John J Guinan

List of Publications by Year
in descending order

102 papers	8,291 citations	50276 46 h-index	46799 89 g-index
107 all docs	107 docs citations	107 times ranked	2276 citing authors

#	Article	IF	Citations
1	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
2	Efferent innervation of the organ of corti: two separate systems. Brain Research, 1979, 173, 152-155.	2.2	596
3	Olivocochlear Efferents: Anatomy, Physiology, Function, and the Measurement of Efferent Effects in Humans. Ear and Hearing, 2006, 27, 589-607.	2.1	515
4	Single Auditory Units in the Superior Olivary Complex: II: Locations of Unit Categories and Tonotopic Organization. International Journal of Neuroscience, 1972, 4, 147-166.	1.6	452
5	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
6	Single Auditory Units in the Superior Olivary Complex: I: Responses to Sounds and Classifications Based on Physiological Properties. International Journal of Neuroscience, 1972, 4, 101-120.	1.6	273
7	Differential olivocochlear projections from lateral versus medial zones of the superior olivary complex. Journal of Comparative Neurology, 1983, 221, 358-370.	1.6	273
8	Physiology of Olivocochlear Efferents. Springer Handbook of Auditory Research, 1996, , 435-502.	0.7	209
9	Vestibular Evoked Myogenic Potentials Show Altered Tuning in Patients with MÃ©niÃ¨reâ€™s Disease. Otology and Neurotology, 2004, 25, 333-338.	1.3	201
10	Medial Olivocochlear Efferent Reflex in Humans: Otoacoustic Emission (OAE) Measurement Issues and the Advantages of Stimulus Frequency OAEs. JARO - Journal of the Association for Research in Otolaryngology, 2003, 4, 521-540.	1.8	193
11	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
12	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
13	Time-course of the human medial olivocochlear reflex. Journal of the Acoustical Society of America, 2006, 119, 2889-2904.	1.1	177
14	Topographic organization of the olivocochlear projections from the lateral and medial zones of the superior olivary complex. Journal of Comparative Neurology, 1984, 226, 21-27.	1.6	155
15	Effects of electrical stimulation of medial olivocochlear neurons on ipsilateral and contralateral cochlear responses. Hearing Research, 1987, 29, 179-194.	2.0	150
16	Signal processing in brainstem auditory neurons which receive giant endings (calyces of Held) in the medial nucleus of the trapezoid body of the cat. Hearing Research, 1990, 49, 321-334.	2.0	150
17	Number and distribution of stapedius motoneurons in cats. Journal of Comparative Neurology, 1985, 232, 43-54.	1.6	147
18	Feedback control of the auditory periphery. Journal of Communication Disorders, 1998, 31, 471-483.	1.5	142

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19	Vestibular Evoked Myogenic Potentials (VEMP) Can Detect Asymptomatic Saccular Hydrops. Laryngoscope, 2006, 116, 987-992.	2.0	140
20	Effects of electrical stimulation of efferent olivocochlear neurons on cat auditory-nerve fibers. III. Tuning curves and thresholds at CF. Hearing Research, 1988, 37, 29-45.	2.0	135
21	Effects of electrical stimulation of efferent olivocochlear neurons on cat auditory-nerve fibers. I. Rate-level functions. Hearing Research, 1988, 33, 97-113.	2.0	130
22	Olivocochlear efferents: Their action, effects, measurement and uses, and the impact of the new conception of cochlear mechanical responses. Hearing Research, 2018, 362, 38-47.	2.0	127
23	Cochlear efferent innervation and function. Current Opinion in Otolaryngology and Head and Neck Surgery, 2010, 18, 447-453.	1.8	124
24	Generators of the brainstem auditory evoked potential in cat. II. Correlating lesion sites with waveform changes. Hearing Research, 1996, 93, 28-51.	2.0	106
25	Human Medial Olivocochlear Reflex: Effects as Functions of Contralateral, Ipsilateral, and Bilateral Elicitor Bandwidths. JARO - Journal of the Association for Research in Otolaryngology, 2009, 10, 459-470.	1.8	106
26	Asymmetries in the acoustic reflexes of the cat stapedius muscle. Hearing Research, 1987, 26, 1-10.	2.0	105
27	The recruitment order of stapedius motoneurons in the acoustic reflex varies with sound laterality. Brain Research, 1987, 425, 372-375.	2.2	103
28	Single unit clues to cochlear mechanisms. Hearing Research, 1986, 22, 171-182.	2.0	100
29	Medial efferent inhibition produces the largest equivalent attenuations at moderate to high sound levels in cat auditory-nerve fibers. Journal of the Acoustical Society of America, 1996, 100, 1680-1690.	1.1	98
30	Effects of crossedâ€olivocochlearâ€bundle stimulation on cat auditory nerve fiber responses to tones. Journal of the Acoustical Society of America, 1983, 74, 115-123.	1.1	96
31	How are inner hair cells stimulated? Evidence for multiple mechanical drives. Hearing Research, 2012, 292, 35-50.	2.0	81
32	Measurement of the Distribution of Medial Olivocochlear Acoustic Reflex Strengths Across Normal-Hearing Individuals via Otoacoustic Emissions. JARO - Journal of the Association for Research in Otolaryngology, 2007, 8, 484-496.	1.8	80
33	Effects of electrical stimulation of efferent olivocochlear neurons on cat auditory-nerve fibers. II. Spontaneous rate. Hearing Research, 1988, 33, 115-127.	2.0	78
34	Reflex Control of the Human Inner Ear: A Half-Octave Offset in Medial Efferent Feedback That Is Consistent With an Efferent Role in the Control of Masking. Journal of Neurophysiology, 2009, 101, 1394-1406.	1.8	73
35	Acoustic stimulation of human medial olivocochlear efferents reduces stimulus-frequency and click-evoked otoacoustic emission delays: Implications for cochlear filter bandwidths. Hearing Research, 2010, 267, 36-45.	2.0	73
36	Vestibular Evoked Myogenic Potential (VEMP) in Patients With MÃ©niÃ¨re's Disease With Drop Attacks. Laryngoscope, 2006, 116, 776-779.	2.0	72

