Tobias Moser

List of Publications by Year
in descending order

156 papers	13,282 citations	14655 66 h-index	27406 106 g-index
238 all docs	238 docs citations	238 times ranked	8971 citing authors

#	Article	IF	Citations
1	Otoferlin, Defective in a Human Deafness Form, Is Essential for Exocytosis at the Auditory Ribbon Synapse. Cell, 2006, 127, 277-289.	28.9	554
2	Hair cell synaptic ribbons are essential for synchronous auditory signalling. Nature, 2005, 434, 889-894.	27.8	459
3	Kinetics of exocytosis and endocytosis at the cochlear inner hair cell afferent synapse of the mouse. Proceedings of the National Academy of Sciences of the United States of America, 2000, 97, 883-888.	7.1	381
4	Ca_V1.3 Channels Are Essential for Development and Presynaptic Activity of Cochlear Inner Hair Cells. Journal of Neuroscience, 2003, 23, 10832-10840.	3.6	359
5	Munc18-1 Promotes Large Dense-Core Vesicle Docking. Neuron, 2001, 31, 581-592.	8.1	329
6	Calcium Dependence of Exocytosis and Endocytosis at the Cochlear Inner Hair Cell Afferent Synapse. Neuron, 2001, 29, 681-690.	8.1	310
7	Tuning of synapse number, structure and function in the cochlea. Nature Neuroscience, 2009, 12, 444-453.	14.8	295
8	Few CaV1.3 Channels Regulate the Exocytosis of a Synaptic Vesicle at the Hair Cell Ribbon Synapse. Journal of Neuroscience, 2005, 25, 11577-11585.	3.6	261
9	Bassoon and the Synaptic Ribbon Organize Ca2+ Channels and Vesicles to Add Release Sites and Promote Refilling. Neuron, 2010, 68, 724-738.	8.1	250
10	Auditory neuropathy â€" neural and synaptic mechanisms. Nature Reviews Neurology, 2016, 12, 135-149.	10.1	248
11	Impairment of SLC17A8 Encoding Vesicular Glutamate Transporter-3, VGLUT3, Underlies Nonsyndromic Deafness DFNA25 and Inner Hair Cell Dysfunction in Null Mice. American Journal of Human Genetics, 2008, 83, 278-292.	6.2	237
12	Mechanisms Underlying Phasic and Sustained Secretion in Chromaffin Cells from Mouse Adrenal Slices. Neuron, 1999, 23, 607-615.	8.1	231
13	Mice with altered KCNQ4 K+ channels implicate sensory outer hair cells in human progressive deafness. EMBO Journal, 2006, 25, 642-652.	7.8	227
14	Cytosolic Ca 2+ Acts by Two Separate Pathways to Modulate the Supply of Release-Competent Vesicles in Chromaffin Cells. Neuron, 1998, 20, 1243-1253.	8.1	220
15	Glyoxal as an alternative fixative to formaldehyde in immunostaining and superâ€resolution microscopy. EMBO Journal, 2018, 37, 139-159.	7.8	206
16	The Presynaptic Function of Mouse Cochlear Inner Hair Cells during Development of Hearing. Journal of Neuroscience, 2001, 21, 4593-4599.	3.6	200
17	Hearing requires otoferlin-dependent efficient replenishment of synaptic vesicles in hair cells. Nature Neuroscience, 2010, 13, 869-876.	14.8	198
18	Structure and Function of the Hair Cell Ribbon Synapse. Journal of Membrane Biology, 2006, 209, 153-165.	2.1	194

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19	Onset Coding Is Degraded in Auditory Nerve Fibers from Mutant Mice Lacking Synaptic Ribbons. Journal of Neuroscience, 2010, 30, 7587-7597.	3.6	186
20	Neuroligin-4 is localized to glycinergic postsynapses and regulates inhibition in the retina. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 3053-3058.	7.1	183
21	Intracellular calcium dependence of large dense-core vesicle exocytosis in the absence of synaptotagmin I. Proceedings of the National Academy of Sciences of the United States of America, 2001, 98, 11680-11685.	7.1	175
