Andrew K Wise

List of Publications by Year
in descending order

71 papers	2,864 citations	172386 29 h-index	189801 50 g-index
73 all docs	73 docs citations	73 times ranked	2590 citing authors

#	Article	IF	Citations
1	Polypyrrole-coated electrodes for the delivery of charge and neurotrophins to cochlear neurons. Biomaterials, 2009, 30, 2614-2624.	5.7	277
2	Resprouting and survival of guinea pig cochlear neurons in response to the administration of the neurotrophins brain-derived neurotrophic factor and neurotrophin-3. Journal of Comparative Neurology, 2005, 487, 147-165.	0.9	206
3	The role of muscle receptors in the detection of movements. Progress in Neurobiology, 2000, 60, 85-96.	2.8	157
4	Effects of Localized Neurotrophin Gene Expression on Spiral Ganglion Neuron Resprouting in the Deafened Cochlea. Molecular Therapy, 2010, 18, 1111-1122.	3.7	109
5	Mechanisms of synchronous activity in cerebellar Purkinje cells. Journal of Physiology, 2010, 588, 2373-2390.	1.3	88
6	Systematic Regional Variations in Purkinje Cell Spiking Patterns. PLoS ONE, 2014, 9, e105633.	1.1	84
7	Neurotrophic Factors and Neural Prostheses: Potential Clinical Applications Based Upon Findings in the Auditory System. IEEE Transactions on Biomedical Engineering, 2007, 54, 1138-1148.	2.5	80
8	Enhanced Auditory Neuron Survival Following Cell-Based BDNF Treatment in the Deaf Guinea Pig. PLoS ONE, 2011, 6, e18733.	1.1	74
9	Muscle history, fusimotor activity and the human stretch reflex. Journal of Physiology, 1998, 513, 927-934.	1.3	73
10	Hair Cell Regeneration after ATOH1 Gene Therapy in the Cochlea of Profoundly Deaf Adult Guinea Pigs. PLoS ONE, 2014, 9, e102077.	1.1	71
11	Combining Cell-Based Therapies and Neural Prostheses to Promote Neural Survival. Neurotherapeutics, 2011, 8, 774-787.	2.1	68
12	Spiral ganglion neuron survival and function in the deafened cochlea following chronic neurotrophic treatment. Hearing Research, 2011, 282, 303-313.	0.9	65
13	The effect of deafness duration on neurotrophin gene therapy for spiral ganglion neuron protection. Hearing Research, 2011, 278, 69-76.	0.9	59
14	Improved Auditory Nerve Survival with Nanoengineered Supraparticles for Neurotrophin Delivery into the Deafened Cochlea. PLoS ONE, 2016, 11, e0164867.	1.1	59
15	Infrared neural stimulation fails to evoke neural activity in the deaf guinea pig cochlea. Hearing Research, 2015, 324, 46-53.	0.9	58
16	Impact of Morphometry, Myelinization and Synaptic Current Strength on Spike Conduction in Human and Cat Spiral Ganglion Neurons. PLoS ONE, 2013, 8, e79256.	1.1	57
17	A single dose of neurotrophin-3 to the cochlea surrounds spiral ganglion neurons and provides trophic support. Hearing Research, 2005, 204, 37-47.	0.9	56
18	Deafness alters auditory nerve fibre responses to cochlear implant stimulation. European Journal of Neuroscience, 2007, 26, 510-522.	1.2	56