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37	Generators of the brainstem auditory evoked potential in cat. I. An experimental approach to their identification. Hearing Research, 1996, 93, 1-27.	2.0	68
38	Medial olivocochlear reflex interneurons are located in the posteroventral cochlear nucleus: A kainic acid lesion study in guinea pigs. Journal of Comparative Neurology, 2005, 487, 345-360.	1.6	61
39	A New Auditory Threshold Estimation Technique for Low Frequencies. Ear and Hearing, 2013, 34, 42-51.	2.1	61
40	Auditory-nerve-fiber responses to high-level clicks: Interference patterns indicate that excitation is due to the combination of multiple drives. Journal of the Acoustical Society of America, 2000, 107, 2615-2630.	1.1	58
41	Short-Term Sound Temporal Envelope Characteristics Determine Multisecond Time Patterns of Activity in Human Auditory Cortex as Shown by fMRI. Journal of Neurophysiology, 2005, 93, 210-222.	1.8	57
42	Vestibular Evoked Myogenic Potentials versus Vestibular Test Battery in Patients with MÃ©niÃ¨reâ€™s Disease. Otology and Neurotology, 2004, 25, 981-986.	1.3	55
43	Otoacoustic-emission-based medial-olivocochlear reflex assays for humans. Journal of the Acoustical Society of America, 2014, 136, 2697-2713.	1.1	55
44	Frequency tuning of medial-olivocochlear-efferent acoustic reflexes in humans as functions of probe frequency. Journal of Neurophysiology, 2012, 107, 1598-1611.	1.8	54
45	Medial-olivocochlear-efferent inhibition of the first peak of auditory-nerve responses: Evidence for a new motion within the cochlea. Journal of the Acoustical Society of America, 2005, 118, 2421-2433.	1.1	49
46	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
47	Medial efferent effects on auditory-nerve responses to tail-frequency tones. I. Rate reduction. Journal of the Acoustical Society of America, 1999, 106, 857-869.	1.1	46
48	Medial olivocochlear efferent inhibition of basilar-membrane responses to clicks: Evidence for two modes of cochlear mechanical excitation. Journal of the Acoustical Society of America, 2008, 124, 1080-1092.	1.1	44
49	Physiology of the Medial and Lateral Olivocochlear Systems. Springer Handbook of Auditory Research, 2011, , 39-81.	0.7	41
50	Efferent inhibition strength is a physiological correlate of hyperacusis in children with autism spectrum disorder. Journal of Neurophysiology, 2017, 118, 1164-1172.	1.8	41
51	Effects of stapedius-muscle contractions on the masking of auditory-nerve responses. Journal of the Acoustical Society of America, 1997, 102, 3576-3586.	1.1	39
52	Changes in Stimulus Frequency Otoacoustic Emissions Produced by Two-Tone Suppression and Efferent Stimulation in Cats. Lecture Notes in Biomathematics, 1990, , 170-177.	0.3	37
53	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
54	Progress in cochlear physiology after BÃ©kÃ©sy. Hearing Research, 2012, 293, 12-20.	2.0	34

