Jochen Schacht

List of Publications by Year
in descending order

105 papers	8,490 citations	38742 50 h-index	43889 91 g-index
106 all docs	106 docs citations	106 times ranked	4625 citing authors

#	Article	IF	Citations
1	Phenotype of Mrps5-Associated Phylogenetic Polymorphisms Is Intimately Linked to Mitoribosomal Misreading. International Journal of Molecular Sciences, 2022, 23, 4384.	4.1	1
2	An Advanced Apralog with Increased inâ€…vitro and inâ€…vivo Activity toward Gramâ€negative Pathogens and Reduced ex vivo Cochleotoxicity. ChemMedChem, 2021, 16, 335-339.	3.2	20
3	Apralogs: Apramycin 5-<i>O</i>-Glycosides and Ethers with Improved Antibacterial Activity and Ribosomal Selectivity and Reduced Susceptibility to the Aminoacyltransferase (3)-IV Resistance Determinant. Journal of the American Chemical Society, 2020, 142, 530-544.	13.7	30
4	Auditory metabolomics, an approach to identify acute molecular effects of noise trauma. Scientific Reports, 2019, 9, 9273.	3.3	24
5	Design, Multigram Synthesis, and in Vitro and in Vivo Evaluation of Propylamycin: A Semisynthetic 4,5-Deoxystreptamine Class Aminoglycoside for the Treatment of Drug-Resistant Enterobacteriaceae and Other Gram-Negative Pathogens. Journal of the American Chemical Society, 2019, 141, 5051-5061.	13.7	46
6	Effects of the 1-<i>N</i>-(4-Amino-2<i>S</i>-hydroxybutyryl) and 6â€²-<i>N</i>-(2-Hydroxyethyl) Substituents on Ribosomal Selectivity, Cochleotoxicity, and Antibacterial Activity in the Sisomicin Class of Aminoglycoside Antibiotics. ACS Infectious Diseases, 2018, 4, 1114-1120.	3.8	22
7	Mutant <scp>MRPS</scp> 5 affects mitoribosomal accuracy and confers stressâ€related behavioral alterations. EMBO Reports, 2018, 19, .	4.5	26
8	Assessing ototoxicity due to chronic lead and cadmium intake with and without noise exposure in the mature mouse. Journal of Toxicology and Environmental Health - Part A: Current Issues, 2018, 81, 1041-1057.	2.3	14
9	Welcome to Journal of Otorhinolaryngology, Hearing and Balance Medicine. Journal of Otorhinolaryngology Hearing and Balance Medicine, 2018, 1, 1.	0.2	0
10	Vestibular dysfunction in the adult CBA/CaJ mouse after lead and cadmium treatment. Environmental Toxicology, 2017, 32, 869-876.	4.0	16
11	Emerging therapeutic interventions against noise-induced hearing loss. Expert Opinion on Investigational Drugs, 2017, 26, 85-96.	4.1	99
12	Histone Deacetylase Inhibitors Are Protective in Acute but Not in Chronic Models of Ototoxicity. Frontiers in Cellular Neuroscience, 2017, 11, 315.	3.7	10
13	Pharmacologic Intervention for Acquired Hearing Loss: Assays of Drug-Induced Inner Ear Damage. , 2016, , 3791-3800.		0
14	Age-related hearing impairment and the triad of acquired hearing loss. Frontiers in Cellular Neuroscience, 2015, 9, 276.	3.7	96
15	Structural basis for selective targeting of leishmanial ribosomes: aminoglycoside derivatives as promising therapeutics. Nucleic Acids Research, 2015, 43, 8601-8613.	14.5	28
16	Designer Aminoglycosides That Selectively Inhibit Cytoplasmic Rather than Mitochondrial Ribosomes Show Decreased Ototoxicity. Journal of Biological Chemistry, 2014, 289, 2318-2330.	3.4	97
17	Identification and Evaluation of Improved 4â€²- <i>O</i> -(Alkyl) 4,5-Disubstituted 2-Deoxystreptamines as Next-Generation Aminoglycoside Antibiotics. MBio, 2014, 5, e01827-14.	4.1	37
18	Protection and Repair of Hearing. , 2014, , 1375-1395.		0

