Christopher A Shera

List of Publications by Year
in descending order

99 papers	4,842 citations	109321 35 h-index	98798 67 g-index
102 all docs	102 docs citations	102 times ranked	1162 citing authors

#	Article	IF	Citations
1	Whistling While it Works: Spontaneous Otoacoustic Emissions and the Cochlear Amplifier. JARO - Journal of the Association for Research in Otolaryngology, 2022, 23, 17-25.	1.8	8
2	Auditory filter shapes derived from forward and simultaneous masking at low frequencies: Implications for human cochlear tuning. Hearing Research, 2022, 420, 108500.	2.0	4
3	Interplay between traveling wave propagation and amplification at the apex of the mouse cochlea. Biophysical Journal, 2022, 121, 2940-2951.	0.5	9
4	Characterizing the Relationship Between Reflection and Distortion Otoacoustic Emissions in Normal-Hearing Adults. JARO - Journal of the Association for Research in Otolaryngology, 2022, 23, 647-664.	1.8	6
5	Extended low-frequency phase of the distortion-product otoacoustic emission in human newborns. JASA Express Letters, 2021, 1, 014404.	1.1	2
6	The Elusive Cochlear Filter: Wave Origin of Cochlear Cross-Frequency Masking. JARO - Journal of the Association for Research in Otolaryngology, 2021, 22, 623-640.	1.8	6
7	Reflection-Source Emissions Evoked with Clicks and Frequency Sweeps: Comparisons Across Levels. JARO - Journal of the Association for Research in Otolaryngology, 2021, 22, 641-658.	1.8	6
8	Cochlear outer hair cell electromotility enhances organ of Corti motion on a cycle-by-cycle basis at high frequencies in vivo. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	53
9	A cochlea with three parts? Evidence from otoacoustic emission phase in humans. Journal of the Acoustical Society of America, 2020, 148, 1585-1601.	1.1	4
10	The cochlear ear horn: geometric origin of tonotopic variations in auditory signal processing. Scientific Reports, 2020, 10, 20528.	3.3	25
11	Asymmetry and Microstructure of Temporal-Suppression Patterns in Basilar-Membrane Responses to Clicks: Relation to Tonal Suppression and Traveling-Wave Dispersion. JARO - Journal of the Association for Research in Otolaryngology, 2020, 21, 151-170.	1.8	10
12	Nonlinear cochlear mechanics without direct vibration-amplification feedback. Physical Review Research, 2020, 2, .	3.6	21
13	Cochlear Frequency Tuning and Otoacoustic Emissions. Cold Spring Harbor Perspectives in Medicine, 2019, 9, a033498.	6.2	14
14	Morphological Immaturity of the Neonatal Organ of Corti and Associated Structures in Humans. JARO - Journal of the Association for Research in Otolaryngology, 2019, 20, 461-474.	1.8	17
15	A comparison of ear-canal-reflectance measurement methods in an ear simulator. Journal of the Acoustical Society of America, 2019, 146, 1350-1361.	1.1	14
16	Constraints imposed by zero-crossing invariance on cochlear models with two mechanical degrees of freedom. Journal of the Acoustical Society of America, 2019, 146, 1685-1695.	1.1	11
17	On the calculation of reflectance in non-uniform ear canals. Journal of the Acoustical Society of America, 2019, 146, 1464-1474.	1.1	4
18	Variable-rate frequency sweeps and their application to the measurement of otoacoustic emissions. Journal of the Acoustical Society of America, 2019, 146, 3457-3465.	1.1	5

