Stuart Leigh Johnson

List of Publications by Year
in descending order

39	2,529	236925	315739
papers	citations	25 h-index	38 g-index

41	41	41	1577
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Electrophysiological Recordings of Voltage-Dependent and Mechanosensitive Currents in Sensory Hair Cells of the Auditory and Vestibular Organs of the Mouse. Neuromethods, 2022, , 221-264.	0.3	1
2	Grxcr1 regulates hair bundle morphogenesis and is required for normal mechanoelectrical transduction in mouse cochlear hair cells. PLoS ONE, 2022, 17, e0261530.	2.5	2
3	MET currents and otoacoustic emissions from mice with a detached tectorial membrane indicate the extracellular matrix regulates Ca²⁺ near stereocilia. Journal of Physiology, 2021, 599, 2015-2036.	2.9	13
4	Current Response in CaV1.3â€"/â€" Mouse Vestibular and Cochlear Hair Cells. Frontiers in Neuroscience, 2021, 15, 749483.	2.8	4
5	Hair cell maturation is differentially regulated along the tonotopic axis of the mammalian cochlea. Journal of Physiology, 2020, 598, 151-170.	2.9	34
6	Exocytosis in mouse vestibular Type II hair cells shows a highâ€order Ca 2+ dependence that is independent of synaptotagminâ€4. Physiological Reports, 2020, 8, e14509.	1.7	4
7	Pathophysiological changes in inner hair cell ribbon synapses in the ageing mammalian cochlea. Journal of Physiology, 2020, 598, 4339-4355.	2.9	23
8	Hair Cell Afferent Synapses: Function and Dysfunction. Cold Spring Harbor Perspectives in Medicine, 2019, 9, a033175.	6.2	20
9	Mechanotransduction is required for establishing and maintaining mature inner hair cells and regulating efferent innervation. Nature Communications, 2018, 9, 4015.	12.8	54
10	The Coupling between Ca²⁺Channels and the Exocytotic Ca²⁺Sensor at Hair Cell Ribbon Synapses Varies Tonotopically along the Mature Cochlea. Journal of Neuroscience, 2017, 37, 2471-2484.	3.6	47
11	Connexin-Mediated Signaling in Nonsensory Cells Is Crucial for the Development of Sensory Inner Hair Cells in the Mouse Cochlea. Journal of Neuroscience, 2017, 37, 258-268.	3.6	61
12	Absence of Neuroplastin-65 Affects Synaptogenesis in Mouse Inner Hair Cells and Causes Profound Hearing Loss. Journal of Neuroscience, 2016, 36, 222-234.	3.6	30
13	Tmc1Point Mutation Affects Ca²⁺Sensitivity and Block by Dihydrostreptomycin of the Mechanoelectrical Transducer Current of Mouse Outer Hair Cells. Journal of Neuroscience, 2016, 36, 336-349.	3.6	62
14	Elementary properties of Ca2+ channels and their influence on multivesicular release and phase-locking at auditory hair cell ribbon synapses. Frontiers in Cellular Neuroscience, 2015, 9, 123.	3.7	15
15	Absence of plastin 1 causes abnormal maintenance of hair cell stereocilia and a moderate form of hearing loss in mice. Human Molecular Genetics, 2015, 24, 37-49.	2.9	47
16	Membrane properties specialize mammalian inner hair cells for frequency or intensity encoding. ELife, 2015, 4, .	6.0	45
17	Fine Tuning of CaV1.3 Ca2+ Channel Properties in Adult Inner Hair Cells Positioned in the Most Sensitive Region of the Gerbil Cochlea. PLoS ONE, 2014, 9, e113750.	2.5	15
18	Functional Development of Hair Cells in the Mammalian Inner Ear. , 2014, , 155-188.		10

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19	A reduction in Ptprq associated with specific features of the deafness phenotype of the miRâ€96 mutant mouse diminuendo. European Journal of Neuroscience, 2014, 39, 744-756.	2.6	19
20	In vivo and in vitro biophysical properties of hair cells from the lateral line and inner ear of developing and adult zebrafish. Journal of Physiology, 2014, 592, 2041-2058.	2.9	53
21	Calcium entry into stereocilia drives adaptation of the mechanoelectrical transducer current of mammalian cochlear hair cells. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 14918-14923.	7.1	101
22	The Actin-Binding Proteins Eps8 and Gelsolin Have Complementary Roles in Regulating the Growth and Stability of Mechanosensory Hair Bundles of Mammalian Cochlear Outer Hair Cells. PLoS ONE, 2014, 9, e87331.	2.5	15
23	Burst activity and ultrafast activation kinetics of Ca_V1.3 Ca²⁺ channels support presynaptic activity in adult gerbil hair cell ribbon synapses. Journal of Physiology, 2013, 591, 3811-3820.	2.9	48
24	Presynaptic maturation in auditory hair cells requires a critical period of sensory-independent spiking activity. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 8720-8725.	7.1	70
25	Cholinergic efferent synaptic transmission regulates the maturation of auditory hair cell ribbon synapses. Open Biology, 2013, 3, 130163.	3.6	56
26	The Resting Transducer Current Drives Spontaneous Activity in Prehearing Mammalian Cochlear Inner Hair Cells. Journal of Neuroscience, 2012, 32, 10479-10483.	3.6	66
27	Prestin-Driven Cochlear Amplification Is Not Limited by the Outer Hair Cell Membrane Time Constant. Neuron, 2011, 70, 1143-1154.	8.1	241
28	Position-dependent patterning of spontaneous action potentials in immature cochlear inner hair cells. Nature Neuroscience, 2011, 14, 711-717.	14.8	147
29	Elementary properties of Ca_V1.3 Ca²⁺ channels expressed in mouse cochlear inner hair cells. Journal of Physiology, 2010, 588, 187-199.	2.9	110
30	Synaptotagmin IV determines the linear Ca2+ dependence of vesicle fusion at auditory ribbon synapses. Nature Neuroscience, 2010, 13, 45-52.	14.8	106
31	Functional maturation of the exocytotic machinery at gerbil hair cell ribbon synapses. Journal of Physiology, 2009, 587, 1715-1726.	2.9	50
32	Biophysical properties of Ca_V1.3 calcium channels in gerbil inner hair cells. Journal of Physiology, 2008, 586, 1029-1042.	2.9	80
33	Tonotopic Variation in the Calcium Dependence of Neurotransmitter Release and Vesicle Pool Replenishment at Mammalian Auditory Ribbon Synapses. Journal of Neuroscience, 2008, 28, 7670-7678.	3.6	115
34	Genetic deletion of SK2 channels in mouse inner hair cells prevents the developmental linearization in the Ca²⁺ dependence of exocytosis. Journal of Physiology, 2007, 583, 631-646.	2.9	48
35	Increase in efficiency and reduction in Ca2+dependence of exocytosis during development of mouse inner hair cells. Journal of Physiology, 2005, 563, 177-191.	2.9	160
36	A transiently expressed SK current sustains and modulates action potential activity in immature mouse inner hair cells. Journal of Physiology, 2004, 560, 691-708.	2.9	107

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37	Sodium and calcium currents shape action potentials in immature mouse inner hair cells. Journal of Physiology, 2003, 552, 743-761.	2.9	173
38	Developmental changes in the expression of potassium currents of embryonic, neonatal and mature mouse inner hair cells. Journal of Physiology, 2003, 548, 383-400.	2.9	230
39	Membrane capacitance measurement using patch clamp with integrated self-balancing lock-in amplifier. Pflugers Archiv European Journal of Physiology, 2002, 443, 653-663.	2.8	45