
238	Simulation of transcranial magnetic stimulation in head model with morphologically-realistic cortical neurons. <i>Brain Stimulation</i> , 2020 , 13, 175-189	5.1	80
237	High-resolution measurement of electrically-evoked vagus nerve activity in the anesthetized dog. <i>Journal of Neural Engineering</i> , 2013 , 10, 026003	5	79
236	Electrical stimulation for the treatment of bladder dysfunction: current status and future possibilities. <i>Neurological Research</i> , 2002 , 24, 413-30	2.7	79
235	Frequency-dependent selection of reflexes by pudendal afferents in the cat. <i>Journal of Physiology</i> , 2006 , 577, 115-26	3.9	78
234	Optimized temporal pattern of brain stimulation designed by computational evolution. <i>Science Translational Medicine</i> , 2017 , 9,	17.5	77
233	Neural and connective tissue response to long-term implantation of multiple contact nerve cuff electrodes. <i>Journal of Biomedical Materials Research Part B</i> , 2000 , 50, 215-26		77
232	Efficiency analysis of waveform shape for electrical excitation of nerve fibers. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2010 , 18, 319-28	4.8	73

231	Bladder activation by selective stimulation of pudendal nerve afferents in the cat. <i>Experimental Neurology</i> , 2008 , 212, 218-25	5.7	71
230	Dorsal genital nerve stimulation for the treatment of overactive bladder symptoms. <i>Neurourology and Urodynamics</i> , 2008 , 27, 499-503	2.3	70
229	Relative contributions of local cell and passing fiber activation and silencing to changes in thalamic fidelity during deep brain stimulation and lesioning: a computational modeling study. <i>Journal of Computational Neuroscience</i> , 2012 , 32, 499-519	1.4	68
228	Bladder and urethral pressures evoked by microstimulation of the sacral spinal cord in cats. <i>Brain Research</i> , 1999 , 836, 19-30	3.7	67
227	Principles of electrical stimulation of neural tissue. <i>Handbook of Clinical Neurology / Edited By P J Vinken and G W Bruyn</i> , 2013 , 116, 3-18	3	66
226	Excitation properties of the right cervical vagus nerve in adult dogs. <i>Experimental Neurology</i> , 2011 , 227, 62-8	5.7	66
225	A urethral afferent mediated excitatory bladder reflex exists in humans. <i>Neuroscience Letters</i> , 2004 , 360, 9-12	3.3	66
224	Role of pudendal afferents in voiding efficiency in the rat. <i>American Journal of Physiology - Regulatory Integrative and Comparative Physiology</i> , 2008 , 294, R660-72	3.2	64
223	Amplitude- and frequency-dependent changes in neuronal regularity parallel changes in tremor With thalamic deep brain stimulation. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2007 , 15, 190-7	4.8	61
222	A method to estimate the spatial extent of activation in thalamic deep brain stimulation. <i>Clinical Neurophysiology</i> , 2008 , 119, 2148-58	4.3	58
221	Safety considerations for deep brain stimulation: review and analysis. <i>Expert Review of Medical Devices</i> , 2005 , 2, 409-20	3.5	58
220	Detection and inhibition of hyperreflexia-like bladder contractions in the cat by sacral nerve root recording and electrical stimulation. <i>Neurourology and Urodynamics</i> , 2001 , 20, 215-30	2.3	58
219	Modulation of activity and conduction in single dorsal column axons by kilohertz-frequency spinal cord stimulation. <i>Journal of Neurophysiology</i> , 2017 , 117, 136-147	3.2	57
218	Extracellular excitation of central neurons: implications for the mechanisms of deep brain stimulation. <i>Thalamus & Related Systems</i> , 2001 , 1, 269		57
217	Neuroprosthetic applications of electrical stimulation. <i>Assistive Technology</i> , 2000 , 12, 6-20	1.5	56
216	Modulation of neuroinflammation and memory dysfunction using percutaneous vagus nerve stimulation in mice. <i>Brain Stimulation</i> , 2019 , 12, 19-29	5.1	56
215	Sites of neuronal excitation by epiretinal electrical stimulation. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2006 , 14, 5-13	4.8	55