22	Mechanisms contributing to synaptic Ca ²⁺ signals and their heterogeneity in hair cells. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 4483-4488.	7.1	161
23	Optogenetic stimulation of the auditory pathway. Journal of Clinical Investigation, 2014, 124, 1114-1129.	8.2	147
24	GaN-based micro-LED arrays on flexible substrates for optical cochlear implants. Journal Physics D: Applied Physics, 2014, 47, 205401.	2.8	143
25	The afferent synapse of cochlear hair cells. Current Opinion in Neurobiology, 2003, 13, 452-458.	4.2	142
26	Hair cell ribbon synapses. Cell and Tissue Research, 2006, 326, 347-359.	2.9	141
27	Spike Encoding of Neurotransmitter Release Timing by Spiral Ganglion Neurons of the Cochlea. Journal of Neuroscience, 2012, 32, 4773-4789.	3.6	134
28	Rapid Exocytosis in Single Chromaffin Cells Recorded from Mouse Adrenal Slices. Journal of Neuroscience, 1997, 17, 2314-2323.	3.6	133
29	High frequency neural spiking and auditory signaling by ultrafast red-shifted optogenetics. Nature Communications, 2018, 9, 1750.	12.8	128
30	Developmental refinement of hair cell synapses tightens the coupling of Ca²⁺influx to exocytosis. EMBO Journal, 2014, 33, n/a-n/a.	7.8	127
31	Calcium regulates exocytosis at the level of single vesicles. Nature Neuroscience, 2003, 6, 846-853.	14.8	126
32	Î²IVÎ£1 spectrin stabilizes the nodes of Ranvier and axon initial segments. Journal of Cell Biology, 2004, 166, 983-990.	5.2	124
33	Otoferlin: a multi-C2 domain protein essential for hearing. Trends in Neurosciences, 2012, 35, 671-680.	8.6	123
34	Sensory Processing at Ribbon Synapses in the Retina and the Cochlea. Physiological Reviews, 2020, 100, 103-144.	28.8	123
35	A new probe for super-resolution imaging of membranes elucidates trafficking pathways. Journal of Cell Biology, 2014, 205, 591-606.	5.2	122
36	A dualâ€AAV approach restores fast exocytosis and partially rescues auditory function in deaf otoferlin knockâ€out mice. EMBO Molecular Medicine, 2019, 11, .	6.9	118

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37	Exocytosis at the hair cell ribbon synapse apparently operates without neuronal SNARE proteins. Nature Neuroscience, 2011, 14, 411-413.	14.8	112
38	LIMP-2/LGP85 deficiency causes ureteric pelvic junction obstruction, deafness and peripheral neuropathy in mice. Human Molecular Genetics, 2003, 12, 631-646.	2.9	110
39	Mechanisms underlying the temporal precision of sound coding at the inner hair cell ribbon synapse. Journal of Physiology, 2006, 576, 55-62.	2.9	110
40	Hair cells use active zones with different voltage dependence of Ca ²⁺ influx to decompose sounds into complementary neural codes. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E4716-25.	7.1	110
41	Disruption of the Presynaptic Cytomatrix Protein Bassoon Degrades Ribbon Anchorage, Multiquantal Release, and Sound Encoding at the Hair Cell Afferent Synapse. Journal of Neuroscience, 2013, 33, 4456-4467.	3.6	108
42	Ca²⁺â€binding proteins tune Ca²⁺â€feedback to Ca_v1.3 channels in mouse auditory hair cells. Journal of Physiology, 2007, 585, 791-803.	2.9	101
43	R-Type Ca2+Channels Are Coupled to the Rapid Component of Secretion in Mouse Adrenal Slice Chromaffin Cells. Journal of Neuroscience, 2000, 20, 8323-8330.	3.6	100
44	Relating structure and function of inner hair cell ribbon synapses. Cell and Tissue Research, 2015, 361, 95-114.	2.9	98
