Joseph P Walton

List of Publications by Year
in descending order

69 papers	2,514 citations	147801 31 h-index	206112 48 g-index
72 all docs	72 docs citations	72 times ranked	1666 citing authors

#	Article	IF	Citations
1	Machine learning, waveform preprocessing and feature extraction methods for classification of acoustic startle waveforms. MethodsX, 2021, 8, 101166.	1.6	5
2	Rescuing Auditory Temporal Processing with a Novel Augmented Acoustic Environment in an Animal Model of Congenital Hearing Loss. ENeuro, 2021, 8, ENEURO.0231-21.2021.	1.9	1
3	A Wirelessly Controlled Scalable 3D-Printed Microsystem for Drug Delivery. Pharmaceuticals, 2021, 14, 538.	3.8	7
4	A BK channel-targeted peptide induces age-dependent improvement in behavioral and neural sound representation. Neurobiology of Aging, 2021, 110, 61-72.	3.1	0
5	Automated classification of acoustic startle reflex waveforms in young CBA/CaJ mice using machine learning. Journal of Neuroscience Methods, 2020, 344, 108853.	2.5	4
6	Aldosterone up-regulates voltage-gated potassium currents and NKCC1 protein membrane fractions. Scientific Reports, 2020, 10, 15604.	3.3	12
7	A 3D-Printed Modular Microreservoir for Drug Delivery. Micromachines, 2020, 11, 648.	2.9	13
8	A nanoliter resolution implantable micropump for murine inner ear drug delivery. Journal of Controlled Release, 2019, 298, 27-37.	9.9	35
9	Cochlear pharmacokinetics - Micro-computed tomography and learning-prediction modeling for transport parameter determination. Hearing Research, 2019, 380, 46-59.	2.0	8
10	Sodium salicylate alters temporal integration measured through increasing stimulus presentation rates. International Journal of Audiology, 2019, 58, 141-150.	1.7	0
11	Noise-Induced Hearing Loss in Mice: Effects of High and Low Levels of Noise Trauma in CBA Mice. , 2018, 2018, 1210-1213.		7
12	Loss of the Cochlear Amplifier Prestin Reduces Temporal Processing Efficacy in the Central Auditory System. Frontiers in Cellular Neuroscience, 2018, 12, 291.	3.7	4
13	Age-related changes in Na, K-ATPase expression, subunit isoform selection and assembly in the stria vascularis lateral wall of mouse cochlea. Hearing Research, 2018, 367, 59-73.	2.0	30
14	Increasing GABA reverses age-related alterations in excitatory receptive fields and intensity coding of auditory midbrain neuronsÂinÂaged mice. Neurobiology of Aging, 2017, 56, 87-99.	3.1	7
15	Nanoparticle-based Plasmonic Transduction for Modulation of Electrically Excitable Cells. Scientific Reports, 2017, 7, 7803.	3.3	25
16	Long-term treatment with aldosterone slows the progression of age-related hearing loss. Hearing Research, 2016, 336, 63-71.	2.0	34
17	Age-related hearing loss: prevention of threshold declines, cell loss and apoptosis in spiral ganglion neurons. Aging, 2016, 8, 2081-2099.	3.1	75
18	Alterations in Peripheral and Central Components of the Auditory Brainstem Response: A Neural Assay of Tinnitus. PLoS ONE, 2015, 10, e0117228.	2.5	37