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55	Growth rate of simultaneous masking in cat auditory-nerve fibers: Relationship to the growth of basilar-membrane motion and the origin of two-tone suppression. Journal of the Acoustical Society of America, 1997, 102, 3564-3575.	1.1	30
56	Timeâ€"frequency analysis of auditory-nerve-fiber and basilar-membrane click responses reveal glide irregularities and non-characteristic-frequency skirts. Journal of the Acoustical Society of America, 2004, 116, 405-416.	1.1	30
57	Mechanisms of Mammalian Otoacoustic Emission. Springer Handbook of Auditory Research, 2008, , 305-342.	0.7	29
58	Normalization Reduces Intersubject Variability in Cervical Vestibular Evoked Myogenic Potentials. Otology and Neurotology, 2014, 35, e222-e227.	1.3	26
59	Cochlear partition anatomy and motion in humans differ from the classic view of mammals. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 13977-13982.	7.1	24
60	Vestibular Evoked Myogenic Potentials in Patients With Superior Semicircular Canal Dehiscence. Otology and Neurotology, 2013, 34, 360-367.	1.3	22
61	Olivocochlear efferent function: issues regarding methods and the interpretation of results. Frontiers in Systems Neuroscience, 2014, 8, 142.	2.5	22
62	Brainstem facial-motor pathways from two distinct groups of stapedius motoneurons in the cat. Journal of Comparative Neurology, 1989, 287, 134-144.	1.6	20
63	Central auditory pathways mediating the rat middle ear muscle reflexes. The Anatomical Record Part A: Discoveries in Molecular, Cellular, and Evolutionary Biology, 2006, 288A, 358-369.	2.0	20
64	Intracellularly labeled stapedius-motoneuron cell bodies in the cat are spatially organized according to their physiologic responses. Journal of Comparative Neurology, 1989, 289, 401-415.	1.6	19
65	Medial efferent effects on auditory-nerve responses to tail-frequency tones II: Alteration of phase. Journal of the Acoustical Society of America, 2000, 108, 664-678.	1.1	18
66	Auditory Attention Reduced Ear-Canal Noise in Humans by Reducing Subject Motion, Not by Medial Olivocochlear Efferent Inhibition: Implications for Measuring Otoacoustic Emissions During a Behavioral Task. Frontiers in Systems Neuroscience, 2018, 12, 42.	2.5	18
67	Audiometric and cVEMP Thresholds Show Little Correlation With Symptoms in Superior Semicircular Canal Dehiscence Syndrome. Otology and Neurotology, 2018, 39, 1153-1162.	1.3	18
68	The Spatial Origins of Cochlear Amplification Assessed by Stimulus-Frequency Otoacoustic Emissions. Biophysical Journal, 2020, 118, 1183-1195.	0.5	16
69	Toward Optimizing Cervical Vestibular Evoked Myogenic Potentials (cVEMP): Combining Air-Bone Gap and cVEMP Thresholds to Improve Diagnosis of Superior Canal Dehiscence. Otology and Neurotology, 2018, 39, 212-220.	1.3	15
70	Toward Optimizing cVEMP: 2,000-Hz Tone Bursts Improve the Detection of Superior Canal Dehiscence. Audiology and Neuro-Otology, 2018, 23, 335-344.	1.3	15
71	The interplay of organ-of-Corti vibrational modes, not tectorial- membrane resonance, sets outer-hair-cell stereocilia phase to produce cochlear amplification. Hearing Research, 2020, 395, 108040.	2.0	15
72	Non-tip auditory-nerve responses that are suppressed by low-frequency bias tones originate from reticular lamina motion. Hearing Research, 2018, 358, 1-9.	2.0	14

