J Hounsgaard

List of Publications by Year in Descending Order

82 papers	5,362 citations	40 h-index	73 g-index
82 ext. papers	5,815 ext. citations	5.3 avg, IF	5.46 L-index

#	Paper	IF	Citations
82	Synaptic Excitation in Spinal Motoneurons Alternates with Synaptic Inhibition and Is Balanced by Outward Rectification during Rhythmic Motor Network Activity. *Journal of Neuroscience*, **2017**, 37, 9239-9248	6.6	8
81	Irregular Firing and High-Conductance States in Spinal Motoneurons during Scratching and Swimming. *Journal of Neuroscience*, **2016**, 36, 5799-807	6.6	13
80	Excitatory and inhibitory synaptic mechanisms at the first stage of integration in the electroreception system of the shark. *Frontiers in Cellular Neuroscience*, **2014**, 8, 72	6.1	0
79	Dense distributed processing in a hindlimb scratch motor network. *Journal of Neuroscience*, **2014**, 34, 10756-64	6.6	12
78	Mathematical model of dopamine autoreceptors and uptake inhibitors and their influence on tonic and phasic dopamine signaling. *Journal of Neurophysiology*, **2013**, 109, 171-82	3.2	26
77	Increased activity of pre-motor network does not change the excitability of motoneurons during protracted scratch initiation. *Journal of Physiology*, **2013**, 591, 1851-8	3.9	12
76	Opposing Effects of Intrinsic Conductance and Correlated Synaptic Input on V-Fluctuations during Network Activity. *Frontiers in Computational Neuroscience*, **2012**, 6, 40	3.5	13
75	Inhibition of motoneurons during the cutaneous silent period in the spinal cord of the turtle. *Experimental Brain Research*, **2012**, 220, 23-8	2.3	4
74	Motoneuron membrane potentials follow a time inhomogeneous jump diffusion process. *Journal of Computational Neuroscience*, **2011**, 31, 563-79	1.4	35
73	Stereological estimate of the total number of neurons in spinal segment D9 of the red-eared turtle. *Journal of Neuroscience*, **2011**, 31, 2431-5	6.6	21
72	Voltage fluctuations in neurons: signal or noise?. *Physiological Reviews*, **2011**, 91, 917-29	47.9	42
71	Influence of phasic and tonic dopamine release on receptor activation. *Journal of Neuroscience*, **2010**, 30, 14273-83	6.6	266
70	Signaling in large-scale neural networks. *Cognitive Processing*, **2009**, 10 Suppl 1, S9-15	1.5	13
69	Organization of projection-specific interneurons in the spinal cord of the red-eared turtle. *Brain, Behavior and Evolution*, **2008**, 72, 179-91	1.5	13
68	Intense synaptic activity enhances temporal resolution in spinal motoneurons. *PLoS ONE*, **2008**, 3, e3218	3.7	41
67	Heterosynaptic modulation of the dorsal root potential in the turtle spinal cord in vitro. *Experimental Brain Research*, **2007**, 177, 275-84	2.3	2
66	Balanced inhibition and excitation drive spike activity in spinal half-centers. *Science*, **2007**, 315, 390-3	33.3	184

65	Conditional intrinsic voltage oscillations in mature vertebrate neurons undergo specific changes in culture. *Journal of Neurophysiology*, **2006**, 95, 2024-7	3.2	4
64	Cellular signalling properties in microcircuits. *Trends in Neurosciences*, **2005**, 28, 534-40	13.3	27
63	Periodic high-conductance states in spinal neurons during scratch-like network activity in adult turtles. *Journal of Neuroscience*, **2005**, 25, 6316-21	6.6	71
62	Roles of ryanodine and inositol triphosphate receptors in regulation of plateau potentials in turtle spinal motoneurons. *Neuroscience*, **2004**, 123, 123-30	3.9	17
61	Influence of membrane properties on spike synchronization in neurons: theory and experiments. *Network: Computation in Neural Systems*, **2003**, 14, 747-763	0.7	12
60	5-HT2 receptors promote plateau potentials in turtle spinal motoneurons by facilitating an L-type calcium current. *Journal of Neurophysiology*, **2003**, 89, 954-9	3.2	101
59	Subcellular distribution of L-type Ca2+ channels responsible for plateau potentials in motoneurons from the lumbar spinal cord of the turtle. *European Journal of Neuroscience*, **2003**, 18, 258-66	3.5	75
58	5-HT1A receptors increase excitability of spinal motoneurons by inhibiting a TASK-1-like K+ current in the adult turtle. *Journal of Physiology*, **2003**, 548, 485-92	3.9	43
57	CNTF inhibits high voltage activated Ca2+ currents in fetal mouse cortical neurones. *Journal of Neurochemistry*, **2002**, 82, 495-503	6	13
56	An M-like outward current regulates the excitability of spinal motoneurones in the adult turtle. *Journal of Physiology*, **2002**, 540, 875-81	3.9	57
55	Spinal plasticity mediated by postsynaptic L-type Ca2+ channels. *Brain Research Reviews*, **2002**, 40, 223-9		92
54	Electrotonic structure of motoneurons in the spinal cord of the turtle: inferences for the mechanisms of bistability. *Journal of Neurophysiology*, **2001**, 85, 391-8	3.2	29
53	Dedifferentiation of intrinsic response properties of motoneurons in organotypic cultures of the spinal cord of the adult turtle. *European Journal of Neuroscience*, **2000**, 12, 2397-404	3.5	13
52	Dorsal root potential produced by a TTX-insensitive micro-circuitry in the turtle spinal cord. *Journal of Physiology*, **2000**, 528 Pt 1, 115-22	3.9	25
51	Facilitation of plateau potentials in turtle motoneurones by a pathway dependent on calcium and calmodulin. *Journal of Physiology*, **2000**, 528 Pt 1, 107-13	3.9	40
50	Development and regulation of response properties in spinal cord motoneurons. *Brain Research Bulletin*, **2000**, 53, 529-35	3.9	68
49	Detection of inhomogeneities in membrane ohmic resistance in geometrically complex systems. *Membrane & Cell Biology*, **2000**, 14, 413-20		1
48	Ca(2+)-activated nonselective cationic current (I(CAN)) in turtle motoneurons. *Journal of Neurophysiology*, **1999**, 82, 730-5	3.2	45