214	Myoclonus and tremor response to thalamic deep brain stimulation parameters in a patient with inherited myoclonus-dystonia syndrome. <i>Clinical Neurology and Neurosurgery</i> , 2009 , 111, 303-6	2	54

213	Activation and inhibition of the micturition reflex by penile afferents in the cat. <i>American Journal of Physiology - Regulatory Integrative and Comparative Physiology</i> , 2008 , 294, R1880-9	3.2	53
212	Spinal micturition reflex mediated by afferents in the deep perineal nerve. <i>Journal of Neurophysiology</i> , 2005 , 93, 2688-97	3.2	53
211	Computer-based model of epidural motor cortex stimulation: effects of electrode position and geometry on activation of cortical neurons. <i>Clinical Neurophysiology</i> , 2012 , 123, 160-72	4.3	52
210	Computational modeling of epidural cortical stimulation. <i>Journal of Neural Engineering</i> , 2008 , 5, 443-54	5	52
209	Tremor varies as a function of the temporal regularity of deep brain stimulation. <i>NeuroReport</i> , 2008 , 19, 599-602	1.7	52
208	Pudendal nerve stimulation evokes reflex bladder contractions in persons with chronic spinal cord injury. <i>Neurourology and Urodynamics</i> , 2007 , 26, 1020-3	2.3	50
207	Electrical stimulation for the treatment of lower urinary tract dysfunction after spinal cord injury. <i>Journal of Spinal Cord Medicine</i> , 2015 , 38, 135-46	1.9	48
206	Antidromic propagation of action potentials in branched axons: implications for the mechanisms of action of deep brain stimulation. <i>Journal of Computational Neuroscience</i> , 2008 , 24, 81-93	1.4	48
205	Prediction of myelinated nerve fiber stimulation thresholds: limitations of linear models. <i>IEEE Transactions on Biomedical Engineering</i> , 2004 , 51, 229-36	5	47
204	Biophysically realistic neuron models for simulation of cortical stimulation. <i>Journal of Neural Engineering</i> , 2018 , 15, 066023	5	45
203	Functional electrical stimulation helps replenish progenitor cells in the injured spinal cord of adult rats. <i>Experimental Neurology</i> , 2010 , 222, 211-8	5.7	44
202	Functions of Interoception: From Energy Regulation to Experience of the Self. <i>Trends in Neurosciences</i> , 2021 , 44, 29-38	13.3	44
201	Effects of stimulation site and stimulation parameters on bladder inhibition by electrical nerve stimulation. <i>BJU International</i> , 2012 , 110, 136-43	5.6	43
200	Pulse-to-pulse changes in the frequency of deep brain stimulation affect tremor and modeled neuronal activity. <i>Journal of Neurophysiology</i> , 2007 , 98, 1675-84	3.2	43
199	Closed loop electrical control of urinary continence. <i>Journal of Urology</i> , 2006 , 175, 1559-63	2.5	43
198	Bladder emptying by intermittent electrical stimulation of the pudendal nerve. <i>Journal of Neural Engineering</i> , 2006 , 3, 43-51	5	43
197	Detecting the onset of hyper-reflexive bladder contractions from the electrical activity of the pudendal nerve. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2005 , 13, 428-35	4.8	43
196	A biophysical model of the cortex-basal ganglia-thalamus network in the 6-OHDA lesioned rat model of Parkinson's disease. <i>Journal of Computational Neuroscience</i> , 2016 , 40, 207-29	1.4	42

195	Evolving Applications, Technological Challenges and Future Opportunities in Neuromodulation: Proceedings of the Fifth Annual Deep Brain Stimulation Think Tank. <i>Frontiers in Neuroscience</i> , 2017 , 11, 734	5.1	42
194	Deep brain stimulation of the subthalamic nucleus reestablishes neuronal information transmission in the 6-OHDA rat model of parkinsonism. <i>Journal of Neurophysiology</i> , 2014 , 111, 1949-59	3.2	42
193	Biomarkers and Stimulation Algorithms for Adaptive Brain Stimulation. <i>Frontiers in Neuroscience</i> , 2017 , 11, 564	5.1	40
