Marcel G A Van Der Heijden

List of Publications by Year
in descending order

71 papers	7,637 citations	159585 30 h-index	102487 66 g-index
73 all docs	73 docs citations	73 times ranked	7810 citing authors

#	Article	IF	Citations
1	Rectifying and sluggish: Outer hair cells as regulators rather than amplifiers. Hearing Research, 2022, 423, 108367.	2.0	13
2	A coumarin exudation pathway mitigates arbuscular mycorrhizal incompatibility in Arabidopsis thaliana. Plant Molecular Biology, 2021, 106, 319-334.	3.9	22
3	Tuned vibration modes in a miniature hearing organ: Insights from the bushcricket. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	12
4	Early Binaural Hearing: The Comparison of Temporal Differences at the Two Ears. Annual Review of Neuroscience, 2019, 42, 433-457.	10.7	29
5	Molecular dialogue between arbuscular mycorrhizal fungi and the nonhost plant <i>Arabidopsis thaliana</i> switches from initial detection to antagonism. New Phytologist, 2019, 223, 867-881.	7.3	49
6	Agricultural intensification reduces microbial network complexity and the abundance of keystone taxa in roots. ISME Journal, 2019, 13, 1722-1736.	9.8	716
7	The frequency limit of outer hair cell motility measured in vivo. ELife, 2019, 8, .	6.0	60
8	Plantâ€“Soil Feedback: Bridging Natural and Agricultural Sciences. Trends in Ecology and Evolution, 2018, 33, 129-142.	8.7	249
9	Spatial profiles of sound-evoked vibration in the gerbil cochlea. AIP Conference Proceedings, 2018, , .	0.4	7
10	Wave propagation in the mammalian cochlea. AIP Conference Proceedings, 2018, , .	0.4	4
11	A synaptic theory of internal delays. Journal of the Acoustical Society of America, 2018, 144, 2967-2970.	1.1	2
12	Impact of organic and conventional farming systems on wheat grain uptake and soil bioavailability of zinc and cadmium. Science of the Total Environment, 2018, 639, 608-616.	8.0	24
13	Keystone taxa as drivers of microbiome structure and functioning. Nature Reviews Microbiology, 2018, 16, 567-576.	28.6	1,516
14	Vibration hotspots reveal longitudinal funneling of sound-evoked motion in the mammalian cochlea. Nature Communications, 2018, 9, 3054.	12.8	111
15	Non-Mycorrhizal Plants: The Exceptions that Prove the Rule. Trends in Plant Science, 2018, 23, 577-587.	8.8	131
16	Microbiome-on-a-Chip: New Frontiers in Plantâ€“Microbiota Research. Trends in Microbiology, 2017, 25, 610-613.	7.7	42
17	A Test of the Stereausis Hypothesis for Sound Localization in Mammals. Journal of Neuroscience, 2017, 37, 7278-7289.	3.6	12
18	Strategies for Environmentally Sound Soil Ecological Engineering: A Reply to Machado et al.. Trends in Ecology and Evolution, 2017, 32, 10-12.	8.7	6

