

Dominique M Durand

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179
papers

6,020
citations

41
h-index

70
g-index

196
ext. papers

6,764
ext. citations

4
avg, IF

6.01
L-index

#	Paper	IF	Citations
179	Suppression of axonal conduction by sinusoidal stimulation in rat hippocampus in vitro. <i>Journal of Neural Engineering</i> , 2007 , 4, 1-16	5	478
178	Functionally selective peripheral nerve stimulation with a flat interface nerve electrode. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2002 , 10, 294-303	4.8	289
177	Modeling the effects of electric fields on nerve fibers: determination of excitation thresholds. <i>IEEE Transactions on Biomedical Engineering</i> , 1992 , 39, 1244-54	5	236
176	Suppression of epileptiform activity by high frequency sinusoidal fields in rat hippocampal slices. <i>Journal of Physiology</i> , 2001 , 531, 181-91	3.9	174
175	Stochastic resonance improves signal detection in hippocampal CA1 neurons. <i>Journal of Neurophysiology</i> , 2000 , 83, 1394-402	3.2	165
174	Effects of induced electric fields on finite neuronal structures: a simulation study. <i>IEEE Transactions on Biomedical Engineering</i> , 1993 , 40, 1175-88	5	154
173	Phase synchronization in two coupled chaotic neurons. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1999 , 264, 289-297	2.3	144
172	The somatic shunt cable model for neurons. <i>Biophysical Journal</i> , 1984 , 46, 645-53	2.9	138
171	Local suppression of epileptiform activity by electrical stimulation in rat hippocampus in vitro. <i>Journal of Physiology</i> , 2003 , 547, 427-34	3.9	128
170	Low-frequency electrical stimulation of a fiber tract in temporal lobe epilepsy. <i>Annals of Neurology</i> , 2013 , 74, 223-31	9.4	119
169	Effects of applied electric fields on low-calcium epileptiform activity in the CA1 region of rat hippocampal slices. <i>Journal of Neurophysiology</i> , 2000 , 84, 274-80	3.2	117
168	Synaptic noise improves detection of subthreshold signals in hippocampal CA1 neurons. <i>Journal of Neurophysiology</i> , 2001 , 86, 1104-12	3.2	114
167	High frequency stimulation can block axonal conduction. <i>Experimental Neurology</i> , 2009 , 220, 57-70	5.7	108
166	Chronic response of the rat sciatic nerve to the flat interface nerve electrode. <i>Annals of Biomedical Engineering</i> , 2003 , 31, 633-42	4.7	97
165	Impairment of long-term potentiation in rat hippocampus following chronic ethanol treatment. <i>Brain Research</i> , 1984 , 308, 325-32	3.7	85
164	Selectivity of multiple-contact nerve cuff electrodes: a simulation analysis. <i>IEEE Transactions on Biomedical Engineering</i> , 2001 , 48, 165-72	5	82
163	A slowly penetrating interfascicular nerve electrode for selective activation of peripheral nerves. <i>IEEE Transactions on Rehabilitation Engineering: A Publication of the IEEE Engineering in Medicine and Biology Society</i> , 1997 , 5, 51-61		79