45	Review of Hair Cell Synapse Defects in Sensorineural Hearing Impairment. Otology and Neurotology, 2013, 34, 995-1004.	1.3	97
46	Complexin-I Is Required for High-Fidelity Transmission at the Endbulb of Held Auditory Synapse. Journal of Neuroscience, 2009, 29, 7991-8004.	3.6	96
47	A Mutation in CABP2 , Expressed in Cochlear Hair Cells, Causes Autosomal-Recessive Hearing Impairment. American Journal of Human Genetics, 2012, 91, 636-645.	6.2	96
48	Probing the Functional Equivalence of Otoferlin and Synaptotagmin 1 in Exocytosis. Journal of Neuroscience, 2011, 31, 4886-4895.	3.6	94
49	A critical role for the cholesterolâ€associated proteolipids PLP and M6B in myelination of the central nervous system. Glia, 2013, 61, 567-586.	4.9	91
50	A Missense Mutation in a Highly Conserved Alternate Exon of Dynamin-1 Causes Epilepsy in Fitful Mice. PLoS Genetics, 2010, 6, e1001046.	3.5	89
51	EF-hand protein Ca ²⁺ buffers regulate Ca ²⁺ influx and exocytosis in sensory hair cells. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E1028-37.	7.1	88
52	Quantitative optical nanophysiology of Ca2+ signaling at inner hair cell active zones. Nature Communications, 2018, 9, 290.	12.8	88
53	High-fidelity CRISPR/Cas9- based gene-specific hydroxymethylation rescues gene expression and attenuates renal fibrosis. Nature Communications, 2018, 9, 3509.	12.8	88
54	Disruption of adaptor protein 2Î¼ (<scp>AP</scp> â€2Î¼) in cochlear hair cells impairs vesicle reloading of synaptic release sites and hearing. EMBO Journal, 2015, 34, 2686-2702.	7.8	84

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55	Harmonin inhibits presynaptic Cav1.3 Ca2+ channels in mouse inner hair cells. Nature Neuroscience, 2011, 14, 1109-1111.	14.8	83
56	Maturation of Ribbon Synapses in Hair Cells Is Driven by Thyroid Hormone. Journal of Neuroscience, 2007, 27, 3163-3173.	3.6	82
57	A Mutation in PNPT1, Encoding Mitochondrial-RNA-Import Protein PNPase, Causes Hereditary Hearing Loss. American Journal of Human Genetics, 2012, 91, 919-927.	6.2	82
58	Uniquantal Release through a Dynamic Fusion Pore Is a Candidate Mechanism of Hair Cell Exocytosis. Neuron, 2014, 83, 1389-1403.	8.1	81
59	The synaptic ribbon is critical for sound encoding at high rates and with temporal precision. ELife, 2018, 7, .	6.0	81
60	CSPÂ-deficiency causes massive and rapid photoreceptor degeneration. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 2926-2931.	7.1	80
61	Deletion of the Presynaptic Scaffold CAST Reduces Active Zone Size in Rod Photoreceptors and Impairs Visual Processing. Journal of Neuroscience, 2012, 32, 12192-12203.	3.6	77
62	DNA Diagnostics of Hereditary Hearing Loss: A Targeted Resequencing Approach Combined with a Mutation Classification System. Human Mutation, 2016, 37, 812-819.	2.5	76
63	The Ca²⁺Channel Subunit Î²2 Regulates Ca²⁺Channel Abundance and Function in Inner Hair Cells and Is Required for Hearing. Journal of Neuroscience, 2009, 29, 10730-10740.	3.6	75
64	Considering optogenetic stimulation for cochlear implants. Hearing Research, 2015, 322, 224-234.	2.0	75
65	Estimation of mean exocytic vesicle capacitance in mouse adrenal chromaffin cells. Proceedings of the National Academy of Sciences of the United States of America, 1997, 94, 6735-6740.	7.1	74
66	The connexin26 S17F mouse mutant represents a model for the human hereditary keratitis-ichthyosis-deafness syndrome. Human Molecular Genetics, 2011, 20, 28-39.	2.9	74