47	Adapting motoneurons for motor behavior. *Progress in Brain Research*, **1999**, 123, 57-63	2.9	28
46	Local facilitation of plateau potentials in dendrites of turtle motoneurones by synaptic activation of metabotropic receptors. *Journal of Physiology*, **1999**, 515 (Pt 1), 203-7	3.9	47
45	Dynamics of intrinsic electrophysiological properties in spinal cord neurones. *Progress in Biophysics and Molecular Biology*, **1999**, 72, 329-65	4.7	47
44	L-type calcium channels but not N-methyl-D-aspartate receptor channels mediate rhythmic activity induced by cholinergic agonist in motoneurons from turtle spinal cord slices. *Neuroscience Letters*, **1999**, 261, 81-4	3.3	16
43	Non-volatile general anaesthetics reduce spinal activity by suppressing plateau potentials. *Neuroscience*, **1999**, 88, 353-8	3.9	60
42	Oscillatory interaction between dorsal root excitability and dorsal root potentials in the spinal cord of the turtle. *Neuroscience*, **1999**, 93, 731-9	3.9	3
41	Inhibitory control of plateau properties in dorsal horn neurones in the turtle spinal cord in vitro. *Journal of Physiology*, **1998**, 506 (Pt 3), 795-808	3.9	48
40	Chemical and electrical stimulation induce rhythmic motor activity in an in vitro preparation of the spinal cord from adult turtles. *Neuroscience Letters*, **1998**, 245, 5-8	3.3	23
39	NMDA-Induced intrinsic voltage oscillations depend on L-type calcium channels in spinal motoneurons of adult turtles. *Journal of Neurophysiology*, **1998**, 80, 3380-2	3.2	56
38	Transmitter regulation of plateau properties in turtle motoneurons. *Journal of Neurophysiology*, **1998**, 79, 45-50	3.2	111
37	Modulation of plateau properties in dorsal horn neurones in a slice preparation of the turtle spinal cord. *Journal of Physiology*, **1997**, 499 (Pt 2), 459-74	3.9	61
36	Electrotonic measurements by electric field-induced polarization in neurons: theory and experimental estimation. *Biophysical Journal*, **1997**, 73, 3004-15	2.9	25
35	Depolarization-induced facilitation of a plateau-generating current in ventral horn neurons in the turtle spinal cord. *Journal of Neurophysiology*, **1997**, 78, 1740-2	3.2	89
34	Detection of a membrane shunt by DC field polarization during intracellular and whole cell recording. *Journal of Neurophysiology*, **1997**, 77, 579-86	3.2	29
33	Metabotropic synaptic regulation of intrinsic response properties of turtle spinal motoneurones. *Journal of Physiology*, **1997**, 504 (Pt 1), 97-102	3.9	75
32	Fast Na+ spike generation in dendrites of guinea-pig substantia nigra pars compacta neurons. *Neuroscience*, **1996**, 73, 381-96	3.9	11
31	Multiple actions of iontophoretically applied serotonin on motorneurones in the turtle spinal cord in vitro. *Acta Physiologica Scandinavica*, **1996**, 158, 301-10		21
30	Monosynaptic connections between primary afferents and giant neurons in the turtle spinal dorsal horn. *Experimental Brain Research*, **1996**, 108, 347-56	2.3	3