162	Selective recording of the canine hypoglossal nerve using a multicontact flat interface nerve electrode. <i>IEEE Transactions on Biomedical Engineering</i> , 2005 , 52, 1461-9	5	79
161	TRPV1 antagonist capsazepine suppresses 4-AP-induced epileptiform activity in vitro and electrographic seizures in vivo. <i>Experimental Neurology</i> , 2013 , 250, 321-32	5.7	66
160	Subfascicle stimulation selectivity with the flat interface nerve electrode. <i>Annals of Biomedical Engineering</i> , 2003 , 31, 643-52	4.7	65
159	Modulation of burst frequency, duration, and amplitude in the zero-Ca(2+) model of epileptiform activity. <i>Journal of Neurophysiology</i> , 1999 , 82, 2262-70	3.2	63
158	Heat-induced aggregation of whey proteins in the presence of κ -casein or sodium caseinate. <i>Food Hydrocolloids</i> , 2009 , 23, 1103-1110	10.6	62
157	Potassium diffusive coupling in neural networks. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2010 , 365, 2347-62	5.8	59
156	Low frequency stimulation of ventral hippocampal commissures reduces seizures in a rat model of chronic temporal lobe epilepsy. <i>Epilepsia</i> , 2012 , 53, 147-56	6.4	58
155	Low frequency stimulation decreases seizure activity in a mutation model of epilepsy. <i>Epilepsia</i> , 2010 , 51, 1745-53	6.4	56
154	Chronic interfacing with the autonomic nervous system using carbon nanotube (CNT) yarn electrodes. <i>Scientific Reports</i> , 2017 , 7, 11723	4.9	53
153	Propagation of epileptiform activity can be independent of synaptic transmission, gap junctions, or diffusion and is consistent with electrical field transmission. <i>Journal of Neuroscience</i> , 2014 , 34, 1409-19	6.6	52
152	High density mapping of atrial fibrillation during vagal nerve stimulation in the canine heart: restudying the Moe hypothesis. <i>Journal of Cardiovascular Electrophysiology</i> , 2013 , 24, 328-35	2.7	52
151	. <i>Journal of Microelectromechanical Systems</i> , 2003 , 12, 252-263	2.5	49
150	Ethanol-induced dendritic alterations in hippocampal granule cells. <i>Brain Research</i> , 1989 , 477, 373-7	3.7	49
149	Suppression of spontaneous epileptiform activity with applied currents. <i>Brain Research</i> , 1991 , 567, 241-7	3.7	48
148	Activation of the inspiratory intercostal muscles by electrical stimulation of the spinal cord. <i>The American Review of Respiratory Disease</i> , 1987 , 136, 1385-90		48
147	Localization and recovery of peripheral neural sources with beamforming algorithms. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2009 , 17, 461-8	4.8	47
146	A tunable support vector machine assembly classifier for epileptic seizure detection. <i>Expert Systems With Applications</i> , 2012 , 39, 3925-3938	7.8	46
145	Effects of applied currents on spontaneous epileptiform activity induced by low calcium in the rat hippocampus. <i>Brain Research</i> , 1998 , 806, 186-95	3.7	45

144	Role of potassium lateral diffusion in non-synaptic epilepsy: a computational study. <i>Journal of Theoretical Biology</i> , 2006 , 238, 666-82	2.3	45
143	Chronic measurement of the stimulation selectivity of the flat interface nerve electrode. <i>IEEE Transactions on Biomedical Engineering</i> , 2004 , 51, 1649-58	5	45
142	Flexible nerve stimulation electrode with iridium oxide sputtered on liquid crystal polymer. <i>IEEE Transactions on Biomedical Engineering</i> , 2009 , 56, 6-14	5	42
141	Can Neural Activity Propagate by Endogenous Electrical Field?. <i>Journal of Neuroscience</i> , 2015 , 35, 15800-16	4.6	41
140	A generalized cable equation for magnetic stimulation of axons. <i>IEEE Transactions on Biomedical Engineering</i> , 1996 , 43, 304-12	5	41
139	Electrical stimulation can inhibit synchronized neuronal activity. <i>Brain Research</i> , 1986 , 382, 139-44	3.7	41
138	Long-lasting hyperpolarization underlies seizure reduction by low frequency deep brain electrical stimulation. <i>Journal of Physiology</i> , 2013 , 591, 5765-90	3.9	40
137	A 3-D differential coil design for localized magnetic stimulation. <i>IEEE Transactions on Biomedical Engineering</i> , 2001 , 48, 1162-8	5	40
136	Reconstruction of hippocampal granule cell electrophysiology by computer simulation. <i>Neuroscience</i> , 1991 , 41, 411-23	3.9	40
135	Seizure suppression by high frequency optogenetic stimulation using in vitro and in vivo animal models of epilepsy. <i>Brain Stimulation</i> , 2014 , 7, 890-9	5.1	39
134	Noise and coupling affect signal detection and bursting in a simulated physiological neural network. <i>Journal of Neurophysiology</i> , 2002 , 88, 2598-611	3.2	39
133	Ionic mechanisms underlying spontaneous CA1 neuronal firing in Ca ²⁺ -free solution. <i>Biophysical Journal</i> , 2003 , 84, 2099-111	2.9	39
132	Chronic histological effects of the flat interface nerve electrode. <i>Journal of Neural Engineering</i> , 2006 , 3, 102-13	5	38
131	Effects of selective hypoglossal nerve stimulation on canine upper airway mechanics. <i>Journal of Applied Physiology</i> , 2005 , 99, 937-43	3.7	38
130	A novel bulk micromachined electrostatic microvalve with a curved-compliant structure applicable for a pneumatic tactile display. <i>Journal of Microelectromechanical Systems</i> , 2001 , 10, 187-196	2.5	38
129	Dynamic mechanical properties of suspensions of micellar casein particles. <i>Journal of Colloid and Interface Science</i> , 2005 , 287, 468-75	9.3	37
128	Propagation of non-synaptic epileptiform activity across a lesion in rat hippocampal slices. <i>Journal of Physiology</i> , 2001 , 537, 191-9	3.9	37
127	Slow periodic activity in the longitudinal hippocampal slice can self-propagate non-synaptically by a mechanism consistent with ephaptic coupling. <i>Journal of Physiology</i> , 2019 , 597, 249-269	3.9	37