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19	Disparities in auditory physiology and pathology between C57BL/6J and C57BL/6N substrains. Hearing Research, 2014, 318, 18-22.	2.0	20
20	Metformin protects against gentamicin-induced hair cell death in vitro but not ototoxicity in vivo. Neuroscience Letters, 2014, 583, 65-69.	2.1	24
21	In Vitro Models for Ototoxic Research. Methods in Pharmacology and Toxicology, 2014, , 199-222.	0.2	1
22	Pharmacologic Intervention for Acquired Hearing Loss: Assays of Drug-Induced Inner Ear Damage. , 2014, , 1-11.		0
23	My Dull Deaf Ears: Four Millennia of Acquired Hearing Loss. Springer Handbook of Auditory Research, 2014, , 551-567.	0.7	0
24	Tumor Necrosis Factor-alpha-mutant Mice Exhibit High Frequency Hearing Loss. JARO - Journal of the Association for Research in Otolaryngology, 2013, 14, 801-811.	1.8	14
25	The mitochondrion: A perpetrator of acquired hearing loss. Hearing Research, 2013, 303, 12-19.	2.0	168
26	Mitochondrial Peroxiredoxin 3 Regulates Sensory Cell Survival in the Cochlea. PLoS ONE, 2013, 8, e61999.	2.5	23
27	Dissociation of antibacterial activity and aminoglycoside ototoxicity in the 4-monosubstituted 2-deoxystreptamine apramycin. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 10984-10989.	7.1	185
28	Cisplatin and Aminoglycoside Antibiotics: Hearing Loss and Its Prevention. Anatomical Record, 2012, 295, 1837-1850.	1.4	279
29	Antioxidant-enriched diet does not delay the progression of age-related hearing loss. Neurobiology of Aging, 2012, 33, 1010.e15-1010.e16.	3.1	41
30	Alleles that modulate late life hearing in genetically heterogeneous mice. Neurobiology of Aging, 2012, 33, 1842.e15-1842.e29.	3.1	15
31	Activation of apoptotic pathways in the absence of cell death in an inner-ear immortomouse cell line. Hearing Research, 2012, 284, 33-41.	2.0	27
32	Ototoxicity in Dogs and Cats. Veterinary Clinics of North America - Small Animal Practice, 2012, 42, 1259-1271.	1.5	23
33	Emerging treatments for noise-induced hearing loss. Expert Opinion on Emerging Drugs, 2011, 16, 235-245.	2.4	148
34	New developments in aminoglycoside therapy and ototoxicity. Hearing Research, 2011, 281, 28-37.	2.0	238
35	Apoptosis in acquired and genetic hearing impairment: The programmed death of the hair cell. Hearing Research, 2011, 281, 18-27.	2.0	128
36	Introduction: Pathology of the inner ear. Hearing Research, 2011, 281, 1-2.	2.0	1

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37	Aminoglycosideâ€induced histone deacetylation and hair cell death in the mouse cochlea. Journal of Neurochemistry, 2009, 108, 1226-1236.	3.9	69
38	Development of Novel Aminoglycoside (NB54) with Reduced Toxicity and Enhanced Suppression of Disease-Causing Premature Stop Mutations. Journal of Medicinal Chemistry, 2009, 52, 2836-2845.	6.4	169
39	Auditory Pathology: When Hearing is Out of Balance. , 2008, , 1-7.		1
40	Drug-Induced Hearing Loss. , 2008, , 219-256.		15
41	Mechanisms of noise damage to the cochlea. Audiological Medicine, 2007, 5, 3-9.	0.4	24
42	Nuclear Factor kappa B p65 Expression in Mouse Cochlea. Journal of Otology, 2007, 2, 30-35.	1.0	1
43	Oxidative imbalance in the aging inner ear. Neurobiology of Aging, 2007, 28, 1605-1612.	3.1	172
44	Aspirin attenuates gentamicin ototoxicity: From the laboratory to the clinic. Hearing Research, 2007, 226, 178-182.	2.0	121
45	Creatine and tempol attenuate noise-induced hearing loss. Brain Research, 2007, 1148, 83-89.	2.2	42
46	Protection and Repair of Audition. , 2007, , 995-1008.		1
47	Molecular and genetic aspects of aminoglycoside-induced hearing loss. Drug Discovery Today Disease Mechanisms, 2006, 3, 119-124.	0.8	6
48	Kanamycin alters cytoplasmic and nuclear phosphoinositide signaling in the organ of Corti <i>inâ€ƒvivo</i>. Journal of Neurochemistry, 2006, 99, 269-276.	3.9	56
49	A BAD link to mitochondrial cell death in the cochlea of mice with noise-induced hearing loss. Journal of Neuroscience Research, 2006, 83, 1564-1572.	2.9	68
50	Rac/Rho pathway regulates actin depolymerization induced by aminoglycoside antibiotics. Journal of Neuroscience Research, 2006, 83, 1544-1551.	2.9	41
51	Aspirin to Prevent Gentamicin-Induced Hearing Loss. New England Journal of Medicine, 2006, 354, 1856-1857.	27.0	154
52	Sketches of Otohistory Part 11: Ototoxicity: Drug-Induced Hearing Loss. Audiology and Neuro-Otology, 2006, 11, 1-6.	1.3	37
53	Elevation of superoxide dismutase increases acoustic trauma from noise exposure. Free Radical Biology and Medicine, 2005, 38, 492-498.	2.9	27
54	NFâ€ÎºB pathway protects cochlear hair cells from aminoglycosideâ€induced ototoxicity. Journal of Neuroscience Research, 2005, 79, 644-651.	2.9	128