29	Plateau-generating neurones in the dorsal horn in an in vitro preparation of the turtle spinal cord. *Journal of Physiology*, **1996**, 493 (Pt 1), 39-54	3.9	97
28	Burst-generating neurones in the dorsal horn in an in vitro preparation of the turtle spinal cord. *Journal of Physiology*, **1996**, 493 (Pt 1), 55-66	3.9	48
27	Direct monitoring of dopamine and 5-HT release in substantia nigra and ventral tegmental area in vitro. *Experimental Brain Research*, **1994**, 100, 395-406	2.3	75
26	Direct monitoring of dopamine and 5-HT release in substantia nigra and ventral tegmental area in vitro. *Experimental Brain Research*, **1994**, 79, 395	2.3	1
25	European brain research. *Nature*, **1994**, 369, 601	50.4	
24	Short-term plasticity in turtle dorsal horn neurons mediated by L-type Ca2+ channels. *Neuroscience*, **1994**, 61, 191-7	3.9	97
23	Spatial integration of local transmitter responses in motoneurones of the turtle spinal cord in vitro. *Journal of Physiology*, **1994**, 479 (Pt 2), 233-46	3.9	34
22	Calcium spikes and calcium plateaux evoked by differential polarization in dendrites of turtle motoneurones in vitro. *Journal of Physiology*, **1993**, 468, 245-59	3.9	155
21	Electrophysiological localization of distinct calcium potentials at selective somatodendritic sites in the substantia nigra. *Neuroscience*, **1992**, 50, 513-8	3.9	16
20	Ca2+-Mediated Plateau Potentials in a Subpopulation of Interneurons in the Ventral Horn of the Turtle Spinal Cord. *European Journal of Neuroscience*, **1992**, 4, 183-188	3.5	58
19	Synaptic control of excitability in turtle cerebellar Purkinje cells. *Journal of Physiology*, **1989**, 409, 157-70	3.9	41
18	Dendrite processing in more ways than one. *Trends in Neurosciences*, **1989**, 12, 313-5	13.3	31
17	Serotonin-induced bistability of turtle motoneurones caused by a nifedipine-sensitive calcium plateau potential. *Journal of Physiology*, **1989**, 414, 265-82	3.9	358
16	Excitatory synaptic responses in turtle cerebellar Purkinje cells. *Journal of Physiology*, **1989**, 409, 143-56	3.9	29
15	Intrinsic determinants of firing pattern in Purkinje cells of the turtle cerebellum in vitro. *Journal of Physiology*, **1988**, 402, 731-49	3.9	93
14	Effects of electric fields on transmembrane potential and excitability of turtle cerebellar Purkinje cells in vitro. *Journal of Physiology*, **1988**, 402, 751-71	3.9	136
13	Calcium conductance and firing properties of spinal motoneurones in the turtle. *Journal of Physiology*, **1988**, 398, 591-603	3.9	131
12	Bistability of alpha-motoneurones in the decerebrate cat and in the acute spinal cat after intravenous 5-hydroxytryptophan. *Journal of Physiology*, **1988**, 405, 345-67	3.9	531

11	Response properties of motoneurones in a slice preparation of the turtle spinal cord. *Journal of Physiology*, **1988**, 398, 575-89	3.9	138
10	Transmitter-controlled properties of alpha-motoneurones causing long-lasting motor discharge to brief excitatory inputs. *Progress in Brain Research*, **1986**, 64, 39-49	2.9	62
9	Ca++ dependent bistability induced by serotonin in spinal motoneurons. *Experimental Brain Research*, **1985**, 57, 422-5	2.3	225
8	Intrinsic control of electroresponsive properties of transplanted mammalian brain neurons. *Brain Research*, **1985**, 335, 372-6	3.7	24
7	Intrinsic membrane properties causing a bistable behaviour of alpha-motoneurones. *Experimental Brain Research*, **1984**, 55, 391-4	2.3	232
6	Potassium accumulation around individual purkinje cells in cerebellar slices from the guinea-pig. *Journal of Physiology*, **1983**, 340, 359-88	3.9	89
5	Anoxia increases potassium conductance in hippocampal nerve cells. *Acta Physiologica Scandinavica*, **1982**, 115, 301-10		224
4	Dendritic spikes in Purkinje cells of the guinea pig cerebellum studied in vitro. *Experimental Brain Research*, **1979**, 37, 387-98	2.3	28
3	Pacemaker properties of mammalian Purkinje cells. *Acta Physiologica Scandinavica*, **1979**, 106, 91-2		16
2	Inhibition produced by iontophoretically applied acetylcholine in area CA1 of thin hippocampal slices from the rat. *Acta Physiologica Scandinavica*, **1978**, 103, 110-1		6
1	Presynaptic inhibitory action of acetylcholine in area CA1 of the hippocampus. *Experimental Neurology*, **1978**, 62, 787-97	5.7	196