Marlies Knipper

List of Publications by Year
in descending order

102 papers	5,002 citations	61984 43 h-index	98798 67 g-index
103 all docs	103 docs citations	103 times ranked	4210 citing authors

#	Article	IF	Citations
1	Advances in the neurobiology of hearing disorders: Recent developments regarding the basis of tinnitus and hyperacusis. Progress in Neurobiology, 2013, 111, 17-33.	5.7	267
2	A splice site mutation in the murine Opa1 gene features pathology of autosomal dominant optic atrophy. Brain, 2006, 130, 1029-1042.	7.6	232
3	Thyroid Hormone Deficiency Before the Onset of Hearing Causes Irreversible Damage to Peripheral and Central Auditory Systems. Journal of Neurophysiology, 2000, 83, 3101-3112.	1.8	179
4	Deletion of the Ca2+-activated potassium (BK) Â-subunit but not the BKÂ1-subunit leads to progressive hearing loss. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 12922-12927.	7.1	173
5	Developmental Regulation of Nicotinic Synapses on Cochlear Inner Hair Cells. Journal of Neuroscience, 2004, 24, 7814-7820.	3.6	156
6	Position-dependent patterning of spontaneous action potentials in immature cochlear inner hair cells. Nature Neuroscience, 2011, 14, 711-717.	14.8	147
7	The Reduced Cochlear Output and the Failure to Adapt the Central Auditory Response Causes Tinnitus in Noise Exposed Rats. PLoS ONE, 2013, 8, e57247.	2.5	139
8	Resting Potential and Submembrane Calcium Concentration of Inner Hair Cells in the Isolated Mouse Cochlea Are Set by KCNQ-Type Potassium Channels. Journal of Neuroscience, 2003, 23, 2141-2149.	3.6	132
9	Noise-Induced Inner Hair Cell Ribbon Loss Disturbs Central Arc Mobilization: A Novel Molecular Paradigm for Understanding Tinnitus. Molecular Neurobiology, 2013, 47, 261-279.	4.0	129
10	Lack of Bdnf and TrkB signalling in the postnatal cochlea leads to a spatial reshaping of innervation along the tonotopic axis and hearing loss. Development (Cambridge), 2003, 130, 4741-4750.	2.5	120
11	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
12	A behavioral paradigm to judge acute sodium salicylate-induced sound experience in rats: a new approach for an animal model on tinnitus. Hearing Research, 2003, 180, 39-50.	2.0	114
13	Thyroid hormone is a critical determinant for the regulation of the cochlear motor protein prestin. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 2901-2906.	7.1	107
14	Eps8 Regulates Hair Bundle Length and Functional Maturation of Mammalian Auditory Hair Cells. PLoS Biology, 2011, 9, e1001048.	5.6	107
15	Synaptotagmin IV determines the linear Ca2+ dependence of vesicle fusion at auditory ribbon synapses. Nature Neuroscience, 2010, 13, 45-52.	14.8	106
16	Loss of auditory sensitivity from inner hair cell synaptopathy can be centrally compensated in the young but not old brain. Neurobiology of Aging, 2016, 44, 173-184.	3.1	104
17	Otoferlin interacts with myosin VI: implications for maintenance of the basolateral synaptic structure of the inner hair cell. Human Molecular Genetics, 2009, 18, 2779-2790.	2.9	99
18	A Changing Pattern of Brain-Derived Neurotrophic Factor Expression Correlates with the Rearrangement of Fibers during Cochlear Development of Rats and Mice. Journal of Neuroscience, 1999, 19, 3033-3042.	3.6	89

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19	Distinct requirements for TrkB and TrkC signaling in target innervation by sensory neurons. Genes and Development, 2002, 16, 633-645.	5.9	84