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19	Effects of Forward- and Emitted-Pressure Calibrations on the Variability of Otoacoustic Emission Measurements Across Repeated Probe Fits. Ear and Hearing, 2019, 40, 1345-1358.	2.1	8
20	Swept-tone stimulus-frequency otoacoustic emissions: Normative data and methodological considerations. Journal of the Acoustical Society of America, 2018, 143, 181-192.	1.1	17
21	The eardrums move when the eyes move: A multisensory effect on the mechanics of hearing. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E1309-E1318.	7.1	53
22	Negative-delay sources in distortion product otoacoustic emissions. Hearing Research, 2018, 360, 25-30.	2.0	1
23	Introducing causality violation for improved DPOAE component unmixing. AIP Conference Proceedings, 2018, 1965, .	0.4	0
24	Temporal suppression of clicked-evoked otoacoustic emissions and basilar-membrane motion in gerbils. AIP Conference Proceedings, 2018, 1965, .	0.4	1
25	Spectral Ripples in Round-Window Cochlear Microphonics: Evidence for Multiple Generation Mechanisms. JARO - Journal of the Association for Research in Otolaryngology, 2018, 19, 401-419.	1.8	3
26	Mammalian behavior and physiology converge to confirm sharper cochlear tuning in humans. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 11322-11326.	7.1	54
27	Reflection- and Distortion-Source Otoacoustic Emissions: Evidence for Increased Irregularity in the Human Cochlea During Aging. JARO - Journal of the Association for Research in Otolaryngology, 2018, 19, 493-510.	1.8	28
28	Probing apical-basal differences in the human cochlea using distortion-product otoacoustic emission phase. AIP Conference Proceedings, 2018, 1965, .	0.4	2
29	Characterizing spontaneous otoacoustic emissions across the human lifespan. Journal of the Acoustical Society of America, 2017, 141, 1874-1886.	1.1	13
30	Compensating for ear-canal acoustics when measuring otoacoustic emissions. Journal of the Acoustical Society of America, 2017, 141, 515-531.	1.1	51
31	Dynamics of cochlear nonlinearity: Automatic gain control or instantaneous damping?. Journal of the Acoustical Society of America, 2017, 142, 3510-3519.	1.1	12
32	Using Cochlear Microphonic Potentials to Localize Peripheral Hearing Loss. Frontiers in Neuroscience, 2017, 11, 169.	2.8	9
33	Frequency shifts in distortion-product otoacoustic emissions evoked by swept tones. Journal of the Acoustical Society of America, 2016, 140, 936-944.	1.1	7
34	Relating the variability of tone-burst otoacoustic emission and auditory brainstem response latencies to the underlying cochlear mechanics. AIP Conference Proceedings, 2015, 1703, .	0.4	4
35	Functional modeling of the human auditory brainstem response to broadband stimulation. Journal of the Acoustical Society of America, 2015, 138, 1637-1659.	1.1	42
36	Increasing computational efficiency of cochlear models using boundary layers. AIP Conference Proceedings, 2015, 1703, .	0.4	1

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37	The spiral staircase: Tonotopic microstructure and cochlear tuning. AIP Conference Proceedings, 2015, , .	0.4	0
38	Optimizing swept-tone protocols for recording distortion-product otoacoustic emissions in adults and newborns. Journal of the Acoustical Society of America, 2015, 138, 3785-3799.	1.1	31
39	Iterated intracochlear reflection shapes the envelopes of basilar-membrane click responses. Journal of the Acoustical Society of America, 2015, 138, 3717-3722.	1.1	2
40	The Spiral Staircase: Tonotopic Microstructure and Cochlear Tuning. Journal of Neuroscience, 2015, 35, 4683-4690.	3.6	18
41	On the spatial distribution of the reflection sources of different latency components of otoacoustic emissions. Journal of the Acoustical Society of America, 2015, 137, 768-776.	1.1	32
42	Distortion-product otoacoustic emission reflection-component delays and cochlear tuning: Estimates from across the human lifespan. Journal of the Acoustical Society of America, 2014, 135, 1950-1958.	1.1	14
43	Increased contralateral suppression of otoacoustic emissions indicates a hyperresponsive medial olivocochlear system in humans with tinnitus and hyperacusis. Journal of Neurophysiology, 2014, 112, 3197-3208.	1.8	65
44	Otoacoustic-emission-based medial-olivocochlear reflex assays for humans. Journal of the Acoustical Society of America, 2014, 136, 2697-2713.	1.1	55
45	Basilar-membrane interference patterns from multiple internal reflection of cochlear traveling waves. Journal of the Acoustical Society of America, 2013, 133, 2224-2239.	1.1	31
46	Measuring stimulus-frequency otoacoustic emissions using swept tones. Journal of the Acoustical Society of America, 2013, 134, 356-368.	1.1	58
47	Obtaining reliable phase-gradient delays from otoacoustic emission data. Journal of the Acoustical Society of America, 2012, 132, 927-943.	1.1	51
48	Reflectance of acoustic horns and solution of the inverse problem. Journal of the Acoustical Society of America, 2012, 131, 1863-1873.	1.1	11
49	Nonlinear time-domain cochlear model for transient stimulation and human otoacoustic emission. Journal of the Acoustical Society of America, 2012, 132, 3842-3848.	1.1	73
50	Probing cochlear tuning and tonotopy in the tiger using otoacoustic emissions. Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology, 2012, 198, 617-624.	1.6	12
51	Hopf-Bifurcations and Van der Pol Oscillator Models of the Mammalian Cochlea. , 2011, , .		4
52	Delays and Growth Rates of Multiple TEOAE Components. AIP Conference Proceedings, 2011, , .	0.4	18
53	Forward- and Reverse-Traveling Waves in DP Phenomenology: Does Inverted Direction of Wave Propagation Occur in Classical Models?. , 2011, 1403, .		1
54	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

