Alec N Salt

List of Publications by Year
in descending order

95	4,754	61984 43	106344 65
papers	citations	h-index	g-index

102	102	102	2059
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Cochlear Fluid Space Dimensions for Six Species Derived From Reconstructions of Threeâ€Dimensional Magnetic Resonance Images. Laryngoscope, 1999, 109, 1661-1668.	2.0	214
2	Principles of Local Drug Delivery to the Inner Ear. Audiology and Neuro-Otology, 2009, 14, 350-360.	1.3	207
3	Dexamethasone Concentration Gradients Along Scala Tympani After Application to the Round Window Membrane. Otology and Neurotology, 2008, 29, 401-406.	1.3	170
4	Quantification of solute entry into cochlear perilymph through the round window membrane. Hearing Research, 2001, 154, 88-97.	2.0	158
5	Local inner-ear drug delivery and pharmacokinetics. Drug Discovery Today, 2005, 10, 1299-1306.	6.4	156
6	Endolymphatic Hydrops: Pathophysiology and Experimental Models. Otolaryngologic Clinics of North America, 2010, 43, 971-983.	1.1	132
7	Communication pathways to and from the inner ear and their contributions to drug delivery. Hearing Research, 2018, 362, 25-37.	2.0	124
8	Pharmacokinetic principles in the inner ear: Influence of drug properties on intratympanic applications. Hearing Research, 2018, 368, 28-40.	2.0	121
9	Calcium gradients in inner ear endolymph. American Journal of Otolaryngology - Head and Neck Medicine and Surgery, 1989, 10, 371-375.	1.3	107
10	Distribution of Dexamethasone and Preservation of Inner Ear Function following Intratympanic Delivery of a Gel-Based Formulation. Audiology and Neuro-Otology, 2011, 16, 323-335.	1.3	102
11	Volume flow rate of perilymph in the guinea-pig cochlea. Hearing Research, 1988, 35, 119-129.	2.0	101
12	Responses of the ear to low frequency sounds, infrasound and wind turbines. Hearing Research, 2010, 268, 12-21.	2.0	101
13	Concentration Gradient Along the Scala Tympani After Local Application of Gentamicin to the Round Window Membrane. Laryngoscope, 2007, 117, 1191-1198.	2.0	91
14	Analysis of Gentamicin Kinetics in Fluids of the Inner Ear with Round Window Administration. Otology and Neurotology, 2002, 23, 967-974.	1.3	87
15	Entry of Substances Into Perilymph Through the Bone of the Otic Capsule After Intratympanic Applications in Guinea Pigs. Otology and Neurotology, 2009, 30, 131-138.	1.3	87
16	Contamination of perilymph sampled from the basal cochlear turn with cerebrospinal fluid. Hearing Research, 2003, 182, 24-33.	2.0	82
17	Demonstration of a Longitudinal Concentration Gradient Along Scala Tympani by Sequential Sampling of Perilymph from the Cochlear Apex. JARO - Journal of the Association for Research in Otolaryngology, 2006, 7, 182-193.	1.8	80
18	Perilymph sampling from the cochlear apex: A reliable method to obtain higher purity perilymph samples from scala tympani. Journal of Neuroscience Methods, 2006, 153, 121-129.	2.5	79