126	Seizure reduction through interneuron-mediated entrainment using low frequency optical stimulation. <i>Experimental Neurology</i> , 2015 , 269, 120-32	5-7	36
125	Bistability dynamics in simulations of neural activity in high-extracellular-potassium conditions. <i>Journal of Computational Neuroscience</i> , 2001 , 11, 5-18	1-4	34
124	Stochastic resonance can enhance information transmission in neural networks. <i>IEEE Transactions on Biomedical Engineering</i> , 2011 , 58, 1950-8	5	33
123	Spiral nerve cuff electrode for recordings of respiratory output. <i>Journal of Applied Physiology</i> , 1997 , 83, 317-22	3-7	33
122	Low-calcium epileptiform activity in the hippocampus in vivo. <i>Journal of Neurophysiology</i> , 2003 , 90, 2253-60	3-6	33
121	Extracellular voltage profile for reversing the recruitment order of peripheral nerve stimulation: a simulation study. <i>Journal of Neural Engineering</i> , 2004 , 1, 202-11	5	33
120	Selective stimulation of the canine hypoglossal nerve using a multi-contact cuff electrode. <i>Annals of Biomedical Engineering</i> , 2004 , 32, 511-9	4-7	33
119	Analysis of efficiency of magnetic stimulation. <i>IEEE Transactions on Biomedical Engineering</i> , 2003 , 50, 1276-85	5	32
118	Fiber tract stimulation can reduce epileptiform activity in an in-vitro bilateral hippocampal slice preparation. <i>Experimental Neurology</i> , 2013 , 240, 28-43	5-7	31
117	Blind source separation of peripheral nerve recordings. <i>Journal of Neural Engineering</i> , 2007 , 4, S157-67	5	30
116	Effects of potassium concentration on firing patterns of low-calcium epileptiform activity in anesthetized rat hippocampus: inducing of persistent spike activity. <i>Epilepsia</i> , 2006 , 47, 727-36	6-4	30
115	Modelling the postsynaptic location and magnitude of tonic conductance changes resulting from neurotransmitters or drugs. <i>Neuroscience</i> , 1981 , 6, 839-46	3-9	30
114	Conditions sufficient for nonsynaptic epileptogenesis in the CA1 region of hippocampal slices. <i>Journal of Neurophysiology</i> , 2002 , 87, 62-71	3-2	29
113	Mapping location of excitation during magnetic stimulation: effects of coil position. <i>Annals of Biomedical Engineering</i> , 1997 , 25, 112-25	4-7	28
112	Effects of applied currents on epileptiform bursts in vitro. <i>Experimental Neurology</i> , 1991 , 113, 249-54	5-7	28
111	Phase resetting analysis of high potassium epileptiform activity in CA3 region of the rat hippocampus. <i>International Journal of Neural Systems</i> , 2011 , 21, 127-38	6-2	27
110	Motion control of musculoskeletal systems with redundancy. <i>Biological Cybernetics</i> , 2008 , 99, 503-16	2-8	27
109	Electrode array for reversing the recruitment order of peripheral nerve stimulation: experimental studies. <i>Annals of Biomedical Engineering</i> , 2006 , 34, 152-60	4-7	27