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55	Distortion products and backward-traveling waves in nonlinear active models of the cochlea. Journal of the Acoustical Society of America, 2011, 129, 3141-3152.	1.1	22
56	Can a Static Nonlinearity Account for the Dynamics of Otoacoustic Emission Suppression?. , 2011, 1403, 257-263.		4
57	Otoacoustic Estimates of Cochlear Tuning: Testing Predictions in Macaque. AIP Conference Proceedings, 2011, 1403, 286-292.	0.4	5
58	Transient- and Tone-Evoked Otoacoustic Emissions in Three Species. AIP Conference Proceedings, 2011, , .	0.4	8
59	Deviations from Scaling Symmetry in the Apical Half of the Human Cochlea. , 2011, 1403, 483-488.		6
60	Tracing Distortion Product (DP) Waves in a Cochlear Model. , 2011, 1403, 557-562.		4
61	Otoacoustic Estimation of Cochlear Tuning: Validation in the Chinchilla. JARO - Journal of the Association for Research in Otolaryngology, 2010, 11, 343-365.	1.8	182
62	Coherent reflection without traveling waves: On the origin of long-latency otoacoustic emissions in lizards. Journal of the Acoustical Society of America, 2010, 127, 2398-2409.	1.1	31
63	Posture systematically alters ear-canal reflectance and DPOAE properties. Hearing Research, 2010, 263, 43-51.	2.0	32
64	COMPARING OTOACOUSTIC EMISSIONS AND BASILAR MEMBRANE MOTION IN INDIVIDUAL EARS. , 2009, , .		1
65	Testing coherent reflection in chinchilla: Auditory-nerve responses predict stimulus-frequency emissions. Journal of the Acoustical Society of America, 2008, 124, 381-395.	1.1	55
66	Mechanisms of Mammalian Otoacoustic Emission. Springer Handbook of Auditory Research, 2008, , 305-342.	0.7	29
67	Comparing stimulus-frequency otoacoustic emissions measured by compression, suppression, and spectral smoothing. Journal of the Acoustical Society of America, 2007, 122, 3562-3575.	1.1	59
68	Laser amplification with a twist: Traveling-wave propagation and gain functions from throughout the cochlea. Journal of the Acoustical Society of America, 2007, 122, 2738-2758.	1.1	86
69	Near equivalence of human click-evoked and stimulus-frequency otoacoustic emissions. Journal of the Acoustical Society of America, 2007, 121, 2097-2110.	1.1	100
70	Wave propagation patterns in a â€œclassicalâ€• three-dimensional model of the cochlea. Journal of the Acoustical Society of America, 2007, 121, 352-362.	1.1	25
71	Cochlear reflectivity in transmission-line models and otoacoustic emission characteristic time delays. Journal of the Acoustical Society of America, 2007, 122, 3554-3561.	1.1	31
72	Cochlear traveling-wave amplification, suppression, and beamforming probed using noninvasive calibration of intracochlear distortion sources. Journal of the Acoustical Society of America, 2007, 121, 1003-1016.	1.1	48