67	Ephrin-A5/EphA4 signalling controls specific afferent targeting to cochlear hair cells. Nature Communications, 2013, 4, 1438.	12.8	74
68	Optogenetic stimulation of cochlear neurons activates the auditory pathway and restores auditory-driven behavior in deaf adult gerbils. Science Translational Medicine, 2018, 10, .	12.4	72
69	Neuroligin 2 Controls the Maturation of GABAergic Synapses and Information Processing in the Retina. Journal of Neuroscience, 2009, 29, 8039-8050.	3.6	71
70	Ultrafast optogenetic stimulation of the auditory pathway by targetingâ€optimized Chronos. EMBO Journal, 2018, 37, .	7.8	68
71	Mapping developmental maturation of inner hair cell ribbon synapses in the apical mouse cochlea. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 6415-6424.	7.1	68
72	Synaptic organization in cochlear inner hair cells deficient for the CaV1.3 (Î±1D) subunit of L-type Ca2+ channels. Neuroscience, 2006, 141, 1849-1860.	2.3	66

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73	Probing the Mechanism of Exocytosis at the Hair Cell Ribbon Synapse. Journal of Neuroscience, 2007, 27, 12933-12944.	3.6	66
74	Unconventional molecular regulation of synaptic vesicle replenishment in cochlear inner hair cells. Journal of Cell Science, 2015, 128, 638-44.	2.0	64
75	The Readily Releasable Pool of Vesicles in Chromaffin Cells Is Replenished in a Temperature-Dependent Manner and Transiently Overfills at 37Â°C. Journal of Neuroscience, 2000, 20, 8377-8383.	3.6	62
76	Optogenetic stimulation of the auditory pathway for research and future prosthetics. Current Opinion in Neurobiology, 2015, 34, 29-36.	4.2	61
77	Circumvention of common labelling artefacts using secondary nanobodies. Nanoscale, 2020, 12, 10226-10239.	5.6	61
78	Near physiological spectral selectivity of cochlear optogenetics. Nature Communications, 2019, 10, 1962.	12.8	60
79	Rab3-interacting molecules 2Î± and 2Î² promote the abundance of voltage-gated Ca _V 1.3 Ca ²⁺ channels at hair cell active zones. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E3141-9.	7.1	59
80	Î±-Neurexins are required for efficient transmitter release and synaptic homeostasis at the mouse neuromuscular junction. Neuroscience, 2006, 138, 433-446.	2.3	57
81	Expression pattern and functional characterization of connexin29 in transgenic mice. Glia, 2006, 53, 601-611.	4.9	57
82	Structure and function of cochlear afferent innervation. Current Opinion in Otolaryngology and Head and Neck Surgery, 2010, 18, 441-446.	1.8	56
83	Towards the optical cochlear implant: optogenetic approaches for hearing restoration. EMBO Molecular Medicine, 2020, 12, e11618.	6.9	56
84	Phase contrast tomography of the mouse cochlea at microfocus x-ray sources. Applied Physics Letters, 2013, 103, 083703.	3.3	55
85	Tryptophanâ€rich basic protein (<scp>WRB</scp>) mediates insertion of the tailâ€anchored protein otoferlin and is required for hair cell exocytosis and hearing. EMBO Journal, 2016, 35, 2536-2552.	7.8	55
86	Concurrent Maturation of Inner Hair Cell Synaptic Ca2+ Influx and Auditory Nerve Spontaneous Activity around Hearing Onset in Mice. Journal of Neuroscience, 2013, 33, 10661-10666.	3.6	54
87	Multichannel optogenetic stimulation of the auditory pathway using microfabricated LED cochlear implants in rodents. Science Translational Medicine, 2020, 12, .	12.4	54