#	Article	IF	Citations
19	New molecular therapies for the treatment of hearing loss. , 2019, 200, 190-209.		49
20	Influenza Virus Induces Bacterial and Nonbacterial Otitis Media. Journal of Infectious Diseases, 2011, 204, 1857-1865.	1.9	47
21	Neurotrophin Gene Therapy for Sustained Neural Preservation after Deafness. PLoS ONE, 2012, 7, e52338.	1.1	46
22	Chronic neurotrophin delivery promotes ectopic neurite growth from the spiral ganglion of deafened cochleae without compromising the spatial selectivity of cochlear implants. Journal of Comparative Neurology, 2013, 521, 2818-2832.	0.9	46
23	Novel drug delivery systems for inner ear protection and regeneration after hearing loss. Expert Opinion on Drug Delivery, 2008, 5, 1059-1076.	2.4	45
24	Chronic Electrical Stimulation with a Suprachoroidal Retinal Prosthesis: A Preclinical Safety and Efficacy Study. PLoS ONE, 2014, 9, e97182.	1.1	44
25	An improved cochlear implant electrode array for use in experimental studies. Hearing Research, 2011, 277, 20-27.	0.9	42
26	Mesoporous Silica Supraparticles for Sustained Innerâ€Ear Drug Delivery. Small, 2014, 10, 4244-4248.	5.2	41
27	Gel-Mediated Electrospray Assembly of Silica Supraparticles for Sustained Drug Delivery. ACS Applied Materials & Interfaces, 2018, 10, 31019-31031.	4.0	35
28	The responses of muscle spindles to small, slow movements in passive muscle and during fusimotor activity. Brain Research, 1999, 821, 87-94.	1.1	34
29	Heterogeneity of Purkinje cell simple spikeâ€“complex spike interactions: zebrinâ€•and nonâ€zebrinâ€related variations. Journal of Physiology, 2017, 595, 5341-5357.	1.3	34
30	Tracing neurotrophin-3 diffusion and uptake in the guinea pig cochlea. Hearing Research, 2004, 198, 25-35.	0.9	29
31	Evaluation of focused multipolar stimulation for cochlear implants in acutely deafened cats. Journal of Neural Engineering, 2014, 11, 065003.	1.8	29
32	Electroacoustic Stimulation: Now and into the Future. BioMed Research International, 2014, 2014, 1-17.	0.9	29
33	The dynamic relationship between cerebellar Purkinje cell simple spikes and the spikelet number of complex spikes. Journal of Physiology, 2017, 595, 283-299.	1.3	29
34	Evaluation of focused multipolar stimulation for cochlear implants in long-term deafened cats. Journal of Neural Engineering, 2015, 12, 036003.	1.8	28
35	Chronic intracochlear electrical stimulation at high charge densities results in platinum dissolution but not neural loss or functional changes <i>in vivo</i>. Journal of Neural Engineering, 2019, 16, 026009.	1.8	28
36	Drug Delivery: Mesoporous Silica Supraparticles for Sustained Innerâ€Ear Drug Delivery (Small 21/2014). Small, 2014, 10, 4243-4243.	5.2	27

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37	Platinum dissolution and tissue response following long-term electrical stimulation at high charge densities. Journal of Neural Engineering, 2021, 18, 036021.	1.8	27
38	Vitamin D-deficient diet rescues hearing loss in Klotho mice. Hearing Research, 2011, 275, 105-109.	0.9	25
39	Optical stimulation of neural tissue. Healthcare Technology Letters, 2020, 7, 58-65.	1.9	25
40	Structural and Ultrastructural Changes to Type I Spiral Ganglion Neurons and Schwann Cells in the Deafened Guinea Pig Cochlea. JARO - Journal of the Association for Research in Otolaryngology, 2017, 18, 751-769.	0.9	24
41	Cochlear immunochemistryâ€"a new technique based on gelatin embedding. Journal of Neuroscience Methods, 2003, 129, 81-86.	1.3	23
42	Measurement of Forces at the Tip of a Cochlear Implant During Insertion. IEEE Transactions on Biomedical Engineering, 2014, 61, 1177-1186.	2.5	22
43	Drug delivery to the inner ear. Journal of Neural Engineering, 2012, 9, 065002.	1.8	21
44	Cochlear implantation for chronic electrical stimulation in the mouse. Hearing Research, 2013, 306, 37-45.	0.9	21
45	Combined optogenetic and electrical stimulation of auditory neurons increases effective stimulation frequencyâ€"an in vitro study. Journal of Neural Engineering, 2020, 17, 016069.	1.8	21
46	Hybrid optogenetic and electrical stimulation for greater spatial resolution and temporal fidelity of cochlear activation. Journal of Neural Engineering, 2020, 17, 056046.	1.8	21
47	Engineering Biocoatings To Prolong Drug Release from Supraparticles. Biomacromolecules, 2019, 20, 3425-3434.	2.6	20
48	Neurotrophin gene augmentation by electrotransfer to improve cochlear implant hearing outcomes. Hearing Research, 2019, 380, 137-149.	0.9	20
49	Challenges for the application of optical stimulation in the cochlea for the study and treatment of hearing loss. Expert Opinion on Biological Therapy, 2017, 17, 213-223.	1.4	19
50	Mold-Templated Inorganicâ€"Organic Hybrid Supraparticles for Codelivery of Drugs. Biomacromolecules, 2014, 15, 4146-4151.	2.6	18
51	Effects of deafness and cochlear implant use on temporal response characteristics in cat primary auditory cortex. Hearing Research, 2014, 315, 1-9.	0.9	18
52	Biological Considerations of Optical Interfaces for Neuromodulation. Advanced Optical Materials, 2019, 7, 1900385.	3.6	18
53	Electrophysiological channel interactions using focused multipolar stimulation for cochlear implants. Journal of Neural Engineering, 2015, 12, 066005.	1.8	16
54	Viability of Long-Term Gene Therapy in the Cochlea. Scientific Reports, 2014, 4, 4733.	1.6	15