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19	Predicting binaural responses from monaural responses in the gerbil medial superior olive. Journal of Neurophysiology, 2016, 115, 2950-2963.	1.8	19
20	An Underground Revolution: Biodiversity and Soil Ecological Engineering for Agricultural Sustainability. Trends in Ecology and Evolution, 2016, 31, 440-452.	8.7	879
21	Dynamics of Cochlear Nonlinearity. Advances in Experimental Medicine and Biology, 2016, 894, 267-273.	1.6	6
22	Slow dynamics of the amphibian tympanic membrane. AIP Conference Proceedings, 2015, , .	0.4	2
23	Questioning cochlear amplification. AIP Conference Proceedings, 2015, , .	0.4	2
24	Mycorrhizal ecology and evolution: the past, the present, and the future. New Phytologist, 2015, 205, 1406-1423.	7.3	1,390
25	PERN: an EUâ€"Russia initiative for rhizosphere microbial resources. Trends in Biotechnology, 2015, 33, 377-380.	9.3	9
26	The role of arbuscular mycorrhizas in reducing soil nutrient loss. Trends in Plant Science, 2015, 20, 283-290.	8.8	242
27	Energy Flux in the Cochlea: Evidence Against Power Amplification of the Traveling Wave. JARO - Journal of the Association for Research in Otolaryngology, 2015, 16, 581-597.	1.8	28
28	The Interaural Time Difference Pathway: a Comparison of Spectral Bandwidth and Correlation Sensitivity at Three Anatomical Levels. JARO - Journal of the Association for Research in Otolaryngology, 2014, 15, 203-218.	1.8	7
29	Frequency selectivity without resonance in a fluid waveguide. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 14548-14552.	7.1	31
30	The Spatial Buildup of Compression and Suppression in the Mammalian Cochlea. JARO - Journal of the Association for Research in Otolaryngology, 2013, 14, 523-545.	1.8	24
31	Arbuscular mycorrhizal fungi reduce growth and infect roots of the nonâ€host plant <i><scp>A</scp>rabidopsis thaliana</i>. Plant, Cell and Environment, 2013, 36, 1926-1937.	5.7	97
32	Directional Hearing by Linear Summation of Binaural Inputs at the Medial Superior Olive. Neuron, 2013, 78, 936-948.	8.1	90
33	Basilar Membrane Responses to Tones and Tone Complexes: Nonlinear Effects of Stimulus Intensity. JARO - Journal of the Association for Research in Otolaryngology, 2012, 13, 785-798.	1.8	46
34	Subcortical input heterogeneity in the mouse inferior colliculus. Journal of Physiology, 2011, 589, 3955-3967.	2.9	20
35	Distortion Product Otoacoustic Emissions Evoked by Tone Complexes. JARO - Journal of the Association for Research in Otolaryngology, 2011, 12, 29-44.	1.8	8
36	Response Characteristics in the Apex of the Gerbil Cochlea Studied Through Auditory Nerve Recordings. JARO - Journal of the Association for Research in Otolaryngology, 2011, 12, 301-316.	1.8	46

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37	Responses of Auditory Nerve and Anteroventral Cochlear Nucleus Fibers to Broadband and Narrowband Noise: Implications for the Sensitivity to Interaural Delays. JARO - Journal of the Association for Research in Otolaryngology, 2011, 12, 485-502.	1.8	10
38	Factors Controlling the Inputâ€"Output Relationship of Spherical Bushy Cells in the Gerbil Cochlear Nucleus. Journal of Neuroscience, 2011, 31, 4260-4273.	3.6	78
39	Frequency selectivity in Old-World monkeys corroborates sharp cochlear tuning in humans. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 17516-17520.	7.1	116
40	Dynamic Aspects of Cochlear Microphonic Potentials. , 2011, , .		2
41	Otoacoustic Estimates of Cochlear Tuning: Testing Predictions in Macaque. AIP Conference Proceedings, 2011, 1403, 286-292.	0.4	5
42	The Cascaded Cochlea. , 2011, , .		0
43	Interaural Correlation Fails to Account for Detection in a Classic Binaural Task: Dynamic ITDs Dominate N0SÏ€ Detection. JARO - Journal of the Association for Research in Otolaryngology, 2010, 11, 113-131.	1.8	22
44	Reverse Cochlear Propagation in the Intact Cochlea of the Gerbil: Evidence for Slow Traveling Waves. Journal of Neurophysiology, 2010, 103, 1448-1455.	1.8	37
45	Reply to Ren and Porsov: Reverse Propagation of Sounds in the Intact Cochlea. Journal of Neurophysiology, 2010, 104, 3733-3733.	1.8	2
46	Dynamic ITDs, Not ILDs, Underlie Binaural Detection of a Tone in Wideband Noise. , 2010, , 265-272.		0
47	Socialism in soil? The importance of mycorrhizal fungal networks for facilitation in natural ecosystems. Journal of Ecology, 2009, 97, 1139-1150.	4.0	486
48	DISTORTION PRODUCT OTOACOUSTIC EMISSIONS EVOKED BY TONE COMPLEXES. , 2009, , .		1
49	How Secure Is In Vivo Synaptic Transmission at the Calyx of Held?. Journal of Neuroscience, 2008, 28, 10206-10219.	3.6	70
50	Comparison of Bandwidths in the Inferior Colliculus and the Auditory Nerve. II: Measurement Using a Temporally Manipulated Stimulus. Journal of Neurophysiology, 2008, 100, 2312-2327.	1.8	15
51	Temporal Damping in Response to Broadband Noise. II. Auditory Nerve. Journal of Neurophysiology, 2008, 99, 1942-1952.	1.8	10
52	Comparison of Bandwidths in the Inferior Colliculus and the Auditory Nerve. I. Measurement Using a Spectrally Manipulated Stimulus. Journal of Neurophysiology, 2007, 98, 2566-2579.	1.8	23
53	Correlation Index: A new metric to quantify temporal coding. Hearing Research, 2006, 216-217, 19-30.	2.0	91
54	Binaural and cochlear disparities. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 12917-12922.	7.1	101