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55	Ternary Complexes of Gentamicin with Iron and Lipid Catalyze Formation of Reactive Oxygen Species. Chemical Research in Toxicology, 2005, 18, 357-364.	3.3	77
56	Sketches of Otohistory. Audiology and Neuro-Otology, 2005, 10, 243-247.	1.3	23
57	Sketches of Otohistory Part 4: A Cell by Any Other Name: Cochlear Eponyms. Audiology and Neuro-Otology, 2004, 9, 317-327.	1.3	7
58	Antioxidant Gene Therapy Can Protect Hearing and Hair Cells from Ototoxicity. Molecular Therapy, 2004, 9, 173-181.	8.2	144
59	Delayed production of free radicals following noise exposure. Brain Research, 2004, 1019, 201-209.	2.2	311
60	Calcineurin activation contributes to noise-induced hearing loss. Journal of Neuroscience Research, 2004, 78, 383-392.	2.9	68
61	Antioxidant protection in a new animal model of cisplatin-induced ototoxicity. Hearing Research, 2004, 198, 137-143.	2.0	64
62	AIF and EndoG in noise-induced hearing loss. NeuroReport, 2004, 15, 2719-22.	1.2	49
63	Protection from noise-induced lipid peroxidation and hair cell loss in the cochlea. Brain Research, 2003, 966, 265-273.	2.2	165
64	8-Iso-Prostaglandin F_{2Î±}, a Product of Noise Exposure, Reduces Inner Ear Blood Flow. Audiology and Neuro-Otology, 2003, 8, 207-221.	1.3	93
65	Recent Advances in Understanding Aminoglycoside Ototoxicity and Its Prevention. Audiology and Neuro-Otology, 2002, 7, 171-174.	1.3	104
66	Salicylate Protects Hearing and Kidney Function from Cisplatin Toxicity without Compromising its Oncolytic Action. Laboratory Investigation, 2002, 82, 585-596.	3.7	93
67	Differential vulnerability of basal and apical hair cells is based on intrinsic susceptibility to free radicals. Hearing Research, 2001, 155, 1-8.	2.0	346
68	Aminoglycoside ototoxicity in adult CBA, C57BL and BALB mice and the Spragueâ€“Dawley rat. Hearing Research, 2001, 158, 165-178.	2.0	207
69	Overexpression of Copper/Zinc- Superoxide Dismutase Protects from Kanamycin-Induced Hearing Loss. Audiology and Neuro-Otology, 2001, 6, 117-123.	1.3	68
70	Acetylcholine-evoked calcium increases in Deiters' cells of the guinea pig cochlea suggest ?9-like receptors. Journal of Neuroscience Research, 2001, 63, 252-256.	2.9	18
71	Acoustic trauma enhances DNA binding of transcription factor AP-1 in the guinea pig inner ear. NeuroReport, 2000, 11, 859-862.	1.2	33
72	Nitric oxide/Cyclic GMP pathway attenuates ATP-evoked intracellular calcium increase in supporting cells of the guinea pig cochlea. Journal of Comparative Neurology, 2000, 423, 452-461.	1.6	24