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73	Allenâ€“Fahey and related experiments support the predominance of cochlear slow-wave otoacoustic emissions. Journal of the Acoustical Society of America, 2007, 121, 1564-1575.	1.1	35
74	Posture-Induced Changes in Distortion-Product Otoacoustic Emissions and the Potential for Noninvasive Monitoring of Changes in Intracranial Pressure. Neurocritical Care, 2006, 4, 251-257.	2.4	48
75	Coherent reflection in a two-dimensional cochlea: Short-wave versus long-wave scattering in the generation of reflection-source otoacoustic emissions. Journal of the Acoustical Society of America, 2005, 118, 287-313.	1.1	83
76	Simultaneous measurement of middle-ear input impedance and forward/reverse transmission in cat. Journal of the Acoustical Society of America, 2004, 116, 2187-2198.	1.1	35
77	Do Forward- and Backward-Traveling Waves Occur Within the Cochlea? Countering the Critique of Nobili et al.. JARO - Journal of the Association for Research in Otolaryngology, 2004, 5, 349-359.	1.8	24
78	Mechanisms of Mammalian Otoacoustic Emission and their Implications for the Clinical Utility of Otoacoustic Emissions. Ear and Hearing, 2004, 25, 86-97.	2.1	131
79	The origin of SFOAE microstructure in the guinea pig. Hearing Research, 2003, 183, 7-17.	2.0	48
80	Mammalian spontaneous otoacoustic emissions are amplitude-stabilized cochlear standing waves. Journal of the Acoustical Society of America, 2003, 114, 244-262.	1.1	178
81	Stimulus-frequency-emission group delay: A test of coherent reflection filtering and a window on cochlear tuning. Journal of the Acoustical Society of America, 2003, 113, 2762-2772.	1.1	181
82	Revised estimates of human cochlear tuning from otoacoustic and behavioral measurements. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 3318-3323.	7.1	420
83	Small Tumor Virus Genomes Are Integrated near Nuclear Matrix Attachment Regions in Transformed Cells. Journal of Virology, 2001, 75, 12339-12346.	3.4	37
84	Distortion-product source unmixing: A test of the two-mechanism model for DPOAE generation. Journal of the Acoustical Society of America, 2001, 109, 622-637.	1.1	171
85	Frequency glides in click responses of the basilar membrane and auditory nerve: Their scaling behavior and origin in traveling-wave dispersion. Journal of the Acoustical Society of America, 2001, 109, 2023-2034.	1.1	56
86	Intensity-invariance of fine time structure in basilar-membrane click responses: Implications for cochlear mechanics. Journal of the Acoustical Society of America, 2001, 110, 332-348.	1.1	94
87	Middle Ear Pathology Can Affect the Ear-Canal Sound Pressure Generated by Audiologic Earphones. Ear and Hearing, 2000, 21, 265-274.	2.1	30
88	Acoustic mechanisms that determine the ear-canal sound pressures generated by earphones. Journal of the Acoustical Society of America, 2000, 107, 1548-1565.	1.1	25
89	Interrelations among distortion-product phase-gradient delays: Their connection to scaling symmetry and its breaking. Journal of the Acoustical Society of America, 2000, 108, 2933-2948.	1.1	57
90	FREQUENCY DEPENDENCE OF STIMULUS-FREQUENCY-EMISSION PHASE: IMPLICATIONS FOR COCHLEAR MECHANICS. , 2000, , .		10

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91	Evoked otoacoustic emissions arise by two fundamentally different mechanisms: A taxonomy for mammalian OAEs. Journal of the Acoustical Society of America, 1999, 105, 782-798.	1.1	622
92	The origin of periodicity in the spectrum of evoked otoacoustic emissions. Journal of the Acoustical Society of America, 1995, 98, 2018-2047.	1.1	371
93	Noninvasive measurement of the cochlear travelingâ€wave ratio. Journal of the Acoustical Society of America, 1993, 93, 3333-3352.	1.1	87
94	Analyzing reverse middleâ€ear transmission: Noninvasive Gedankenexperiments. Journal of the Acoustical Society of America, 1992, 92, 1371-1381.	1.1	30
95	An empirical bound on the compressibility of the cochlea. Journal of the Acoustical Society of America, 1992, 92, 1382-1388.	1.1	34
96	Middleâ€ear phenomenology: The view from the three windows. Journal of the Acoustical Society of America, 1992, 92, 1356-1370.	1.1	42
97	A symmetry suppresses the cochlear catastrophe. Journal of the Acoustical Society of America, 1991, 89, 1276-1289.	1.1	44
98	Reflection of retrograde waves within the cochlea and at the stapes. Journal of the Acoustical Society of America, 1991, 89, 1290-1305.	1.1	56
99	Phenomenological characterization of eardrum transduction. Journal of the Acoustical Society of America, 1991, 90, 253-262.	1.1	31