192	Conditional and continuous electrical stimulation increase cystometric capacity in persons with spinal cord injury. <i>Neurourology and Urodynamics</i> , 2010 , 29, 401-7	2.3	40
191	Modeling effects of spinal cord stimulation on wide-dynamic range dorsal horn neurons: influence of stimulation frequency and GABAergic inhibition. <i>Journal of Neurophysiology</i> , 2014 , 112, 552-67	3.2	38
190	Analysis of high-perimeter planar electrodes for efficient neural stimulation. <i>Frontiers in Neuroengineering</i> , 2009 , 2, 15		38
189	Improved bladder emptying in urinary retention by electrical stimulation of pudendal afferents. <i>Journal of Neural Engineering</i> , 2008 , 5, 144-54	5	38
188	Sensitivity analysis of a model of mammalian neural membrane. <i>Biological Cybernetics</i> , 1998 , 79, 29-37	2.8	36
187	Multiple pudendal sensory pathways reflexly modulate bladder and urethral activity in patients with spinal cord injury. <i>Journal of Urology</i> , 2011 , 185, 737-43	2.5	35
186	Modulation of heart rate by temporally patterned vagus nerve stimulation in the anesthetized dog. <i>Physiological Reports</i> , 2016 , 4, e12689	2.6	34
185	Model-based analysis and design of nerve cuff electrodes for restoring bladder function by selective stimulation of the pudendal nerve. <i>Journal of Neural Engineering</i> , 2013 , 10, 036010	5	34
184	Evaluation of intradural stimulation efficiency and selectivity in a computational model of spinal cord stimulation. <i>PLoS ONE</i> , 2014 , 9, e114938	3.7	33
183	Fascicular anatomy and surgical access of the human pudendal nerve. <i>World Journal of Urology</i> , 2005 , 23, 411-8	4	32
182	FUNCTIONAL ANATOMY OF THE MALE FELINE URETHRA: MORPHOLOGICAL AND PHYSIOLOGICAL CORRELATIONS. <i>Journal of Urology</i> , 1999 , 161, 654-659	2.5	32
181	Non-invasive measurement of the input-output properties of peripheral nerve stimulating electrodes. <i>Journal of Neuroscience Methods</i> , 1996 , 65, 43-50	3	32
180	Peripheral nerve stimulation in regional anesthesia. <i>Regional Anesthesia and Pain Medicine</i> , 2012 , 37, 383-92	3.4	31
179	Translating promising strategies for bowel and bladder management in spinal cord injury. <i>Experimental Neurology</i> , 2018 , 306, 169-176	5.7	30
178	Design and in vivo evaluation of more efficient and selective deep brain stimulation electrodes. <i>Journal of Neural Engineering</i> , 2015 , 12, 046030	5	29

177	Influences of interpolation error, electrode geometry, and the electrode-tissue interface on models of electric fields produced by deep brain stimulation. <i>IEEE Transactions on Biomedical Engineering</i> , 2014 , 61, 297-307	5	29
176	Intraurethral stimulation evokes bladder responses via 2 distinct reflex pathways. <i>Journal of Urology</i> , 2009 , 182, 366-73	2.5	29
175	A catheter based method to activate urethral sensory nerve fibers. <i>Journal of Urology</i> , 2003 , 170, 126-9	2.5	29
174	Enhancement of Neuromodulation with Novel Pulse Shapes Generated by Controllable Pulse Parameter Transcranial Magnetic Stimulation. <i>Brain Stimulation</i> , 2016 , 9, 39-47	5.1	28
173	Model-based analysis and design of waveforms for efficient neural stimulation. <i>Progress in Brain Research</i> , 2015 , 222, 147-62	2.9	28
172	Fabrication and evaluation of conductive elastomer electrodes for neural stimulation. <i>Journal of Biomaterials Science, Polymer Edition</i> , 2007 , 18, 1057-73	3.5	28
171	Electrodeposited platinum-iridium coating improves in vivo recording performance of chronically implanted microelectrode arrays. <i>Biomaterials</i> , 2019 , 205, 120-132	15.6	27
170	Measurement of evoked potentials during thalamic deep brain stimulation. <i>Brain Stimulation</i> , 2015 , 8, 42-56	5.1	27
169	Mechanisms of reflex bladder activation by pudendal afferents. <i>American Journal of Physiology - Regulatory Integrative and Comparative Physiology</i> , 2011 , 300, R398-407	3.2	27