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19	Auditory brainstem gap responses start to decline in mice in middle age: a novel physiological biomarker for age-related hearing loss. Cell and Tissue Research, 2015, 361, 359-369.	2.9	21
20	Auditory deficits of Kcna1 deletion are similar to those of a monaural hearing impairment. Hearing Research, 2015, 321, 45-51.	2.0	10
21	Direct control of Na⁺-K⁺-2Cl^{âˆ’}-cotransport protein (NKCC1) expression with aldosterone. American Journal of Physiology - Cell Physiology, 2014, 306, C66-C75.	4.6	36
22	Age-related hearing loss: GABA, nicotinic acetylcholine and NMDA receptor expression changes in spiral ganglion neurons of the mouse. Neuroscience, 2014, 259, 184-193.	2.3	47
23	Iron Deficiency Disrupts Axon Maturation of the Developing Auditory Nerve. Journal of Neuroscience, 2012, 32, 5010-5015.	3.6	41
24	Neural correlates of age-related declines in frequency selectivity in the auditory midbrain. Neurobiology of Aging, 2011, 32, 168-178.	3.1	18
25	AMTAS^{Â®}: Automated method for testing auditory sensitivity: II. Air conduction audiograms in children and adults. International Journal of Audiology, 2011, 50, 434-439.	1.7	43
26	Cell Biology and Physiology of the Aging Central Auditory Pathway. Springer Handbook of Auditory Research, 2010, , 39-74.	0.7	14
27	Timing is everything: Temporal processing deficits in the aged auditory brainstem. Hearing Research, 2010, 264, 63-69.	2.0	126
28	Ablation of mixed lineage kinase 3 (Mlk3) does not inhibit ototoxicity induced by acoustic trauma or aminoglycoside exposure. Hearing Research, 2010, 270, 21-27.	2.0	8
29	Interactions of hearing loss and diabetes mellitus in the middle age CBA/CaJ mouse model of presbycusis. Hearing Research, 2009, 249, 44-53.	2.0	46
30	Sensorineural Hearing Loss and Neural Correlates of Temporal Acuity in the Inferior Colliculus of the C57bl/6 Mouse. JARO - Journal of the Association for Research in Otolaryngology, 2008, 9, 90-101.	1.8	43
31	Lead exposure during development results in increased neurofilament phosphorylation, neuritic beading, and temporal processing deficits within the murine auditory brainstem. Journal of Comparative Neurology, 2008, 506, 1003-1017.	1.6	61
32	Kv1.1 channel subunits are not necessary for high temporal acuity in behavioral and electrophysiological gap detection. Hearing Research, 2008, 246, 52-58.	2.0	17
33	Age-related structural and functional changes in the cochlear nucleus. Hearing Research, 2006, 216-217, 216-223.	2.0	97
34	Age reduces response latency of mouse inferior colliculus neurons to AM sounds. Journal of the Acoustical Society of America, 2004, 116, 469-477.	1.1	39
35	Impaired gap encoding in aged mouse inferior colliculus at moderate but not high stimulus levels. Hearing Research, 2003, 186, 17-29.	2.0	32
36	The relative detectability for mice of gaps having different ramp durations at their onset and offset boundaries. Journal of the Acoustical Society of America, 2002, 112, 740-747.	1.1	30

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37	Behavioral and neural measures of auditory temporal acuity in aging humans and mice. Neurobiology of Aging, 2002, 23, 565-578.	3.1	85
38	Age-Related Alterations in the Neural Coding of Envelope Periodicities. Journal of Neurophysiology, 2002, 88, 565-578.	1.8	136
39	Background Noise Improves Gap Detection in Tonically Inhibited Inferior Colliculus Neurons. Journal of Neurophysiology, 2002, 87, 240-249.	1.8	11
40	Auditory Temporal Processing during Aging. , 2001, , 565-579.		30
41	Neurophysiological Manifestations of Aging in the Peripheral and Central Auditory Nervous System. , 2001, , 581-595.		4
42	Neuroanatomy of the Central Auditory System. , 2001, , 243-275.		6
43	Aging of the Mouse Central Auditory System. , 2001, , 339-379.		18
44	Background noise differentially effects temporal coding by tonic units in the mouse inferior colliculus. Hearing Research, 2000, 150, 149-160.	2.0	3
45	Auditory brainstem response forward-masking recovery functions in older humans with normal hearing. Hearing Research, 1999, 127, 86-94.	2.0	51
46	Gap encoding by inferior collicular neurons is altered by minimal changes in signal envelope. Hearing Research, 1998, 115, 13-26.	2.0	32
47	Inputs to a physiologically characterized region of the inferior colliculus of the young adult CBA mouse. Hearing Research, 1998, 115, 61-81.	2.0	44
48	Age-Related Alteration in Processing of Temporal Sound Features in the Auditory Midbrain of the CBA Mouse. Journal of Neuroscience, 1998, 18, 2764-2776.	3.6	229
49	Efferent projections of a physiologically characterized region of the inferior colliculus of the young adult CBA mouse. Journal of the Acoustical Society of America, 1997, 101, 2741-2753.	1.1	26
50	Nimodipine at a dose that slows ABR latencies does not protect the ear against noise. Hearing Research, 1997, 106, 179-183.	2.0	12
51	Neural correlates of behavioral gap detection in the inferior colliculus of the young CBA mouse. Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology, 1997, 181, 161-176.	1.6	121
52	Hair Cell Loss and Synaptic Loss in Inferior Colliculus of C57BL/6 MICE. , 1997, , 535-542.		0
53	Preservation of amplitude modulation coding in the presence of background noise by chinchilla auditoryâ€nerve fibers. Journal of the Acoustical Society of America, 1996, 99, 475-490.	1.1	45
54	Sensorineural hearing loss alters recovery from short-term adaptation in the C57BL/6 mouse. Hearing Research, 1995, 88, 19-26.	2.0	48