88	The Mechanosensory Structure of the Hair Cell Requires Clarin-1, a Protein Encoded by Usher Syndrome III Causative Gene. Journal of Neuroscience, 2012, 32, 9485-9498.	3.6	52
89	RIM-Binding Protein 2 Promotes a Large Number of CaV1.3 Ca2+-Channels and Contributes to Fast Synaptic Vesicle Replenishment at Hair Cell Active Zones. Frontiers in Cellular Neuroscience, 2017, 11, 334.	3.7	51
90	Neural Circuit Development in the Mammalian Cochlea. Physiology, 2012, 27, 100-112.	3.1	49

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91	Modes and Regulation of Endocytic Membrane Retrieval in Mouse Auditory Hair Cells. Journal of Neuroscience, 2014, 34, 705-716.	3.6	46
92	Bassoon-disruption slows vesicle replenishment and induces homeostatic plasticity at a CNS synapse. EMBO Journal, 2014, 33, n/a-n/a.	7.8	45
93	Emerging approaches for restoration of hearing and vision. Physiological Reviews, 2020, 100, 1467-1525.	28.8	45
94	A synthetic prestin reveals protein domains and molecular operation of outer hair cell piezoelectricity. EMBO Journal, 2011, 30, 2793-2804.	7.8	44
95	A sensory cell diversifies its output by varying Ca ²⁺ influxâ€release coupling among active zones. EMBO Journal, 2021, 40, e106010.	7.8	43
96	Ca ²⁺ -binding protein 2 inhibits Ca ²⁺ -channel inactivation in mouse inner hair cells. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E1717-E1726.	7.1	42
97	Endophilinâ€A regulates presynaptic Ca ²⁺ influx and synaptic vesicle recycling in auditory hair cells. EMBO Journal, 2019, 38, .	7.8	39
98	Low-conductance intercellular coupling between mouse chromaffin cellsin situ. Journal of Physiology, 1998, 506, 195-205.	2.9	38
99	Harmonin enhances voltageâ€dependent facilitation of Ca_v1.3 channels and synchronous exocytosis in mouse inner hair cells. Journal of Physiology, 2013, 591, 3253-3269.	2.9	38
100	Individual synaptic vesicles mediate stimulated exocytosis from cochlear inner hair cells. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 12811-12816.	7.1	37
101	Pou4f1 Defines a Subgroup of Type I Spiral Ganglion Neurons and Is Necessary for Normal Inner Hair Cell Presynaptic Ca²⁺ Signaling. Journal of Neuroscience, 2019, 39, 5284-5298.	3.6	37
102	The Crystal Structure of the C2A Domain of Otoferlin Reveals an Unconventional Top Loop Region. Journal of Molecular Biology, 2011, 406, 479-490.	4.2	36
103	Axial Tubule Junctions Activate Atrial Ca2+ Release Across Species. Frontiers in Physiology, 2018, 9, 1227.	2.8	36
104	Detection and differentiation of sensorineural hearing loss in mice using auditory steady-state responses and transient auditory brainstem responses. Neuroscience, 2007, 149, 673-684.	2.3	34
105	Electron Microscopic Reconstruction of Neural Circuitry in the Cochlea. Cell Reports, 2021, 34, 108551.	6.4	34
106	Viral rhodopsins 1 areÂ an unique family of light-gated cation channels. Nature Communications, 2020, 11, 5707.	12.8	33
107	Does a single session of theta-burst transcranial magnetic stimulation of inferior temporal cortex affect tinnitus perception?. BMC Neuroscience, 2009, 10, 54.	1.9	32
108	Cytomatrix proteins CAST and ELKS regulate retinal photoreceptor development and maintenance. Journal of Cell Biology, 2018, 217, 3993-4006.	5.2	32

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109	Piccolo Promotes Vesicle Replenishment at a Fast Central Auditory Synapse. Frontiers in Synaptic Neuroscience, 2017, 9, 14.	2.5	31