108	A novel electrode array for diameter-dependent control of axonal excitability: a simulation study. <i>IEEE Transactions on Biomedical Engineering</i> , 2004 , 51, 1242-50	5	27
107	¹ H NMR Study of the Association of Hydrophobically End-Capped Poly(ethylene oxide). <i>Macromolecules</i> , 1998 , 31, 4035-4037	5.5	26
106	Ictal patterns in experimental models of epilepsy. <i>Journal of Clinical Neurophysiology</i> , 1993 , 10, 281-97	2.2	26
105	Effect of surface boundary on neuronal magnetic stimulation. <i>IEEE Transactions on Biomedical Engineering</i> , 1992 , 39, 58-64	5	26
104	Functional disconnection of axonal fibers generated by high frequency stimulation in the hippocampal CA1 region in-vivo. <i>Brain Research</i> , 2013 , 1509, 32-42	3.7	25
103	Directional asymmetry during combined saccade-vergence movements. <i>Journal of Neurophysiology</i> , 2005 , 93, 2797-808	3.2	25
102	System for dynamic measurements of membrane capacitance in intact epithelial monolayers. <i>Biophysical Journal</i> , 1998 , 75, 2743-56	2.9	25
101	Analysis of magnetic stimulation of a concentric axon in a nerve bundle. <i>IEEE Transactions on Biomedical Engineering</i> , 1995 , 42, 926-33	5	25
100	Measurement of external pressures generated by nerve cuff electrodes. <i>IEEE Transactions on Rehabilitation Engineering: A Publication of the IEEE Engineering in Medicine and Biology Society</i> , 2000 , 8, 35-41		24
99	A novel electrical stimulation paradigm for the suppression of epileptiform activity in an in vivo model of mesial temporal lobe status epilepticus. <i>International Journal of Neural Systems</i> , 2012 , 22, 1250006	6.2	23
98	Influence of genetic variation on the aggregation of heat-denatured β -lactoglobulin. <i>International Dairy Journal</i> , 2002 , 12, 671-678	3.5	23
97	Orthogonal wave propagation of epileptiform activity in the planar mouse hippocampus in vitro. <i>Epilepsia</i> , 2011 , 52, 1590-600	6.4	22
96	Control of phase synchronization of neuronal activity in the rat hippocampus. <i>Journal of Neural Engineering</i> , 2004 , 1, 46-54	5	22
95	. <i>Proceedings of the IEEE</i> , 2017 , 105, 50-65	14.3	21
94	High frequency stimulation extends the refractory period and generates axonal block in the rat hippocampus. <i>Brain Stimulation</i> , 2014 , 7, 680-9	5.1	21
93	Diffusive coupling and network periodicity: a computational study. <i>Biophysical Journal</i> , 2008 , 95, 1126-37	2.9	20
92	Neurofuzzy adaptive controlling of selective stimulation for FES: a case study. <i>IEEE Transactions on Rehabilitation Engineering: A Publication of the IEEE Engineering in Medicine and Biology Society</i> , 1999 , 7, 183-92		20
91	High frequency stimulation of afferent fibers generates asynchronous firing in the downstream neurons in hippocampus through partial block of axonal conduction. <i>Brain Research</i> , 2017 , 1661, 67-78	3.7	19

