Christoph E Schreiner

List of Publications by Year
in descending order

145	11,745	18482 62	30087 103
papers	citations	h-index	g-index

149	149	149	5510
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Neural Processing of Amplitude-Modulated Sounds. Physiological Reviews, 2004, 84, 541-577.	28.8	817
2	A synaptic memory trace for cortical receptive field plasticity. Nature, 2007, 450, 425-429.	27.8	541
3	Time Course of Forward Masking Tuning Curves in Cat Primary Auditory Cortex. Journal of Neurophysiology, 1997, 77, 923-943.	1.8	344
4	Topography and synaptic shaping of direction selectivity in primary auditory cortex. Nature, 2003, 424, 201-205.	27.8	343
5	Spectrotemporal Receptive Fields in the Lemniscal Auditory Thalamus and Cortex. Journal of Neurophysiology, 2002, 87, 516-527.	1.8	328
6	Representation of amplitude modulation in the auditory cortex of the cat. II. Comparison between cortical fields. Hearing Research, 1988, 32, 49-63.	2.0	326
7	Developmental sensory experience balances cortical excitation and inhibition. Nature, 2010, 465, 932-936.	27.8	273
8	Tone-Evoked Excitatory and Inhibitory Synaptic Conductances of Primary Auditory Cortex Neurons. Journal of Neurophysiology, 2004, 92, 630-643.	1.8	250
9	Modular Organization of Frequency Integration in Primary Auditory Cortex. Annual Review of Neuroscience, 2000, 23, 501-529.	10.7	234
10	Spectrotemporal Structure of Receptive Fields in Areas AI and AAF of Mouse Auditory Cortex. Journal of Neurophysiology, 2003, 90, 2660-2675.	1.8	223
11	Representation of amplitude modulation in the auditory cortex of the cat. I. The anterior auditory field (AAF). Hearing Research, 1986, 21, 227-241.	2.0	212
12	Laminar fine structure of frequency organization in auditory midbrain. Nature, 1997, 388, 383-386.	27.8	212
13	Nonlinear Spectrotemporal Sound Analysis by Neurons in the Auditory Midbrain. Journal of Neuroscience, 2002, 22, 4114-4131.	3.6	202
14	Functional Convergence of Response Properties in the Auditory Thalamocortical System. Neuron, 2001, 32, 151-160.	8.1	195
15	Long-term modification of cortical synapses improves sensory perception. Nature Neuroscience, 2013, 16, 79-88.	14.8	193
16	Auditory thalamocortical transformation: structure and function. Trends in Neurosciences, 2005, 28, 255-263.	8.6	183
17	Acoustic variability and distinguishability among mouse ultrasound vocalizations. Journal of the Acoustical Society of America, 2003, 114, 3412-3422.	1.1	176
18	Auditory Cortex Mapmaking: Principles, Projections, and Plasticity. Neuron, 2007, 56, 356-365.	8.1	171

#	Article	IF	Citations
19	Sensory Input Directs Spatial and Temporal Plasticity in Primary Auditory Cortex. Journal of Neurophysiology, 2001, 86, 326-338.	1.8	170
20	Sound-induced seizures in serotonin 5-HT2c receptor mutant mice. Nature Genetics, 1997, 16, 387-390.	21.4	152
21	Development of spectral and temporal response selectivity in the auditory cortex. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 16460-16465.	7.1	145
22	Functional architecture of auditory cortex. Current Opinion in Neurobiology, 2002, 12, 433-440.	4.2	143
23	Functional topography of cat primary auditory cortex: responses to frequency-modulated sweeps. Experimental Brain Research, 1993, 94, 65-87.	1.5	138
24	Human Superior Temporal Gyrus Organization of Spectrotemporal Modulation Tuning Derived from Speech Stimuli. Journal of Neuroscience, 2016, 36, 2014-2026.	3.6	138
25	Modular organization of intrinsic connections associated with spectral tuning in cat auditory cortex. Proceedings of the National Academy of Sciences of the United States of America, 2001, 98, 8042-8047.	7.1	132
26	Functional topography of cat primary auditory cortex: representation of tone intensity. Experimental Brain Research, 1992, 92, 105-22.	1.5	131
27	Columnar Transformations in Auditory Cortex? A Comparison to Visual and Somatosensory Cortices. Cerebral Cortex, 2003, 13, 83-89.	2.9	130
28	Associative learning shapes the neural code for stimulus magnitude in primary auditory cortex. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 16351-16356.	7.1	128
29	Short-Term Adaptation of Auditory Receptive Fields to Dynamic Stimuli. Journal of Neurophysiology, 2004, 91, 604-612.	1.8	125
30	Cooperative Nonlinearities in Auditory Cortical Neurons. Neuron, 2008, 58, 956-966.	8.1	123
31	Auditory Cortical Detection and Discrimination Correlates with Communicative Significance. PLoS Biology, 2007, 5, e173.	5.6	120
32	Fine functional organization of auditory cortex revealed by Fourier optical imaging. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 13325-13330.	7.1	118
33	Reward-dependent plasticity in the primary auditory cortex of adult monkeys trained to discriminate temporally modulated signals. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 11070-11075.	7.1	117
34	Neural Mechanisms Underlying Temporal Integration, Segmentation, and Input Sequence Representation: Some Implications for the Origin of Learning Disabilities. Annals of the New York Academy of Sciences, 1993, 682, 1-22.	3.8	112
35	Naturalistic Auditory Contrast Improves Spectrotemporal Coding in the Cat Inferior Colliculus. Journal of Neuroscience, 2003, 23, 11489-11504.	3.6	111
36	Functional Organization of Squirrel Monkey Primary Auditory Cortex: Responses to Pure Tones. Journal of Neurophysiology, 2001, 85, 1732-1749.	1.8	110