168	Detection of neurogenic detrusor contractions from the activity of the external anal sphincter in cat and human. <i>Neurourology and Urodynamics</i> , 2006 , 25, 140-7	2.3	27
167	Loss of Ranbp2 in motoneurons causes disruption of nucleocytoplasmic and chemokine signaling, proteostasis of hnRNPH3 and Mmp28, and development of amyotrophic lateral sclerosis-like syndromes. <i>DMM Disease Models and Mechanisms</i> , 2017 , 10, 559-579	4.1	26
166	Selective co-stimulation of pudendal afferents enhances bladder activation and improves voiding efficiency. <i>Neurourology and Urodynamics</i> , 2014 , 33, 1272-8	2.3	26
165	Temporal Pattern of Electrical Stimulation is a New Dimension of Therapeutic Innovation. <i>Current Opinion in Biomedical Engineering</i> , 2018 , 8, 1-6	4.4	26
164	Analysis of deep brain stimulation electrode characteristics for neural recording. <i>Journal of Neural Engineering</i> , 2014 , 11, 046010	5	25
163	Evaluation of high-perimeter electrode designs for deep brain stimulation. <i>Journal of Neural Engineering</i> , 2014 , 11, 046026	5	25
162	Minimally-invasive electrical stimulation of the pudendal nerve: a pre-clinical study for neural control of the lower urinary tract. <i>Neurourology and Urodynamics</i> , 2007 , 26, 562-569	2.3	25
161	Functional magnetic resonance imaging of the human lumbar spinal cord. <i>Journal of Magnetic Resonance Imaging</i> , 2005 , 21, 527-35	5.6	25
160	Polarization of a spherical cell in a nonuniform extracellular electric field. <i>Annals of Biomedical Engineering</i> , 2005 , 33, 603-15	4.7	25

159	Spinal sensory projection neuron responses to spinal cord stimulation are mediated by circuits beyond gate control. <i>Journal of Neurophysiology</i> , 2015 , 114, 284-300	3.2	24
158	A spinal GABAergic mechanism is necessary for bladder inhibition by pudendal afferent stimulation. <i>American Journal of Physiology - Renal Physiology</i> , 2014 , 307, F921-30	4.3	24
157	Tremor reduction and modeled neural activity during cycling thalamic deep brain stimulation. <i>Clinical Neurophysiology</i> , 2012 , 123, 1044-52	4.3	24
156	Identification of the spinal neural network involved in coordination of micturition in the male cat. <i>Brain Research</i> , 1998 , 796, 150-60	3.7	24
155	Sensitivity of temporal excitation properties to the neuronal element activated by extracellular stimulation. <i>Journal of Neuroscience Methods</i> , 2004 , 132, 91-9	3	24
154	Effects of vagal neuromodulation on feeding behavior. <i>Brain Research</i> , 2018 , 1693, 180-187	3.7	23
153	Modeling Current Sources for Neural Stimulation in COMSOL. <i>Frontiers in Computational Neuroscience</i> , 2018 , 12, 40	3.5	23
152	Modeling deep brain stimulation: point source approximation versus realistic representation of the electrode. <i>Journal of Neural Engineering</i> , 2010 , 7, 066009	5	23
151	Failure to suppress low-frequency neuronal oscillatory activity underlies the reduced effectiveness of random patterns of deep brain stimulation. <i>Journal of Neurophysiology</i> , 2016 , 115, 2791-802	3.2	23
150	Frequency-Specific Optogenetic Deep Brain Stimulation of Subthalamic Nucleus Improves Parkinsonian Motor Behaviors. <i>Journal of Neuroscience</i> , 2020 , 40, 4323-4334	6.6	22
149	Characterizing effects of subthalamic nucleus deep brain stimulation on methamphetamine-induced circling behavior in hemi-Parkinsonian rats. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2012 , 20, 626-35	4.8	22
148	Short pauses in thalamic deep brain stimulation promote tremor and neuronal bursting. <i>Clinical Neurophysiology</i> , 2016 , 127, 1551-1559	4.3	21
147	Activation of peripheral nerve fibers by electrical stimulation in the sole of the foot. <i>BMC Neuroscience</i> , 2013 , 14, 116	3.2	21
146	An improved genetic algorithm for designing optimal temporal patterns of neural stimulation. <i>Journal of Neural Engineering</i> , 2017 , 14, 066013	5	21