90	Improved nerve cuff electrode recordings with subthreshold anodic currents. <i>IEEE Transactions on Biomedical Engineering</i> , 1998 , 45, 1044-50	5	19
89	Association of Telechelic Ionomers in Apolar Solvents. <i>Macromolecular Rapid Communications</i> , 2001 , 22, 1216	4.8	19
88	A high aspect ratio microelectrode array for mapping neural activity in vitro. <i>Journal of Neuroscience Methods</i> , 2012 , 204, 296-305	3	18
87	Enhancement of information transmission of sub-threshold signals applied to distal positions of dendritic trees in hippocampal CA1 neuron models with stochastic resonance. <i>Biological Cybernetics</i> , 2010 , 103, 227-36	2.8	18
86	Chronic recordings of hypoglossal nerve activity in a dog model of upper airway obstruction. <i>Journal of Applied Physiology</i> , 1999 , 87, 2197-206	3.7	18
85	Study of junction zones in gelatin gels through selective enzymatic digestion. <i>Polymer</i> , 1991 , 32, 2680-2685	3.9	17
84	Sonic Hedgehog is expressed by hilar mossy cells and regulates cellular survival and neurogenesis in the adult hippocampus. <i>Scientific Reports</i> , 2019 , 9, 17402	4.9	17
83	High frequency stimulation can suppress globally seizures induced by 4-AP in the rat hippocampus: an acute in vivo study. <i>Brain Stimulation</i> , 2013 , 6, 180-9	5.1	16
82	Scn2a sodium channel mutation results in hyperexcitability in the hippocampus in vitro. <i>Epilepsia</i> , 2008 , 49, 488-99	6.4	16
81	Toroidal coil models for transcutaneous magnetic stimulation of nerves. <i>IEEE Transactions on Biomedical Engineering</i> , 2001 , 48, 434-41	5	16
80	Closed-loop stimulation of hypoglossal nerve in a dog model of upper airway obstruction. <i>IEEE Transactions on Biomedical Engineering</i> , 2000 , 47, 919-25	5	16
79	Prediction of neural excitation during magnetic stimulation using passive cable models. <i>IEEE Transactions on Biomedical Engineering</i> , 2000 , 47, 463-71	5	15
78	Ultra-low noise miniaturized neural amplifier with hardware averaging. <i>Journal of Neural Engineering</i> , 2015 , 12, 046024	5	14
77	Direct measurement of vagal tone in rats does not show correlation to HRV. <i>Scientific Reports</i> , 2021 , 11, 1210	4.9	14
76	Self-propagating, non-synaptic epileptiform activity recruits neurons by endogenous electric fields. <i>Experimental Neurology</i> , 2019 , 317, 119-128	5.7	13
75	Electrical properties of axons within probst bundles of acallosal mice and callosi that have reformed upon glial-coated polymer implants. <i>Experimental Neurology</i> , 1991 , 113, 306-13	5.7	13
74	Chronic neural activity recorded within breast tumors. <i>Scientific Reports</i> , 2020 , 10, 14824	4.9	13
73	Fabrication of High Contact-Density, Flat-Interface Nerve Electrodes for Recording and Stimulation Applications. <i>Journal of Visualized Experiments</i> , 2016 ,	1.6	12

72	Axonal stimulation under MRI magnetic field z gradients: a modeling study. <i>Magnetic Resonance in Medicine</i> , 1997 , 38, 750-8	4.4	12
71	Activation kinetics of the delayed rectifier potassium current of bullfrog sympathetic neurons. <i>Journal of Neurophysiology</i> , 1998 , 79, 2345-57	3.2	12
70	Nonlinear parameter estimation by linear association: application to a five-parameter passive neuron model. <i>IEEE Transactions on Biomedical Engineering</i> , 1994 , 41, 461-9	5	12
69	An algorithm to measure beat-to-beat cycle lengths for assessment of atrial electrogram rate and regularity during atrial fibrillation. <i>Journal of Cardiovascular Electrophysiology</i> , 2013 , 24, 199-206	2.7	11
68	A flat interface nerve electrode with integrated multiplexer. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2009 , 17, 176-82	4.8	11
67	Hierarchical beamformer and cross-talk reduction in electroneurography. <i>Journal of Neural Engineering</i> , 2011 , 8, 056002	5	11
66	Estimation of electrotonic parameters of neurons using an inverse Fourier transform technique. <i>IEEE Transactions on Biomedical Engineering</i> , 1992 , 39, 493-501	5	11
65	A nerve cuff electrode for controlled reshaping of nerve geometry. <i>Journal of Biomaterials Applications</i> , 2009 , 24, 247-73	2.9	10
64	Slow moving neural source in the epileptic hippocampus can mimic progression of human seizures. <i>Scientific Reports</i> , 2018 , 8, 1564	4.9	9
63	Spatiotemporal characteristics of neural activity in tibial nerves with carbon nanotube yarn electrodes. <i>Journal of Neuroscience Methods</i> , 2019 , 328, 108450	3	9
62	Model-based Bayesian signal extraction algorithm for peripheral nerves. <i>Journal of Neural Engineering</i> , 2017 , 14, 056009	5	9
61	Control of seizure activity by electrical stimulation: effect of frequency. <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, 2375	0.9	9
60	Suppression of neural activity with high frequency stimulation. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society</i> , 2006 , 2006, 1624-5		9
59	Suppression of excitatory synaptic transmission can facilitate low-calcium epileptiform activity in the hippocampus in vivo. <i>Brain Research</i> , 2004 , 1030, 57-65	3.7	9
58	Magnetic stimulation of axons in a nerve bundle: effects of current redistribution in the bundle. <i>Annals of Biomedical Engineering</i> , 1995 , 23, 116-26	4.7	9
57	Propagating Neural Source Revealed by Doppler Shift of Population Spiking Frequency. <i>Journal of Neuroscience</i> , 2016 , 36, 3495-505	6.6	8
56	Dilation of the oropharynx via selective stimulation of the hypoglossal nerve. <i>Journal of Neural Engineering</i> , 2005 , 2, 73-80	5	8
55	Nonlinear dynamic properties of low calcium-induced epileptiform activity. <i>Brain Research</i> , 2001 , 890, 246-54	3.7	8