20	Lack of Brain-Derived Neurotrophic Factor Hampers Inner Hair Cell Synapse Physiology, But Protects against Noise-Induced Hearing Loss. Journal of Neuroscience, 2012, 32, 8545-8553.	3.6	84
21	Differential expression of otoferlin in brain, vestibular system, immature and mature cochlea of the rat. European Journal of Neuroscience, 2006, 24, 3372-3380.	2.6	82
22	cGMP-Prkg1 signaling and Pde5 inhibition shelter cochlear hair cells and hearing function. Nature Medicine, 2012, 18, 252-259.	30.7	82
23	Thyroid hormone receptors TRÎ±1 and TRÎ² differentially regulate gene expression of Kcnq4 and prestin during final differentiation of outer hair cells. Journal of Cell Science, 2006, 119, 2975-2984.	2.0	75
24	Thyroid Hormone Deficiency Affects Postnatal Spiking Activity and Expression of Ca2+ and K+ Channels in Rodent Inner Hair Cells. Journal of Neuroscience, 2007, 27, 3174-3186.	3.6	74
25	Otoferlin Couples to Clathrin-Mediated Endocytosis in Mature Cochlear Inner Hair Cells. Journal of Neuroscience, 2013, 33, 9508-9519.	3.6	74
26	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
27	Persistence of Cav1.3 Ca2+ Channels in Mature Outer Hair Cells Supports Outer Hair Cell Afferent Signaling. Journal of Neuroscience, 2007, 27, 6442-6451.	3.6	67
28	The Neural Bases of Tinnitus: Lessons from Deafness and Cochlear Implants. Journal of Neuroscience, 2020, 40, 7190-7202.	3.6	65
29	Thyroid Hormone-deficient Period Prior to the Onset of Hearing Is Associated with Reduced Levels of Î²-Tectorin Protein in the Tectorial Membrane. Journal of Biological Chemistry, 2001, 276, 39046-39052.	3.4	63
30	The function of BDNF in the adult auditory system. Neuropharmacology, 2014, 76, 719-728.	4.1	62
31	Reduced sound-evoked and resting-state BOLD fMRI connectivity in tinnitus. NeuroImage: Clinical, 2018, 20, 637-649.	2.7	61
32	Cochlear NMDA Receptors as a Therapeutic Target of Noise-Induced Tinnitus. Cellular Physiology and Biochemistry, 2015, 35, 1905-1923.	1.6	59
33	Estrogen and the inner ear: megalin knockout mice suffer progressive hearing loss. FASEB Journal, 2008, 22, 410-417.	0.5	58
34	Rab8b GTPase, a protein transport regulator, is an interacting partner of otoferlin, defective in a human autosomal recessive deafness form. Human Molecular Genetics, 2008, 17, 3814-3821.	2.9	58
35	Distinct thyroid hormone-dependent expression of trkB and p75NGFR in nonneuronal cells during the critical TH-dependent period of the cochlea. Journal of Neurobiology, 1999, 38, 338-356.	3.6	57
36	Deafness in LIMP2-deficient mice due to early loss of the potassium channel KCNQ1/KCNE1 in marginal cells of the stria vascularis. Journal of Physiology, 2006, 576, 73-86.	2.9	54

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37	Differential expression of trkB.T1 and trkB.T2, truncated trkC, and p75NGFR in the cochlea prior to hearing function. Journal of Comparative Neurology, 1999, 414, 33-49.	1.6	53
38	Synaptophysin and Gap-43 proteins in efferent fibers of the inner ear during postnatal development. Developmental Brain Research, 1995, 89, 73-86.	1.7	52
39	OSBPL2 encodes a protein of inner and outer hair cell stereocilia and is mutated in autosomal dominant hearing loss (DFNA67). Orphanet Journal of Rare Diseases, 2015, 10, 15.	2.7	52
40	Genetics of Tinnitus: An Emerging Area for Molecular Diagnosis and Drug Development. Frontiers in Neuroscience, 2016, 10, 377.	2.8	52