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55	Auditory Midbrain and Nerve Responses to Sinusoidal Variations in Interaural Correlation. Journal of Neuroscience, 2006, 26, 279-289.	3.6	50
56	Panoramic Measurements of the Apex of the Cochlea. Journal of Neuroscience, 2006, 26, 11462-11473.	3.6	59
57	Decorrelation Sensitivity of Auditory Nerve and Anteroventral Cochlear Nucleus Fibers to Broadband and Narrowband Noise. Journal of Neuroscience, 2006, 26, 96-108.	3.6	33
58	Dependence of binaural and cochlear â€œbest delaysâ€•on characteristic frequency. , 2005, , 477-483.		10
59	Cochlear gain control. Journal of the Acoustical Society of America, 2005, 117, 1223-1233.	1.1	21
60	The Speed of Auditory Low-Side Suppression. Journal of Neurophysiology, 2005, 93, 201-209.	1.8	11
61	Enhanced Temporal Response Properties of Anteroventral Cochlear Nucleus Neurons to Broadband Noise. Journal of Neuroscience, 2005, 25, 1560-1570.	3.6	56
62	Temporal Damping in Response to Broadband Noise. I. Inferior Colliculus. Journal of Neurophysiology, 2005, 93, 1857-1870.	1.8	23
63	Temporal Properties of Responses to Broadband Noise in the Auditory Nerve. Journal of Neurophysiology, 2004, 91, 2051-2065.	1.8	110
64	Cochlear Phase and Amplitude Retrieved from the Auditory Nerve at Arbitrary Frequencies. Journal of Neuroscience, 2003, 23, 9194-9198.	3.6	66
65	Masking with interaurally delayed stimuli: The use of â€œinternalâ€•delays in binaural detection. Journal of the Acoustical Society of America, 1999, 105, 388-399.	1.1	52
66	Binaural detection as a function of interaural correlation and bandwidth of masking noise: Implications for estimates of spectral resolution. Journal of the Acoustical Society of America, 1998, 103, 1609-1614.	1.1	43
67	A new way to account for binaural detection as a function of interaural noise correlation. Journal of the Acoustical Society of America, 1997, 101, 1019-1022.	1.1	32
68	Binaural detection with spectrally nonoverlapping signals and maskers: Evidence for masking by aural distortion products. Journal of the Acoustical Society of America, 1997, 102, 2966-2972.	1.1	9
69	The role of distortion products in masking by single bands of noise. Journal of the Acoustical Society of America, 1995, 98, 3125-3134.	1.1	2
70	The role of envelope fluctuations in spectral masking. Journal of the Acoustical Society of America, 1995, 97, 1800-1807.	1.1	24
71	Using an excitation-pattern model to predict auditory masking. Hearing Research, 1994, 80, 38-52.	2.0	14