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73	Protection from ototoxicity of intraperitoneal gentamicin in guinea pig. Kidney International, 2000, 58, 2525-2532.	5.2	51
74	Intense noise induces formation of vasoactive lipid peroxidation products in the cochlea. Brain Research, 2000, 878, 163-173.	2.2	233
75	Antioxidants attenuate gentamicin-induced free radical formation in vitro and ototoxicity in vivo: D-methionine is a potential protectant. Hearing Research, 2000, 142, 34-40.	2.0	212
76	Glutathione limits noise-induced hearing loss. Hearing Research, 2000, 146, 28-34.	2.0	168
77	Aminoglycoside Antibiotics. Audiology and Neuro-Otology, 2000, 5, 3-22.	1.3	545
78	Attenuation of cochlear damage from noise trauma by an iron chelator, a free radical scavenger and glial cell line-derived neurotrophic factor in vivo. Brain Research, 1999, 815, 317-325.	2.2	175
79	Formation of reactive oxygen species following bioactivation of gentamicin. Free Radical Biology and Medicine, 1999, 26, 341-347.	2.9	105
80	Nitric oxide/cyclic guanosine monophosphate pathway in the peripheral and central auditory system of the rat. Journal of Comparative Neurology, 1999, 404, 52-63.	1.6	57
81	Stimulation of free radical formation by aminoglycoside antibiotics. Hearing Research, 1999, 128, 112-118.	2.0	155
82	Cyclic GMP-dependent protein kinase-I in the guinea pig cochlea. Hearing Research, 1999, 131, 63-70.	2.0	21
83	NMR studies of iron-gentamicin complexes and the implications for aminoglycoside toxicity. Inorganica Chimica Acta, 1998, 273, 85-91.	2.4	39
84	Iron Chelators Protect From Aminoglycoside-Induced Cochleo- and Vestibulo-Toxicity. Free Radical Biology and Medicine, 1998, 25, 189-195.	2.9	105
85	The nitric oxide/cyclic GMP pathway: A potential major regulator of cochlear physiology. Hearing Research, 1998, 118, 168-176.	2.0	104
86	Localization of Soluble Guanylate Cyclase Activity in the Guinea Pig Cochlea Suggests Involvement in Regulation of Blood Flow and Supporting Cell Physiology. Journal of Histochemistry and Cytochemistry, 1997, 45, 1401-1408.	2.5	41
87	Morphological evidence of ototoxicity of the iron chelator deferoxamine. Hearing Research, 1997, 112, 44-48.	2.0	27
88	Energy metabolism in cochlear outer hair cells in vitro. Hearing Research, 1997, 114, 102-106.	2.0	28
89	Variable efficacy of radical scavengers and iron chelators to attenuate gentamicin ototoxicity in guinea pig in vivo. Hearing Research, 1996, 94, 87-93.	2.0	151
90	Formation of free radicals by gentamicin and iron and evidence for an iron/gentamicin complex. Biochemical Pharmacology, 1995, 50, 1749-1752.	4.4	280

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91	Diet is a risk factor in cisplatin ototoxicity. Hearing Research, 1995, 88, 47-53.	2.0	49
92	Glutathione protection against gentamicin ototoxicity depends on nutritional status. Hearing Research, 1995, 86, 15-24.	2.0	123
93	Detection and characterization of nitric oxide synthase in the mammalian cochlea. Brain Research, 1994, 668, 9-15.	2.2	76
94	Attenuation of gentamicin ototoxicity by glutathione in the guinea pig in vivo. Hearing Research, 1994, 77, 81-87.	2.0	149
95	Glutathione S-transferases in the organ of Corti of the rat: Enzymatic activity, subunit composition and immunohistochemical localization. Hearing Research, 1993, 71, 80-90.	2.0	86
96	Protein phosphorylation in the organ of Corti: Differential regulation by second messengers between base and apex. Hearing Research, 1991, 57, 113-120.	2.0	29
97	Drug-Induced Ototoxicity. Medical Toxicology and Adverse Drug Experience, 1989, 4, 452-467.	0.8	39
98	Pharmacokinetics of Aminoglycoside Antibiotics in Blood, Inner-Ear Fluids and Tissues and Their Relationship to Ototoxicity. International Journal of Audiology, 1988, 27, 137-146.	1.7	73
99	Characteristics of gentamicin uptake in the isolated crista ampullaris of the inner EAR of the guinea pig. Biochemical Pharmacology, 1987, 36, 89-95.	4.4	26
100	Inductive tissue interactions during inner ear development. Archives of Oto-rhino-laryngology, 1984, 240, 27-33.	0.5	13
101	Acoustic stimulation alters deoxyglucose uptake in the mouse cochlea and inferior colliculus. Hearing Research, 1983, 10, 217-226.	2.0	60
102	Ototoxicity of aminoglycosides correlated with their action on monomolecular films of polyphosphoinositides. Biochemical Pharmacology, 1980, 29, 597-601.	4.4	81
103	Polyphosphoinositides in insect muscle and sensory tissues.. Journal of Neurochemistry, 1979, 32, 247-248.	3.9	3
104	Isolation of an aminoglycoside receptor from guinea pig inner ear tissues and kidney. Archives of Oto-rhino-laryngology, 1979, 224, 129-134.	0.5	130
105	EFFECT OF NEOMYCIN ON PHOSPHOINOSITIDE LABELLING AND CALCIUM BINDING IN GUINEA-PIG INNER EAR TISSUES IN VIVO AND IN VITRO. Journal of Neurochemistry, 1976, 26, 285-290.	3.9	120