54	Effects of ethanol on the excitability of hippocampal granule neurons. <i>Brain Research</i> , 1991 , 563, 315-203;7		8
53	Flexural characterization of carbon nanotube (CNT) yarn neural electrodes. <i>Materials Research Express</i> , 2019 , 6, 045402	1.7	7
52	Transcranial direct current stimulation alleviates seizure severity in kainic acid-induced status epilepticus rats. <i>Experimental Neurology</i> , 2020 , 328, 113264	5.7	7
51	Propagation of low calcium non-synaptic induced epileptiform activity to the contralateral hippocampus in vivo. <i>Brain Research</i> , 2005 , 1055, 25-35	3.7	7
50	Decrease in synaptic transmission can reverse the propagation direction of epileptiform activity in hippocampus in vivo. <i>Journal of Neurophysiology</i> , 2005 , 93, 1158-64	3.2	7
49	Corpus callosum low-frequency stimulation suppresses seizures in an acute rat model of focal cortical seizures. <i>Epilepsia</i> , 2018 , 59, 2219-2230	6.4	7
48	Recovering Motor Activation with Chronic Peripheral Nerve Computer Interface. <i>Scientific Reports</i> , 2018 , 8, 14149	4.9	7
47	Mechanism of highly synchronized bilateral hippocampal activity. <i>Experimental Neurology</i> , 2014 , 251, 101-11	5.7	6
46	Motion control of the rabbit ankle joint with a flat interface nerve electrode. <i>Muscle and Nerve</i> , 2015 , 52, 1088-95	3.4	6
45	Transection of CA3 does not affect memory performance in rats. <i>Epilepsy and Behavior</i> , 2011 , 21, 267-703;2		6
44	Positive Lyapunov exponents calculated from time series of strange nonchaotic attractors. <i>Physical Review E</i> , 2001 , 64, 026220	2.4	6
43	A theory of the magnetic field from current monopoles. <i>Journal of Applied Physics</i> , 1992 , 71, 3107-3113	2.5	6
42	Comparison of fiber tract low frequency stimulation to focal and ANT stimulation in an acute rat model of focal cortical seizures. <i>Brain Stimulation</i> , 2020 , 13, 499-506	5.1	5
41	What is Neural Engineering?. <i>Journal of Neural Engineering</i> , 2006 , 4,	5	5
40	Neural interfacing with the peripheral nervous system. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society</i> , 2004 , 2004, 5329-32		5
39	Block of peripheral pain response by high-frequency sinusoidal stimulation. <i>Neuromodulation</i> , 2013 , 16, 312-7; discussion 317	3.1	5
38	Model-based analysis of implanted hypoglossal nerve stimulation for the treatment of obstructive sleep apnea. <i>Sleep</i> , 2021 , 44, S11-S19	1.1	4
37	Neural engineering--a new discipline for analyzing and interacting with the nervous system. <i>Methods of Information in Medicine</i> , 2007 , 46, 142-6	1.5	4