41	Enhanced Central Neural Gain Compensates Acoustic Trauma-induced Cochlear Impairment, but Unlikely Correlates with Tinnitus and Hyperacusis. Neuroscience, 2019, 407, 146-169.	2.3	50
42	Î±₂Î´3 Is Essential for Normal Structure and Function of Auditory Nerve Synapses and Is a Novel Candidate for Auditory Processing Disorders. Journal of Neuroscience, 2014, 34, 434-445.	3.6	49
43	Loss of Mammal-specific Tectorial Membrane Component Carcinoembryonic Antigen Cell Adhesion Molecule 16 (CEACAM16) Leads to Hearing Impairment at Low and High Frequencies. Journal of Biological Chemistry, 2012, 287, 21584-21598.	3.4	46
44	BDNF mRNA expression and protein localization are changed in age-related hearing loss. Neurobiology of Aging, 2007, 28, 586-601.	3.1	43
45	Lower ototoxicity and absence of hidden hearing loss point to gentamicin C1a and apramycin as promising antibiotics for clinical use. Scientific Reports, 2019, 9, 2410.	3.3	43
46	Hypothyroidism impairs chloride homeostasis and onset of inhibitory neurotransmission in developing auditory brainstem and hippocampal neurons. European Journal of Neuroscience, 2008, 28, 2371-2380.	2.6	41
47	Molecular aspects of tinnitus. Hearing Research, 2010, 266, 60-69.	2.0	39
48	Midazolam Reverses Salicylate-Induced Changes in Brain-Derived Neurotrophic Factor and Arg3.1 Expression: Implications for Tinnitus Perception and Auditory Plasticity. Molecular Pharmacology, 2008, 74, 595-604.	2.3	38
49	Thyroid hormone receptor Î±1 is a critical regulator for the expression of ion channels during final differentiation of outer hair cells. Histochemistry and Cell Biology, 2007, 128, 65-75.	1.7	37
50	Biomarkers for Hearing Dysfunction: Facts and Outlook. Orl, 2017, 79, 93-111.	1.1	33
51	Deafness in TRÎ² Mutants Is Caused by Malformation of the Tectorial Membrane. Journal of Neuroscience, 2009, 29, 2581-2587.	3.6	32
52	BDNF in Lower Brain Parts Modifies Auditory Fiber Activity to Gain Fidelity but Increases the Risk for Generation of Central Noise After Injury. Molecular Neurobiology, 2016, 53, 5607-5627.	4.0	30
53	The glucocorticoid antagonist mifepristone attenuates soundâ€induced longâ€term deficits in auditory nerve response and central auditory processing in female rats. FASEB Journal, 2018, 32, 3005-3019.	0.5	30
54	Age-related hearing loss pertaining to potassium ion channels in the cochlea and auditory pathway. Pflugers Archiv European Journal of Physiology, 2021, 473, 823-840.	2.8	28

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55	Expression of glycine receptors and gephyrin in the rat cochlea. Histochemistry and Cell Biology, 2008, 129, 513-523.	1.7	26
56	Critical role for cochlear hair cell BK channels for coding the temporal structure and dynamic range of auditory information for central auditory processing. FASEB Journal, 2012, 26, 3834-3843.	0.5	26
57	Specific synaptopathies diversify brain responses and hearing disorders: you lose the gain from early life. Cell and Tissue Research, 2015, 361, 77-93.	2.9	26
58	A new twist in an old story: The role for crosstalk of neuronal and trophic activity. Neurochemistry International, 1997, 31, 659-676.	3.8	25
59	Autonomous functions of murine thyroid hormone receptor TRÎ± and TRÎ² in cochlear hair cells. Molecular and Cellular Endocrinology, 2014, 382, 26-37.	3.2	25
60	GÎ±i Proteins are Indispensable for Hearing. Cellular Physiology and Biochemistry, 2018, 47, 1509-1532.	1.6	25