145	Urethral flow-responsive afferents in the cat sacral dorsal root ganglia. <i>Neuroscience Letters</i> , 2012 , 516, 34-8	3.3	21
144	Model-based analysis of multiple electrode array stimulation for epiretinal visual prostheses. <i>Journal of Neural Engineering</i> , 2013 , 10, 036002	5	21
143	Temporal excitation properties of paresthesias evoked by thalamic microstimulation. <i>Clinical Neurophysiology</i> , 2005 , 116, 1227-34	4.3	21
142	On the parameters used in finite element modeling of compound peripheral nerves. <i>Journal of Neural Engineering</i> , 2019 , 16, 016007	5	21

141	Coupling Magnetically Induced Electric Fields to Neurons: Longitudinal and Transverse Activation. <i>Biophysical Journal</i> , 2018 , 115, 95-107	2.9	21
140	Functional vagotomy in the cervical vagus nerve of the domestic pig: implications for the study of vagus nerve stimulation. <i>Journal of Neural Engineering</i> , 2020 , 17, 026022	5	20
139	Electrical stimulation of the urethra evokes bladder contractions and emptying in spinal cord injury men: case studies. <i>Journal of Spinal Cord Medicine</i> , 2011 , 34, 315-21	1.9	20
138	Model-based deconstruction of cortical evoked potentials generated by subthalamic nucleus deep brain stimulation. <i>Journal of Neurophysiology</i> , 2018 , 120, 662-680	3.2	20
137	Effects of frequency-dependent membrane capacitance on neural excitability. <i>Journal of Neural Engineering</i> , 2015 , 12, 056015-56015	5	19
136	Modified cable equation incorporating transverse polarization of neuronal membranes for accurate coupling of electric fields. <i>Journal of Neural Engineering</i> , 2018 , 15, 026003	5	19
135	Somatic innervation of the feline lower urinary tract. <i>Brain Research</i> , 2008 , 1246, 80-7	3.7	19
134	Neural and connective tissue response to long-term implantation of multiple contact nerve cuff electrodes 2000 , 50, 215		19
133	Phasic activation of the external urethral sphincter increases voiding efficiency in the rat and the cat. <i>Experimental Neurology</i> , 2016 , 285, 173-181	5.7	18
132	Bilateral pudendal afferent stimulation improves bladder emptying in rats with urinary retention. <i>BJU International</i> , 2012 , 109, 1051-8	5.6	18
131	Hindlimb endpoint forces predict movement direction evoked by intraspinal microstimulation in cats. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2009 , 17, 379-89	4.8	18
130	Sensory and circuit mechanisms mediating lower urinary tract reflexes. <i>Autonomic Neuroscience: Basic and Clinical</i> , 2016 , 200, 21-28	2.4	17
129	Neural origin of evoked potentials during thalamic deep brain stimulation. <i>Journal of Neurophysiology</i> , 2013 , 110, 826-43	3.2	17
128	Continuous deep brain stimulation of the subthalamic nucleus may not modulate beta bursts in patients with Parkinson's disease. <i>Brain Stimulation</i> , 2020 , 13, 433-443	5.1	17
127	Sources of off-target effects of vagus nerve stimulation using the helical clinical lead in domestic pigs. <i>Journal of Neural Engineering</i> , 2020 , 17, 046017	5	16
126	Dynamics of the sensory response to urethral flow over multiple time scales in rat. <i>Journal of Physiology</i> , 2015 , 593, 3351-71	3.9	16
125	High efficiency electrodes for 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> , 2009 , 2009, 3298-301	0.9	16
124	A model predicting optimal parameters for deep brain stimulation in essential tremor. <i>Journal of Clinical Neurophysiology</i> , 2008 , 25, 265-73	2.2	16

123	Stimulation of the sensory pudendal nerve increases bladder capacity in the rat. <i>American Journal of Physiology - Renal Physiology</i> , 2018 , 314, F543-F550	4.3	16
122	Sensory percepts induced by microwire array and DBS microstimulation in human sensory thalamus. <i>Brain Stimulation</i> , 2018 , 11, 416-422	5.1	15