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55	Synaptic loss in the central nucleus of the inferior colliculus correlates with sensorineural hearing loss in the C57BL/6 mouse model of presbycusis. Hearing Research, 1995, 89, 109-120.	2.0	56
56	Distribution of calbindin D-28k immunoreactivity in the cochlear nucleus of the young adult chinchilla. Hearing Research, 1995, 85, 53-68.	2.0	29
57	P3 Event-Related Potentials and Performance of Young and Old Subjects for Music Perception Tasks. International Journal of Neuroscience, 1994, 78, 223-239.	1.6	8
58	Dorsal cochlear nucleus single neurons can enhance temporal processing capabilities in background noise. Experimental Brain Research, 1994, 102, 160-4.	1.5	41
59	Neural processing of musical timbre by musicians, nonmusicians, and musicians possessing absolute pitch. Journal of the Acoustical Society of America, 1994, 95, 2720-2727.	1.1	77
60	Effects of musical training and absolute pitch ability on eventâ€related activity in response to sine tones. Journal of the Acoustical Society of America, 1992, 91, 3527-3531.	1.1	66
61	P3 event-related potentials and performance of healthy older and Alzheimer's dementia subjects for music perception tasks.. Psychomusicology: Music, Mind and Brain, 1992, 11, 96-118.	0.3	17
62	Effects of Musical Training and Absolute Pitch on the Neural Processing of Melodic Intervals: A P3 Event-Related Potential Study. Music Perception, 1992, 10, 25-42.	1.1	51
63	Differential calbindin-like immunoreactivity in the brain stem auditory system of the chinchilla. Journal of Comparative Neurology, 1992, 320, 196-212.	1.6	44
64	Does the Melody Linger on? Music Cognition in Alzheimer's Disease. Seminars in Neurology, 1989, 9, 152-158.	1.4	40
65	Neural basis for music cognition: Neurophysiological foundations.. Psychomusicology: Music, Mind and Brain, 1988, 7, 99-107.	0.3	18
66	Neural basis for music cognition: Initial experimental findings.. Psychomusicology: Music, Mind and Brain, 1988, 7, 117-126.	0.3	20
67	Neural basis for music cognition: Future directions and biomedical implications.. Psychomusicology: Music, Mind and Brain, 1988, 7, 127-138.	0.3	19
68	Hearing Loss in Infants With Persistent Fetal Circulation. Pediatrics, 1988, 81, 650-656.	2.1	85
69	Binaural Acoustic Reflex Activity following Monaural Noise Exposure in Decerebrate Chinchillas¹: ActivitÃ© du rÃ©flexe acoustique binaural chez des chinchillas dÃ©cÃ©rebrÃ©s aprÃ¨s exposition Ã un bruit monaural. International Journal of Audiology, 1986, 25, 309-320.	1.7	3