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19	Direct measurement of longitudinal endolymph flow rate in the guinea pig cochlea. Hearing Research, 1986, 23, 141-151.	2.0	76
20	Regulation of Endolymphatic Fluid Volume. Annals of the New York Academy of Sciences, 2001, 942, 306-312.	3.8	76
21	Systemic Lipopolysaccharide Compromises the Blood-Labyrinth Barrier and Increases Entry of Serum Fluorescein into the Perilymph. JARO - Journal of the Association for Research in Otolaryngology, 2014, 15, 707-719.	1.8	72
22	Perilymph composition in scala tympani of the cochlea: Influence of cerebrospinal fluid. Hearing Research, 1989, 42, 265-271.	2.0	70
23	Permeability of the Round Window Membrane Is Influenced by the Composition of Applied Drug Solutions and by Common Surgical Procedures. Otology and Neurotology, 2008, 29, 1020-1026.	1.3	70
24	Effects of exposure to noise on ion movement in guinea pig cochlea. Hearing Research, 1979, 1, 325-342.	2.0	69
25	Marker entry into vestibular perilymph via the stapes following applications to the round window niche of guinea pigs. Hearing Research, 2012, 283, 14-23.	2.0	65
26	Responses of the endolymphatic sac to perilymphatic injections and withdrawals: evidence for the presence of a one-way valve. Hearing Research, 2004, 191, 90-100.	2.0	62
27	Cochlear microdialysis for quantification of dexamethasone and fluorescein entry into scala tympani during round window administration. Hearing Research, 2006, 212, 236-244.	2.0	62
28	Perilymph Pharmacokinetics of Markers and Dexamethasone Applied and Sampled at the Lateral Semi-Circular Canal. JARO - Journal of the Association for Research in Otolaryngology, 2012, 13, 771-783.	1.8	61
29	The influence of transducer operating point on distortion generation in the cochlea. Journal of the Acoustical Society of America, 2004, 115, 1219-1229.	1.1	58
30	Radial communication between the perilymphatic scalae of the cochlea. II: Estimation by bolus injection of tracer into the sealed cochlea. Hearing Research, 1991, 56, 37-43.	2.0	57
31	Quantitative interpretation of corticosteroid pharmacokinetics in inner fluids using computer simulations. Hearing Research, 2003, 182, 34-42.	2.0	56
32	Cochlear Pharmacokinetics with Local Inner Ear Drug Delivery Using a Three-Dimensional Finite-Element Computer Model. Audiology and Neuro-Otology, 2007, 12, 37-48.	1.3	55
33	Longitudinal endolymph flow associated with acute volume increase in the guinea pig cochlea. Hearing Research, 1997, 107, 29-40.	2.0	54
34	Dependence of Hearing Changes on the Dose of Intratympanically Applied Gentamicin: A Metaâ€Analysis Using Mathematical Simulations of Clinical Drug Delivery Protocols. Laryngoscope, 2008, 118, 1793-1800.	2.0	54
35	Intracochlear Drug Injections through the Round Window Membrane: Measures to Improve Drug Retention. Audiology and Neuro-Otology, 2016, 21, 72-79.	1.3	54
36	Dexamethasone Levels and Base-to-Apex Concentration Gradients in the Scala Tympani Perilymph After Intracochlear Delivery in the Guinea Pig. Otology and Neurotology, 2012, 33, 660-665.	1.3	53

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37	Radial communication between the perilymphatic scalae of the cochlea. I: Estimation by tracer perfusion. Hearing Research, 1991, 56, 29-36.	2.0	52
38	Effects of noise on cochlear potentials and endolymph potassium concentration recorded with potassium-selective electrodes. Hearing Research, 1979, 1, 343-363.	2.0	50
39	Permeability changes of the blood-labyrinth barrier measured in vivo during experimental treatments. Hearing Research, 1992, 61, 12-18.	2.0	48
40	Detection and quantification of endolymphatic hydrops in the guinea pig cochlea by magnetic resonance microscopy. Hearing Research, 1995, 88, 79-86.	2.0	47
41	Quantitative anatomy of the round window and cochlear aqueduct in guinea pigs. Hearing Research, 2001, 162, 105-112.	2.0	47
42	Endolymph calcium increases with time after surgical induction of hydrops in guinea-pigs. Hearing Research, 1994, 74, 115-121.	2.0	46
43	Quantitative differences in endolymphatic calcium and endocochlear potential between pigmented and albino guinea pigs. Hearing Research, 1997, 113, 191-197.	2.0	44
44	Longitudinal endolymph movements induced by perilymphatic injections. Hearing Research, 1998, 123, 137-147.	2.0	41
45	Hearing Changes After Intratympanically Applied Steroids for Primary Therapy of Sudden Hearing Loss: A Meta-analysis Using Mathematical Simulations of Drug Delivery Protocols. Otology and Neurotology, 2017, 38, 19-30.	1.3	41
46	Simulation of Methods for Drug Delivery to the Cochlear Fluids. , 2002, 59, 140-148.		40
47	Simulation of Application Strategies for Local Drug Delivery to the Inner Ear. Orl, 2006, 68, 386-392.	1.1	39
48	Pharmacokinetics of Drug Entry into Cochlear Fluids. Volta Review, 2005, 105, 277-298.	0.5	39
49	Controlled Release Dexamethasone Implants in the Round Window Niche for Salvage Treatment of Idiopathic Sudden Sensorineural Hearing Loss. Otology and Neurotology, 2014, 35, 1168-1171.	1.3	38
50	RAPID CLEARANCE OF METHYLPREDNISOLONE AFTER INTRATYMPANIC APPLICATION IN HUMANS. COMMENT ON: BIRD PA, BEGG EJ, ZHANG M, ET AL. INTRATYMPANIC VERSUS INTRAVENOUS DELIVERY OF METHYLPREDNISOLONE TO COCHLEAR PERILYMPH. OTOL NEUROTOL 2007;28:1124-30. Otology and Neurotology, 2008, 29, 732-733.	1.3	37
51	Infrasound From Wind Turbines Could Affect Humans. Bulletin of Science, Technology and Society, 2011, 31, 296-302.	2.9	35
52	Acute Endolymphatic Hydrops Generated by Exposure of the Ear to Nontraumatic Low-Frequency Tones. JARO - Journal of the Association for Research in Otolaryngology, 2004, 5, 203-14.	1.8	34
53	Displacements of the organ of Corti by gel injections into the cochlear apex. Hearing Research, 2009, 250, 63-75.	2.0	34
54	Progress in cochlear physiology after BÃ©kÃ©sy. Hearing Research, 2012, 293, 12-20.	2.0	34