121	Model-Based Evaluation of Closed-Loop Deep Brain Stimulation Controller to Adapt to Dynamic Changes in Reference Signal. <i>Frontiers in Neuroscience</i> , 2019 , 13, 956	5.1	15
120	Applied electric fields accelerate the diffusion rate and increase the diffusion distance of Dil in fixed tissue. <i>Journal of Neuroscience Methods</i> , 2005 , 141, 155-63	3	15
119	Optimal filtering of whole nerve signals. <i>Journal of Neuroscience Methods</i> , 2001 , 106, 101-10	3	15
118	Kilohertz Frequency Deep Brain Stimulation Is Ineffective at Regularizing the Firing of Model Thalamic Neurons. <i>Frontiers in Computational Neuroscience</i> , 2016 , 10, 22	3.5	15
117	Empirically Based Guidelines for Selecting Vagus Nerve Stimulation Parameters in Epilepsy and Heart Failure. <i>Cold Spring Harbor Perspectives in Medicine</i> , 2019 , 9,	5.4	15
116	In vivo quantification of excitation and kilohertz frequency block of the rat vagus nerve. <i>Journal of Neural Engineering</i> , 2020 , 17, 026005	5	14
115	Electrical stimulation of the urethra evokes bladder contractions in a woman with spinal cord injury. <i>Journal of Spinal Cord Medicine</i> , 2010 , 33, 261-5	1.9	14
114	Extended survival time following pseudorabies virus injection labels the suprapontine neural network controlling the bladder and urethra in the rat. <i>Neuroscience Letters</i> , 1999 , 270, 63-6	3.3	14
113	Quantified Morphology of the Cervical and Subdiaphragmatic Vagus Nerves of Human, Pig, and Rat. <i>Frontiers in Neuroscience</i> , 2020 , 14, 601479	5.1	14
112	Stimulation of the pelvic nerve increases bladder capacity in the prostaglandin E rat model of overactive bladder. <i>American Journal of Physiology - Renal Physiology</i> , 2017 , 313, F657-F665	4.3	13
111	Multimodal characterization of the human nucleus accumbens. <i>NeuroImage</i> , 2019 , 198, 137-149	7.9	13
110	OAB without an overactive bladder in the acute prostaglandin E2 rat model. <i>American Journal of Physiology - Renal Physiology</i> , 2017 , 313, F1169-F1177	4.3	13
109	Investigation of deep brain stimulation mechanisms during implantable pulse generator replacement surgery. <i>Neuromodulation</i> , 2014 , 17, 419-24; discussion 424	3.1	13
108	Response of human thalamic neurons to high-frequency stimulation. <i>PLoS ONE</i> , 2014 , 9, e96026	3.7	13
107	Instrumentation to record evoked potentials for closed-loop control of 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> , 2011 , 2011, 6777-80	0.9	13
106	Effects of stochastic sodium channels on extracellular excitation of myelinated nerve fibers. <i>IEEE Transactions on Biomedical Engineering</i> , 2002 , 49, 527-32	5	13

105	Volume conductor model of transcutaneous electrical stimulation with kilohertz signals. <i>Journal of Neural Engineering</i> , 2014 , 11, 066012	5	12
104	Evaluation of command algorithms for control of upper-extremity neural prostheses. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2002 , 10, 94-101	4.8	12
103	Electrical activation of spinal neural circuits: application to motor-system neural prostheses. <i>Neuromodulation</i> , 2000 , 3, 97-106	3.1	12
102	Frequency-dependent, transient effects of subthalamic nucleus deep brain stimulation on methamphetamine-induced circling and neuronal activity in the hemiparkinsonian rat. <i>Behavioural Brain Research</i> , 2017 , 320, 119-127	3.4	11
101	Accuracy of robotic coil positioning during transcranial magnetic stimulation. <i>Journal of Neural Engineering</i> , 2019 , 16, 054003	5	11
100	Experimental and model-based analysis of differences in perception of cutaneous electrical stimulation across the sole of the foot. <i>Medical and Biological Engineering and Computing</i> , 2013 , 51, 999-1009	3.1	11
99	Finite element modeling and in vivo analysis of electrode configurations for selective stimulation of pudendal afferent fibers. <i>BMC Urology</i> , 2010 , 10, 11	2.2	11
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