36	An algorithm for source signal extraction from the peripheral nerve. <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, 4251-4	0.9	3
35	Blind source separation of neural recordings and control signals. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society</i> , 2006 , 2006, 731-4		3
34	Microprocessor-controlled memory for cardiopulmonary monitoring of high-risk infants. <i>IEEE Transactions on Biomedical Engineering</i> , 1977 , 24, 536-8	5	3
33	A microprocessor-controlled clinical tromometer. <i>Behavior Research Methods & Instrumentation</i> , 1978 , 10, 177-181		3
32	A Miniature Wireless Neural Recording System for Chronic Implantation in Freely Moving Animals 2018 ,		3
31	Reverse stochastic resonance in a hippocampal CA1 neuron model. <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, 5242-5	0.9	2
30	Mapping 4-AP induced epilepsy propagation with a micro-electrode array in intact hippocampus in-vitro 2011 ,		2
29	Stochastic resonance with a mixture of sub-and supra-threshold stimuli in a population of neuron models. <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, 7328-31	0.9	2
28	Enhancement of information transmission with stochastic resonance in hippocampal CA1 neuron models. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society</i> , 2006 , 2006, 4957-60		2
27	Neural recruitment by ephaptic coupling in epilepsy. <i>Epilepsia</i> , 2021 , 62, 1505-1517	6.4	2
26	Motion control of the ankle joint with a multiple contact nerve cuff electrode: a simulation study. <i>Biological Cybernetics</i> , 2014 , 108, 445-57	2.8	1
25	Neural activity propagation in an unfolded hippocampal preparation with a penetrating micro-electrode array. <i>Journal of Visualized Experiments</i> , 2015 ,	1.6	1
24	Motion control of the rabbit ankle joint using a flat interface nerve electrode. <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, 6789-92	0.9	1
23	Noise induced oscillations in recurrent neural networks. <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, 1521-4	0.9	1
22	Information transmission in hippocampal CA1 neuron models in the presence of poisson shot noise: the case of periodic sub-threshold spike trains. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society</i> , 2006 , 2006, 4196-9		1
21	Peripheral Nerve Signals for Neural Control 2007 ,		1
20	Effects of oxygen deprivation on parapyramidal neurons of the ventrolateral medulla in the rat. <i>Respiration Physiology</i> , 1999 , 115, 11-22		1
19	Neural Interfacing with the Peripheral Nervous System: A FINE Approach 2013 , 657-683		1

18	Decoding Vagus-Nerve Activity with Carbon Nanotube Sensors in Freely Moving Rodents.. <i>Biosensors</i> , 2022 , 12,	5.9	1
17	Low-frequency stimulation of a fiber tract in bilateral temporal lobe epilepsy.. <i>Epilepsy and Behavior</i> , 2022 , 130, 108667	3.2	1
16	Stochastic resonance can enhance information transmission of supra-threshold neural 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> , 2009 , 2009, 6806-9	0.9	0
15	Delta oscillation underlies the interictal spike changes after repeated transcranial direct current stimulation in a rat model of chronic seizures. <i>Brain Stimulation</i> , 2021 , 14, 771-779	5.1	0
14	Pulse-frequency-dependent resonance in a population of pyramidal neuron models.. <i>Biological Cybernetics</i> , 2022 , 1	2.8	0
13	Theta waves, neural spikes and seizures can propagate by ephaptic coupling in vivo.. <i>Experimental Neurology</i> , 2022 , 114109	5.7	0
12	Biochips: Electrical Biosensors: Peripheral Nerve Sensors 2015 , 203-214		
11	A Neural Prosthesis for Obstructive Sleep Apnea 2009 , 777-786		
10	Frequency sensitive motion control for a single joint arm model. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society</i> , 2006 , 2006, 5416-9		
9	Recovery of peripheral nerve signals through blind separation. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society</i> , 2007 , 2007, 5428		
8	Flexible electrode technology for peripheral nerve interfacing. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society</i> , 2007 , 2007, 6060		
7	Enhancement of information transmission with stochastic resonance in hippocampal CA1 neuron models: effects of noise input location. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society</i> , 2007 , 2007, 6661-4		
6	A shared-memory approach to microprocessor program development. <i>Behavior Research Methods</i> , 1979 , 11, 311-313	6.1	
5	Singular Parameter Prediction Algorithm for Bistable Neural Systems 2010 , 11, 211-225		
4	Excitable Tissue, Electrical Stimulation Of 2008 , 1009-1020		
3	Selective Chronic Recording in the Peripheral Nervous System 2020 , 315-330		
2	Improvement of Information Transmission of Suprathreshold Input Signal with Stochastic Resonance in Hippocampal CA1 Neuron Network. <i>Transactions of the Society of Instrument and Control Engineers</i> , 2011 , 47, 79-80	0.1	
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