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55	Large endolymphatic potentials from low-frequency and infrasonic tones in the guinea pig. Journal of the Acoustical Society of America, 2013, 133, 1561-1571.	1.1	34
56	Local drug delivery to the inner ear: Principles, practice, and future challenges. Hearing Research, 2018, 368, 1-2.	2.0	34
57	Improved Speech Intelligibility in Subjects With Stable Sensorineural Hearing Loss Following Intratympanic Dosing of FX-322 in a Phase 1b Study. Otology and Neurotology, 2021, 42, e849-e857.	1.3	34
58	Fixation-induced shrinkage of Reissner's membrane and its potential influence on the assessment of endolymph volume. Hearing Research, 1997, 114, 62-68.	2.0	31
59	Marker retention in the cochlea following injections through the round window membrane. Hearing Research, 2007, 232, 78-86.	2.0	30
60	Time course of endolymph volume increase in experimental hydrops measured in vivo with an ionic volume marker. Hearing Research, 1994, 74, 165-172.	2.0	28
61	Ionic and potential changes of the endolymphatic sac induced by endolymph volume changes. Hearing Research, 2000, 149, 46-54.	2.0	27
62	Endolumph volume changes during osmotic dehydration measured by two marker techniques. Hearing Research, 1995, 90, 12-23.	2.0	26
63	Longitudinal endolymph movements and endocochlear potential changes induced by stimulation at infrasonic frequencies. Journal of the Acoustical Society of America, 1999, 106, 847-856.	1.1	24
64	Estimating the operating point of the cochlear transducer using low-frequency biased distortion products. Journal of the Acoustical Society of America, 2009, 125, 2129-2145.	1.1	24
65	Perilymph pharmacokinetics of marker applied through a cochlear implant in guinea pigs. PLoS ONE, 2017, 12, e0183374.	2.5	24
66	Permeation Enhancers for Intratympanically-applied Drugs Studied Using Fluorescent Dexamethasone as a Marker. Otology and Neurotology, 2018, 39, 639-647.	1.3	23
67	Accumulation of Potassium in Scala Vestibuli Perilymph of the Mammalian Cochlea. Annals of Otology, Rhinology and Laryngology, 1993, 102, 64-70.	1.1	22
68	Dexamethasone and Dexamethasone Phosphate Entry into Perilymph Compared for Middle Ear Applications in Guinea Pigs. Audiology and Neuro-Otology, 2018, 23, 245-257.	1.3	21
69	Gentamicin Concentration Gradients in Scala Tympani Perilymph following Systemic Applications. Audiology and Neuro-Otology, 2013, 18, 383-391.	1.3	20
70	Effects of hypothermia on ionic movement in the guinea pig cochlea. Hearing Research, 1981, 4, 265-278.	2.0	19
71	Functional importance of sodium and potassium in the guinea pig cochlea studied with amiloride and tetraethylammonium.. The Japanese Journal of Physiology, 1982, 32, 219-230.	0.9	19
72	Water permeability of the mammalian cochlea: functional features of an aquaporin-facilitated water shunt at the perilymphâ€“endolymph barrier. Pflugers Archiv European Journal of Physiology, 2014, 466, 1963-1985.	2.8	18