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55	A new strategy for controlling the level of activation in artificially stimulated muscle. IEEE Transactions on Rehabilitation Engineering: A Publication of the IEEE Engineering in Medicine and Biology Society, 1999, 7, 167-173.	1.4	14
56	A partial hearing animal model for chronic electro-acoustic stimulation. Journal of Neural Engineering, 2014, 11, 046008.	1.8	14
57	Treating hearing disorders with cell and gene therapy. Journal of Neural Engineering, 2014, 11, 065001.	1.8	13
58	Evaluation of focused multipolar stimulation for cochlear implants: a preclinical safety study. Journal of Neural Engineering, 2017, 14, 046020.	1.8	11
59	Comparing perilymph proteomes across species. Laryngoscope, 2018, 128, E47-E52.	1.1	11
60	Viral-mediated transduction of auditory neurons with opsins for optical and hybrid activation. Scientific Reports, 2021, 11, 11229.	1.6	10
61	Anti-apoptotic gene Bcl2 is required for stapes development and hearing. Cell Death and Disease, 2012, 3, e362-e362.	2.7	9
62	Second spatial derivative analysis of cortical surface potentials recorded in cat primary auditory cortex using thin film surface arrays: Comparisons with multi-unit data. Journal of Neuroscience Methods, 2016, 267, 14-20.	1.3	8
63	Pharmacokinetics and tissue distribution of neurotrophin 3 after intracochlear delivery. Journal of Controlled Release, 2019, 299, 53-63.	4.8	8
64	Pharmacokinetics and biodistribution of supraparticle-delivered neurotrophin 3 in the guinea pig cochlea. Journal of Controlled Release, 2022, 342, 295-307.	4.8	8
65	Gene Therapy Boosts the Bionic Ear. Science Translational Medicine, 2014, 6, 233fs17.	5.8	6
66	The Effect of Muscle Contraction on Kinaesthesia. Advances in Experimental Medicine and Biology, 2002, 508, 87-94.	0.8	6
67	A radiolabeled drug tracing method to study neurotrophin-3 retention and distribution in the cochlea after nano-based local delivery. MethodsX, 2020, 7, 101078.	0.7	5
68	Effects of chronic implantation and long-term stimulation of a cochlear implant in the partial hearing cat model. Hearing Research, 2022, 426, 108470.	0.9	3
69	Understanding the cochlear implant environment by mapping perilymph proteomes from different species. , 2016, 2016, 5237-5240.		1
70	The Auditory System. Series on Bioengineering and Biomedical Engineering, 2017, , 167-191.	0.1	0
71	Cell and Gene Therapies for the Treatment of Hearing Disorders. , 2015, , 949-964.		0