110	Î¼LEDâ€based optical cochlear implants for spectrally selective activation of the auditory nerve. EMBO Molecular Medicine, 2020, 12, e12387.	6.9	29
111	Swelling-induced catecholamine secretion recorded from single chromaffin cells. Pflugers Archiv European Journal of Physiology, 1995, 431, 196-203.	2.8	27
112	Rab Interacting Molecules 2 and 3 Directly Interact with the Pore-Forming CaV1.3 Ca2+ Channel Subunit and Promote Its Membrane Expression. Frontiers in Cellular Neuroscience, 2017, 11, 160.	3.7	27
113	Overloaded Adeno-Associated Virus as a Novel Gene Therapeutic Tool for Otoferlin-Related Deafness. Frontiers in Molecular Neuroscience, 2020, 13, 600051.	2.9	27
114	The Ribbon Synapse Between Type I Spiral Ganglion Neurons and Inner Hair Cells. Springer Handbook of Auditory Research, 2016, , 117-156.	0.7	27
115	Ca2+ Regulates the Kinetics of Synaptic Vesicle Fusion at the Afferent Inner Hair Cell Synapse. Frontiers in Cellular Neuroscience, 2018, 12, 364.	3.7	26
116	Perspectives on Auditory Neuropathy: Disorders of Inner Hair Cell, Auditory Nerve, and Their Synapse. , 2008, , 397-412.		24
117	The CAPOS mutation in ATP1A3 alters Na/K-ATPase function and results in auditory neuropathy which has implications for management. Human Genetics, 2018, 137, 111-127.	3.8	24
118	Propagation-based phase-contrast x-ray tomography of cochlea using a compact synchrotron source. Scientific Reports, 2018, 8, 4922.	3.3	21
119	Disruption of Otoferlin Alters the Mode of Exocytosis at the Mouse Inner Hair Cell Ribbon Synapse. Frontiers in Molecular Neuroscience, 2018, 11, 492.	2.9	21
120	Intrinsic planar polarity mechanisms influence the position-dependent regulation of synapse properties in inner hair cells. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 9084-9093.	7.1	21
121	Multiscale photonic imaging of the native and implanted cochlea. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	21
122	Utility of redâ€light ultrafast optogenetic stimulation of the auditory pathway. EMBO Molecular Medicine, 2021, 13, e13391.	6.9	21
123	Conditional deletion of pejvakin in adult outer hair cells causes progressive hearing loss in mice. Neuroscience, 2017, 344, 380-393.	2.3	20
124	RIM-Binding Protein 2 Organizes Ca²⁺ Channel Topography and Regulates Release Probability and Vesicle Replenishment at a Fast Central Synapse. Journal of Neuroscience, 2021, 41, 7742-7767.	3.6	19
125	The mammalian rod synaptic ribbon is essential for Cav channel facilitation and ultrafast synaptic vesicle fusion. ELife, 2021, 10, .	6.0	19
126	Measurements of membrane patch capacitance using a software-based lock-in system. Pflugers Archiv European Journal of Physiology, 2007, 454, 335-344.	2.8	17

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127	Toward the Optical Cochlear Implant. Cold Spring Harbor Perspectives in Medicine, 2019, 9, a033225.	6.2	17
128	New insights into cochlear sound encoding. F1000Research, 2016, 5, 2081.	1.6	17
129	Connexin32 can restore hearing in connexin26 deficient mice. European Journal of Cell Biology, 2011, 90, 817-824.	3.6	16
130	Optogenetic Stimulation of the Auditory Nerve. Journal of Visualized Experiments, 2014, , e52069.	0.3	16
131	AP180 promotes release site clearance and clathrin-dependent vesicle reformation in mouse cochlear inner hair cells. Journal of Cell Science, 2019, 133, .	2.0	15
132	Is there an unmet medical need for improved hearing restoration?. EMBO Molecular Medicine, 2022, 14, .	6.9	15