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73	Inner ear drug delivery through a cochlear implant: Pharmacokinetics in a Macaque experimental model. Hearing Research, 2021, 404, 108228.	2.0	18
74	Calibration of ion-selective microelectrodes for use with high levels of interfering ions. Journal of Neuroscience Methods, 1991, 38, 233-237.	2.5	16
75	Hearing Changes After Intratympanic Steroids for Secondary (Salvage) Therapy of Sudden Hearing Loss: A Meta-Analysis Using Mathematical Simulations of Drug Delivery Protocols. Otology and Neurotology, 2018, 39, 803-815.	1.3	16
76	Steroid Nomenclature in Inner Ear Therapy. Otology and Neurotology, 2020, 41, 722-726.	1.3	16
77	Interpretation of endolymph flow results: A Comment On â€˜Longitudinal flow of endolymph measured by distribution of tetraethylammonium and choline in scala mediaâ€™. (SykovÃ¡, E. et al., (1987) Hear. Res.) Tj ETQq1 1 0.784314 rgBT	2.0	14
78	How Does Wind Turbine Noise Affect People?. Acoustics Today, 2014, 10, 20-28.	1.0	14
79	Cochlear Threshold Assessment using Tone-Derived Action Potentials. International Journal of Audiology, 1990, 29, 135-145.	1.7	13
80	Effect of infrasound on cochlear damage from exposure to a 4kHz octave band of noise. Hearing Research, 2007, 225, 128-138.	2.0	12
81	Drug delivery to the cochlea after implantation: consideration of the risk factors. Cochlear Implants International, 2005, 6, 12-14.	1.2	11
82	ATP-Î³-S shifts the operating point of outer hair cell transduction towards scala tympani. Hearing Research, 2005, 205, 35-43.	2.0	11
83	Comparison of Endolymph Cross-Sectional Area Measured Histologically with that Measured in Vivo with an Ionic Volume Marker. Annals of Otology, Rhinology and Laryngology, 1995, 104, 886-894.	1.1	10
84	Effect of Artificial Endolymph Injection into the Cochlear Duct on Perilymph Potassium. Orl, 2009, 71, 16-18.	1.1	10
85	Drug delivery to the cochlea after implantation: consideration of the risk factors. Cochlear Implants International, 2005, 6, 12-14.	1.2	9
86	Cochlear action potential tuning curves recorded with a derived response technique. Journal of the Acoustical Society of America, 1990, 88, 1392-1402.	1.1	8
87	Quantitative anatomy of the guinea pig endolymphatic sac. Hearing Research, 2002, 174, 1-8.	2.0	6
88	Amplitude modulation of audible sounds by non-audible sounds: Understanding the effects of wind turbine noise. Proceedings of Meetings on Acoustics, 2013, , .	0.3	6
89	Reducing Auditory Nerve Excitability by Acute Antagonism of Ca2+-Permeable AMPA Receptors. Frontiers in Synaptic Neuroscience, 2021, 13, 680621.	2.5	5
90	New Concepts Regarding the Volume Flow of Endolymph and Perilymph. Advances in Oto-Rhino-Laryngology, 1987, 37, 11-17.	1.6	4

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91	The endolymphatic sinus is a possible detector of endolymph volume status. Hearing Research, 2007, 224, 117-118.	2.0	3
92	Guest Editorial: Drug Delivery for Treatment of Inner Ear Disease: Current State of Knowledge. Ear and Hearing, 2010, 31, 155.	2.1	3
93	CACHD1-deficient mice exhibit hearing and balance deficits associated with a disruption of calcium homeostasis in the inner ear. Hearing Research, 2021, 409, 108327.	2.0	3
94	The auditory nerve overlapped waveform (ANOW): A new objective measure of low-frequency hearing. AIP Conference Proceedings, 2015, , .	0.4	2
95	Drug Diffusion to the Apex of the Human Cochlea? A Comment on â€œKang WS, Nguyen K, McKenna CE, Sewell WF, McKenna MJ, Jung DH. Intracochlear Drug Delivery Through the Oval Window in Fresh Cadaveric Human Temporal Bonesâ€• Otology and Neurotology, 2016, 37, 1462-1463.	1.3	1