61	NO-Sensitive Guanylate Cyclase Isoforms NO-GC1 and NO-GC2 Contribute to Noise-Induced Inner Hair Cell Synaptopathy. Molecular Pharmacology, 2017, 92, 375-388.	2.3	24
62	Salicylate Alters the Expression of Calcium Response Transcription Factor 1 in the Cochlea: Implications for Brain-Derived Neurotrophic Factor Transcriptional Regulation. Molecular Pharmacology, 2008, 73, 1085-1091.	2.3	22
63	OPA1, the disease gene for optic atrophy type Kjer, is expressed in the inner ear. Histochemistry and Cell Biology, 2007, 128, 421-430.	1.7	21
64	L-type Calcium Channel Cav1.2 Is Required for Maintenance of Auditory Brainstem Nuclei. Journal of Biological Chemistry, 2015, 290, 23692-23710.	3.4	17
65	Visualizing BDNF Transcript Usage During Sound-Induced Memory Linked Plasticity. Frontiers in Molecular Neuroscience, 2018, 11, 260.	2.9	17
66	Functional biomarkers that distinguish between tinnitus with and without hyperacusis. Clinical and Translational Medicine, 2021, 11, e378.	4.0	17
67	L-type CaV1.2 deletion in the cochlea but not in the brainstem reduces noise vulnerability: implication for CaV1.2-mediated control of cochlear BDNF expression. Frontiers in Molecular Neuroscience, 2013, 6, 20.	2.9	15
68	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
69	GC-B Deficient Mice With Axon Bifurcation Loss Exhibit Compromised Auditory Processing. Frontiers in Neural Circuits, 2018, 12, 65.	2.8	14
70	Co-occurrence of Hyperacusis Accelerates With Tinnitus Burden Over Time and Requires Medical Care. Frontiers in Neurology, 2021, 12, 627522.	2.4	14
71	Generation of somatic electromechanical force by outer hair cells may be influenced by prestinâ€"CASK interaction at the basal junction with the Deiterâ€™s cell. Histochemistry and Cell Biology, 2013, 140, 119-135.	1.7	13
72	Too Blind to See the Elephant? Why Neuroscientists Ought to Be Interested in Tinnitus. JARO - Journal of the Association for Research in Otolaryngology, 2021, 22, 609-621.	1.8	13

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73	BDNF-Live-Exon-Visualization (BLEV) Allows Differential Detection of BDNF Transcripts in vitro and in vivo. Frontiers in Molecular Neuroscience, 2018, 11, 325.	2.9	12
74	Disturbed Balance of Inhibitory Signaling Links Hearing Loss and Cognition. Frontiers in Neural Circuits, 2021, 15, 785603.	2.8	11
75	Deletion of myosin VI causes slow retinal optic neuropathy and age-related macular degeneration (AMD)-relevant retinal phenotype. Cellular and Molecular Life Sciences, 2015, 72, 3953-3969.	5.4	10
76	Detection of Excitatory and Inhibitory Synapses in the Auditory System Using Fluorescence Immunohistochemistry and High-Resolution Fluorescence Microscopy. Methods in Molecular Biology, 2016, 1427, 263-276.	0.9	10
77	Guanylyl Cyclase A/cGMP Signaling Slows Hidden, Age- and Acoustic Trauma-Induced Hearing Loss. Frontiers in Aging Neuroscience, 2020, 12, 83.	3.4	10
78	Molecular characterization of anion exchangers in the cochlea. Molecular and Cellular Biochemistry, 2000, 205, 25-37.	3.1	9
79	Molecular Mechanism of Tinnitus. Springer Handbook of Auditory Research, 2012, , 59-82.	0.7	9
80	Ergic2, a Brain Specific Interacting Partner of Otoferlin. Cellular Physiology and Biochemistry, 2012, 29, 941-948.	1.6	8
81	Loss of glycine receptors containing the Î±3 subunit compromises auditory nerve activity, but not outer hair cell function. Hearing Research, 2016, 337, 25-34.	2.0	8
82	Distinct Stress Response and Altered Striatal Transcriptome in Alpha-Synuclein Overexpressing Mice. Frontiers in Neuroscience, 2018, 12, 1033.	2.8	8
