Matthew C Holley

List of Publications by Year
in descending order

59 papers	2,341 citations	201658 27 h-index	214788 47 g-index
60 all docs	60 docs citations	60 times ranked	2012 citing authors

#	Article	IF	Citations
1	Biophysical and morphological changes in inner hair cells and their efferent innervation in the ageing mouse cochlea. Journal of Physiology, 2021, 599, 269-287.	2.9	25
2	Cell Transplantation to Restore Lost Auditory Nerve Function is a Realistic Clinical Opportunity. Cell Transplantation, 2021, 30, 096368972110350.	2.5	5
3	Pathophysiological changes in inner hair cell ribbon synapses in the ageing mammalian cochlea. Journal of Physiology, 2020, 598, 4339-4355.	2.9	23
4	Ageâ€related changes in the biophysical and morphological characteristics of mouse cochlear outer hair cells. Journal of Physiology, 2020, 598, 3891-3910.	2.9	29
5	Gata3 is required for the functional maturation of inner hair cells and their innervation in the mouse cochlea. Journal of Physiology, 2019, 597, 3389-3406.	2.9	19
6	Coordinated calcium signalling in cochlear sensory and nonâ€sensory cells refines afferent innervation of outer hair cells. EMBO Journal, 2019, 38, .	7.8	52
7	â€˜Surface Transplantationâ€™ for Nerve Injury and Repair: The Quest for Minimally Invasive Cell Delivery. Trends in Neurosciences, 2018, 41, 429-441.	8.6	1
8	The histone demethylase LSD1 regulates inner ear progenitor differentiation through interactions with Pax2 and the NuRD repressor complex. PLoS ONE, 2018, 13, e0191689.	2.5	14
9	Mouse DRG Cell Line with Properties of Nociceptors. PLoS ONE, 2015, 10, e0128670.	2.5	18
10	Cells transplanted onto the surface of the glial scar reveal hidden potential for functional neural regeneration. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E3431-40.	7.1	23
11	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
12	Functional Development of Hair Cells in the Mammalian Inner Ear. , 2014, , 155-188.		10
13	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
14	Progressive hearing loss and gradual deterioration of sensory hair bundles in the ears of mice lacking the actin-binding protein Eps8L2. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 13898-13903.	7.1	68
15	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
16	Cholinergic efferent synaptic transmission regulates the maturation of auditory hair cell ribbon synapses. Open Biology, 2013, 3, 130163.	3.6	56
17	The Resting Transducer Current Drives Spontaneous Activity in Prehearing Mammalian Cochlear Inner Hair Cells. Journal of Neuroscience, 2012, 32, 10479-10483.	3.6	66
18	Reprogramming of Single-Cellâ€“Derived Mesenchymal Stem Cells Into Hair Cell-Like Cells. Otology and Neurotology, 2012, 33, 1648-1655.	1.3	14

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19	Development and Function of the Voltage-Gated Sodium Current in Immature Mammalian Cochlear Inner Hair Cells. PLoS ONE, 2012, 7, e45732.	2.5	11
20	Structure and Mechanics of Supporting Cells in the Guinea Pig Organ of Corti. PLoS ONE, 2012, 7, e49338.	2.5	32
21	Eps8 Regulates Hair Bundle Length and Functional Maturation of Mammalian Auditory Hair Cells. PLoS Biology, 2011, 9, e1001048.	5.6	107
22	Mechanical stress-induced reactive gliosis in the auditory nerve and cochlear nucleus. Journal of Neurosurgery, 2011, 114, 414-425.	1.6	12
23	miR-96 regulates the progression of differentiation in mammalian cochlear inner and outer hair cells. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 2355-2360.	7.1	103
24	Ranking of gene regulators through differential equations and Gaussian processes. , 2010, , .		1
25	Emx2 and early hair cell development in the mouse inner ear. Developmental Biology, 2010, 340, 547-556.	2.0	57
26	Role of phosphatase and tensin homolog in the development of the mammalian auditory system. NeuroReport, 2010, 21, 731-735.	1.2	11
27	RNA Microarray Analysis in Prenatal Mouse Cochlea Reveals Novel IGF-I Target Genes: Implication of MEF2 and FOXM1 Transcription Factors. PLoS ONE, 2010, 5, e8699.	2.5	79
28	Genomic Analysis of the Function of the Transcription Factor gata3 during Development of the Mammalian Inner Ear. PLoS ONE, 2009, 4, e7144.	2.5	21
29	REBUILDING LOST HEARING USING CELL TRANSPLANTATION. Neurosurgery, 2007, 60, 417-433.	1.1	13
30	Transplantation of conditionally immortal auditory neuroblasts to the auditory nerve. European Journal of Neuroscience, 2007, 25, 2307-2318.	2.6	26
31	Stem Cell Therapy for Hearing Loss. Otology and Neurotology, 2006, 27, 414-421.	1.3	14
32	Keynote review: The auditory system, hearing loss and potential targets for drug development. Drug Discovery Today, 2005, 10, 1269-1282.	6.4	79
33	Development of Outward Potassium Currents in Inner and Outer Hair Cells from the Embryonic Mouse Cochlea. Audiology and Neuro-Otology, 2005, 10, 22-34.	1.3	17
34	Ventral otic cell lines as developmental models of auditory epithelial and neural precursors. Developmental Dynamics, 2004, 231, 801-814.	1.8	28
35	GATA3 and NeuroD distinguish auditory and vestibular neurons during development of the mammalian inner ear. Mechanisms of Development, 2004, 121, 287-299.	1.7	90
36	Brn-3c (POU4F3) regulates BDNF and NT-3 promoter activity. Biochemical and Biophysical Research Communications, 2004, 324, 372-381.	2.1	39