133	Flexible auditory training, psychophysics, and enrichment of common marmosets with an automated, touchscreen-based system. Nature Communications, 2022, 13, 1648.	12.8	14
134	Î²-Secretase BACE1 Is Required for Normal Cochlear Function. Journal of Neuroscience, 2019, 39, 9013-9027.	3.6	13
135	Towards optogenetic approaches for hearing restoration. Biochemical and Biophysical Research Communications, 2020, 527, 337-342.	2.1	13
136	Developing Fast, Red-Light Optogenetic Stimulation of Spiral Ganglion Neurons for Future Optical Cochlear Implants. Frontiers in Molecular Neuroscience, 2021, 14, 635897.	2.9	13
137	Macromolecular and electrical coupling between inner hair cells in the rodent cochlea. Nature Communications, 2020, 11, 3208.	12.8	12
138	RIM-Binding Proteins Are Required for Normal Sound-Encoding at Afferent Inner Hair Cell Synapses. Frontiers in Molecular Neuroscience, 2021, 14, 651935.	2.9	11
139	Cabp2-Gene Therapy Restores Inner Hair Cell Calcium Currents and Improves Hearing in a DFNB93 Mouse Model. Frontiers in Molecular Neuroscience, 2021, 14, 689415.	2.9	11
140	Resolving the molecular architecture of the photoreceptor active zone with 3D-MINFLUX. Science Advances, 2022, 8, .	10.3	11
141	Functional Properties of Synaptic Transmission in Primary Sense Organs. Journal of Neuroscience, 2009, 29, 12802-12806.	3.6	10
142	ATP Hydrolysis Is Critically Required for Function of Ca_V1.3 Channels in Cochlear Inner Hair Cells via Fueling Ca²⁺Clearance. Journal of Neuroscience, 2014, 34, 6843-6848.	3.6	10
143	Gene therapy for deafness: How close are we?. Science Translational Medicine, 2015, 7, 295fs28.	12.4	9
144	Understanding and treating paediatric hearing impairment. EBioMedicine, 2021, 63, 103171.	6.1	8

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145	The Cl–channel TMEM16A is involved in the generation of cochlear Ca2+ waves and promotes the refinement of auditory brainstem networks in mice. ELife, 2022, 11, .	6.0	8
146	Model-based prediction of optogenetic sound encoding in the human cochlea by future optical cochlear implants. Computational and Structural Biotechnology Journal, 2022, 20, 3621-3629.	4.1	8
147	Analyzing efficacy, stability, and safety of AAV-mediated optogenetic hearing restoration in mice. Life Science Alliance, 2022, 5, e202101338.	2.8	7
148	Molekulares Verstehen des HÃ¶rens â€“ Was Ãndert sich fÃ¼r den Patienten?. Laryngo- Rhino- Otologie, 2018, 97, S214-S230.	0.2	4
149	Presynaptic Physiology of Cochlear Inner Hair Cells. , 2020, , 441-467.		4
150	Peripheres Auditorisches System. Springer-Lehrbuch, 2019, , 685-700.	0.0	3
151	Fast Photoswitchable Molecular Prosthetics Control Neuronal Activity in the Cochlea. Journal of the American Chemical Society, 2022, 144, 9229-9239.	13.7	3
152	Recent advances in cochlear hair cell nanophysiology: subcellular compartmentalization of electrical signaling in compact sensory cells. Faculty Reviews, 2020, 9, 24.	3.9	2
153	Synaptic encoding and processing of auditory information in physiology and disease. Hearing Research, 2015, 330, 155-156.	2.0	1
154	Modeling inner hair cell ribbon synapses: response heterogeneity and efficiency of sound encoding in an idealized biophysical model. BMC Neuroscience, 2013, 14, .	1.9	0
155	Eyes without a ribbon. EMBO Journal, 2016, 35, 1018-1020.	7.8	0
156	Improved Microbial Rhodopsins for Ultrafast Red-Shifted Optogenetics. Biophysical Journal, 2018, 114, 669a.	0.5	0