83	Age-Dependent Auditory Processing Deficits after Cochlear Synaptopathy Depend on Auditory Nerve Latency and the Ability of the Brain to Recruit LTP/BDNF. Brain Sciences, 2020, 10, 710.	2.3	8
84	Altered Phenotype of the Vestibular Organ in GLAST-1 Null Mice. JARO - Journal of the Association for Research in Otolaryngology, 2012, 13, 323-333.	1.8	7
85	Deletion of BDNF in Pax2 Lineage-Derived Interneuron Precursors in the Hindbrain Hampers the Proportion of Excitation/Inhibition, Learning, and Behavior. Frontiers in Molecular Neuroscience, 2021, 14, 642679.	2.9	7
86	Auditory Threshold Variability in the SAMP8 Mouse Model of Age-Related Hearing Loss: Functional Loss and Phenotypic Change Precede Outer Hair Cell Loss. Frontiers in Aging Neuroscience, 2021, 13, 708190.	3.4	7
87	Auditory system: development, genetics, function, aging, and diseases. Cell and Tissue Research, 2015, 361, 1-6.	2.9	6
88	Insights from the third international conference on hyperacusis: causes, evaluation, diagnosis, and treatment. Noise and Health, 2018, 20, 162-170.	0.5	6
89	Loss of central mineralocorticoid or glucocorticoid receptors impacts auditory nerve processing in the cochlea. IScience, 2022, 25, 103981.	4.1	5
90	The Geisler Method: Tracing Activity-Dependent cGMP Plasticity Changes upon Double Detection of mRNA and Protein on Brain Slices. Methods in Molecular Biology, 2013, 1020, 223-233.	0.9	4

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91	The role of cGMP signalling in auditory processing in health and disease. British Journal of Pharmacology, 2021, , .	5.4	3
92	Absence of Early Neuronal Death in the Olivocochlear System Following Acoustic Overstimulation. Anatomical Record, 2016, 299, 103-110.	1.4	2
93	Fire & Flower in the Cochlea oder Wie die Haarsinneszellen im Innenohr in AbhÃngigkeit von Thyroidhormon erblÃ¼hen. E-Neuroforum, 2003, 9, 113-120.	0.1	1
94	Differential deletion of GDNF in the auditory system leads to altered sound responsiveness. Journal of Neuroscience Research, 2020, 98, 1764-1779.	2.9	1
95	The aftermath of tinnitus-inducing inner ear damage for auditory brainstem responses and MEMR imaging of central brain activity in the rat. Hearing, Balance and Communication, 2020, 18, 225-233.	0.4	1
96	Activities of the Right Temporo-Parieto-Occipital Junction Reflect Spatial Hearing Ability in Cochlear Implant Users. Frontiers in Neuroscience, 2021, 15, 613101.	2.8	1
97	CYCLIN DEPENDENT KINASE INHIBITORS DURING POSTNATAL DEVELOPMENT OF THE RAT. Biochemical Society Transactions, 1996, 24, 555S-555S.	3.4	0
98	Individual Characteristics of Members of the SLC26 Family in Vertebrates and their Homologues in Insects. Novartis Foundation Symposium, 2008, , 19-41.	1.1	0
99	The role of particulate guanylyl cyclase B (GC-B) in auditory function in adult mice. BMC Pharmacology & Toxicology, 2015, 16, .	2.4	0
100	Age, noise and cGMP: Pharmacological activation of soluble guanylyl cyclase (sGC) interacts with the progression of age related and noise induced hearing loss. BMC Pharmacology & Toxicology, 2015, 16, .	2.4	0
101	Tinnitus Research: Improvement and Innovation. Trends in Hearing, 2019, 23, 233121651983713.	1.3	0
102	Individual characteristics of members of the SLC26 family in vertebrates and their homologues in insects. Novartis Foundation Symposium, 2006, 273, 19-30; discussion 30-41, 261-4.	1.1	0