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37	Hair cell re-growth. International Journal of Pediatric Otorhinolaryngology, 2003, 67, S1-S5.	1.0	5
38	Hair cell regrowth. International Congress Series, 2003, 1254, 1-6.	0.2	2
39	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
40	Application of new biological approaches to stimulate sensory repair and protection. British Medical Bulletin, 2002, 63, 157-169.	6.9	45
41	Transcript Profiling of Functionally Related Groups of Genes During Conditional Differentiation of a Mammalian Cochlear Hair Cell Line. Genome Research, 2002, 12, 1091-1099.	5.5	58
42	E-cadherin and the Differentiation of Mammalian Vestibular Hair Cells. Experimental Cell Research, 2002, 278, 19-30.	2.6	28
43	Asymmetric segregation of mitochondria and mortalin correlates with the multi-lineage potential of inner ear sensory cell progenitors in vitro. Developmental Brain Research, 2002, 133, 49-56.	1.7	33
44	Cell lines in inner ear research. Journal of Neurobiology, 2002, 53, 306-318.	3.6	64
45	Expression of the transcription factors GATA3 and Pax2 during development of the mammalian inner ear. Journal of Comparative Neurology, 2002, 442, 378-391.	1.6	147
46	Differential expression of ?3 and ?6 integrins in the developing mouse inner ear. Journal of Comparative Neurology, 2002, 445, 122-132.	1.6	31
47	Expression of the transcription factors GATA3 and Pax2 during development of the mammalian inner ear. Journal of Comparative Neurology, 2002, 442, 378-391.	1.6	1
48	A difficult organ to work with. Lancet, The, 2001, 358, S15.	13.7	0
49	Ion-age molecular motors. Nature Neuroscience, 2001, 4, 771-773.	14.8	5
50	Tuning in with motor proteins. Nature, 2000, 405, 131-133.	27.8	7
51	Differentiation of Mammalian Vestibular Hair Cells from Conditionally Immortal, Postnatal Supporting Cells. Journal of Neuroscience, 1999, 19, 9445-9458.	3.6	50
52	GATA3 is downregulated during hair cell differentiation in the mouse cochlea. Journal of Neurocytology, 1998, 27, 637-647.	1.5	57
53	Timed markers for the differentiation of the cuticular plate and stereocilia in hair cells from the mouse inner ear. Journal of Comparative Neurology, 1998, 395, 18-28.	1.6	33
54	Auditory hair cell precursors immortalized from the mammalian inner ear. Proceedings of the Royal Society B: Biological Sciences, 1998, 265, 1595-1603.	2.6	94

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55	Production of Conditionally Immortalised Cell Lines from a Transgenic Mouse. Audiology and Neuro-Otology, 1997, 2, 25-35.	1.3	21
56	Outer Hair Cell Motility. Springer Handbook of Auditory Research, 1996, , 386-434.	0.7	56
57	Hair and supporting-cell differentiation during the development of the avian inner ear. Journal of Comparative Neurology, 1995, 351, 81-93.	1.6	55
58	Visualisation of domains in the avian tectorial and otolithic membranes with monoclonal antibodies. Hearing Research, 1994, 80, 93-104.	2.0	16
59	Gene Arrays, Cell Lines, Stem Cells, and Sensory Regeneration in Mammalian Ears. , 0, , 257-307.		5