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73	Cervical Vestibular Evoked Myogenic Potentials in MeniÃ¨re's Disease: A Comparison of Response Metrics. Otology and Neurotology, 2019, 40, e215-e224.	1.3	14
74	Stimulus Frequency Otoacoustic Emission Delays and Generating Mechanisms in Guinea Pigs, Chinchillas, and Simulations. JARO - Journal of the Association for Research in Otolaryngology, 2015, 16, 679-694.	1.8	13
75	Serial cVEMP Testing is Sensitive to Disease Progression in MÃ©niÃ¨re Patients. Otology and Neurotology, 2016, 37, 1614-1619.	1.3	12
76	Toward Optimizing Vestibular Evoked Myogenic Potentials: Normalization Reduces the Need for Strong Neck Muscle Contraction. Audiology and Neuro-Otology, 2017, 22, 282-291.	1.3	12
77	Electrically Evoked Medial Olivocochlear Efferent Effects on Stimulus Frequency Otoacoustic Emissions in Guinea Pigs. JARO - Journal of the Association for Research in Otolaryngology, 2017, 18, 153-163.	1.8	10
78	Normalizing cVEMPs: Which Method Is the Most Effective?. Ear and Hearing, 2019, 40, 878-886.	2.1	10
79	FREQUENCY DEPENDENCE OF STIMULUS-FREQUENCY-EMISSION PHASE: IMPLICATIONS FOR COCHLEAR MECHANICS. , 2000, , .		10
80	Cochlear Mechanics, Otoacoustic Emissions, and Medial Olivocochlear Efferents: Twenty Years of Advances and Controversies Along with Areas Ripe for New Work. Springer Handbook of Auditory Research, 2014, , 229-246.	0.7	9
81	Evaluating Inhibition of Motoneuron Firing From Electromyogram Data to Assess Vestibular Output Using Vestibular Evoked Myogenic Potentials. Ear and Hearing, 2015, 36, 591-604.	2.1	8
82	Low-frequency bias tone suppression of auditory-nerve responses to low-level clicks and tones. Hearing Research, 2016, 341, 66-78.	2.0	8
83	Motoneuron axon distribution in the cat stapedius muscle. Hearing Research, 1999, 133, 139-148.	2.0	7
84	New Insights into Cochlear Amplification. Biophysical Journal, 2013, 105, 839-840.	0.5	6
85	Increasing the Stimulation Rate Reduces cVEMP Testing Time by More Than Half With No Significant Difference in Threshold. Otology and Neurotology, 2016, 37, 933-936.	1.3	6
86	Toward Optimizing VEMP: Calculating VEMP Inhibition Depth With a Generic Template. Ear and Hearing, 2018, 39, 1199-1206.	2.1	6
87	Hearing at speech frequencies is different from what we thought. Journal of Physiology, 2017, 595, 4123-4124.	2.9	4
88	Predicting Development of Bilateral MeniÃ¨re's Disease Based on cVEMP Threshold and Tuning. Otology and Neurotology, 2019, 40, 1346-1352.	1.3	4
89	Anatomy of the Human Osseous Spiral Lamina and Cochlear Partition Bridge: Relevance for Cochlear Partition Motion. JARO - Journal of the Association for Research in Otolaryngology, 2020, 21, 171-182.	1.8	4
90	On Cochlear Impedances and the Miscomputation of Power Gain. JARO - Journal of the Association for Research in Otolaryngology, 2011, 12, 671-676.	1.8	3

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91	Efferent Insights into Cochlear Mechanics. , 2011, , .		3
92	Mechanical Excitation of IHC Stereocilia: An Attempt to Fit Together Diverse Evidence. , 2011, , .		2
93	The auditory nerve overlapped waveform (ANOW): A new objective measure of low-frequency hearing. AIP Conference Proceedings, 2015, , .	0.4	2
94	Auditory-nerve phenomena relevant to cochlear mechanics. AIP Conference Proceedings, 2018, , .	0.4	2
95	Drive mechanisms to the inner and outer hair cell stereocilia. AIP Conference Proceedings, 2018, , .	0.4	2
96	Optimized Diagnostic Approach to Patients Suspected of Superior Semicircular Canal Dehiscence. Ear and Hearing, 2021, Publish Ahead of Print, 1295-1305.	2.1	2
97	Time-frequency analysis of stimulus frequency otoacoustic emissions and their changes with efferent stimulation in guinea pigs. AIP Conference Proceedings, 2015, , .	0.4	1
98	Acoustic reflex partitioning in the stapedius. Behavioral and Brain Sciences, 1989, 12, 663-665.	0.7	0
99	Auditory-Nerve Responses to Clicks at Low Levels, and the Initial Peak at High Levels, are Suppressed at Opposite Bias-Tone Phases. , 2011, , .		0
100	Nonlinearity in the Cochleaâ€"Moderated Discussions. , 2011, , .		0
101	Multiple vibration modes within the organ of Corti revealed by high-resolution, outer-hair-cell-driven micromechanical motions at acoustic frequencies. AIP Conference Proceedings, 2018, , .	0.4	0
102	ORGAN OF CORTI VIBRATION IN MODES: SUPPORTING EVIDENCE FROM AUDITORY-NERVE-FIBER RESPONSES TO CLICKS AND CLICKS WITH EFFERENT STIMULATION. , 2000, , .		0