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37	Spectrotemporal Processing Differences between Auditory Cortical Fast-Spiking and Regular-Spiking Neurons. Journal of Neuroscience, 2008, 28, 3897-3910.	3.6	109
38	Functional organization of spectral receptive fields in the primary auditory cortex of the owl monkey. Journal of Comparative Neurology, 1999, 415, 460-481.	1.6	108
39	Representation of Spectral and Temporal Envelope of Twitter Vocalizations in Common Marmoset Primary Auditory Cortex. Journal of Neurophysiology, 2002, 87, 1723-1737.	1.8	103
40	Gabor Analysis of Auditory Midbrain Receptive Fields: Spectro-Temporal and Binaural Composition. Journal of Neurophysiology, 2003, 90, 456-476.	1.8	103
41	Spatial Distribution of Responses to Simple and Complex Sounds in the Primary Auditory Cortex. Audiology and Neuro-Otology, 1998, 3, 104-122.	1.3	102
42	Hierarchical computation in the canonical auditory cortical circuit. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 21894-21899.	7.1	101
43	Concurrent Tonotopic Processing Streams in Auditory Cortex. Cerebral Cortex, 2004, 14, 441-451.	2.9	99
44	Improved cortical entrainment to infant communication calls in mothers compared with virgin mice. European Journal of Neuroscience, 2006, 23, 3087-3097.	2.6	99
45	Auditory map plasticity: diversity in causes and consequences. Current Opinion in Neurobiology, 2014, 24, 143-156.	4.2	95
46	Inhibitory Actions Unified by Network Integration. Neuron, 2015, 87, 1181-1192.	8.1	93
47	Neuronal Responses in Cat Primary Auditory Cortex to Electrical Cochlear Stimulation. III. Activation Patterns in Short- and Long-Term Deafness. Journal of Neurophysiology, 1999, 82, 3506-3526.	1.8	92
48	Hierarchical representations in the auditory cortex. Current Opinion in Neurobiology, 2011, 21, 761-767.	4.2	92
49	Perinatal exposure to a noncoplanar polychlorinated biphenyl alters tonotopy, receptive fields, and plasticity in rat primary auditory cortex. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 7646-7651.	7.1	91
50	The auditory neurophonic: Basic properties. Hearing Research, 1984, 15, 261-280.	2.0	89
51	Auditory cortical neuron response differences under isoflurane versus pentobarbital anesthesia. Hearing Research, 2001, 156, 115-127.	2.0	86
52	Columnar Connectivity and Laminar Processing in Cat Primary Auditory Cortex. PLoS ONE, 2010, 5, e9521.	2.5	86
53	Tonotopic and heterotopic projection systems in physiologically defined auditory cortex. Neuroscience, 2004, 128, 871-887.	2.3	84
54	Order and disorder in auditory cortical maps. Current Opinion in Neurobiology, 1995, 5, 489-496.	4.2	83

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55	Modular Functional Organization of Cat Anterior Auditory Field. Journal of Neurophysiology, 2004, 92, 444-457.	1.8	82
56	Unbalanced synaptic inhibition can create intensity-tuned auditory cortex neurons. Neuroscience, 2007, 146, 449-462.	2.3	80
57	Laminar Diversity of Dynamic Sound Processing in Cat Primary Auditory Cortex. Journal of Neurophysiology, 2010, 103, 192-205.	1.8	77
58	Covariation of latency and temporal resolution in the inferior colliculus of the cat. Hearing Research, 1987, 31, 197-201.	2.0	73
59	Functional topography of cat primary auditory cortex: response latencies. Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology, 1997, 181, 615-633.	1.6	73
60	Dlx1andDlx2Promote Interneuron GABA Synthesis, Synaptogenesis, and Dendritogenesis. Cerebral Cortex, 2018, 28, 3797-3815.	2.9	72
61	Speech modifications algorithms used for training language learning-impaired children. IEEE Transactions on Rehabilitation Engineering: A Publication of the IEEE Engineering in Medicine and Biology Society, 1998, 6, 257-268.	1.4	67
62	Correlations between neural discharges are related to receptive field properties in cat primary auditory cortex. European Journal of Neuroscience, 1999, 11, 3517-3530.	2.6	66
63	Low-frequency oscillations of visual, auditory and somatosensory cortical neurons evoked by sensory stimulation. International Journal of Psychophysiology, 1997, 26, 205-227.	1.0	64
64	Adaptation and recovery from adaptation in single fiber responses of the cat auditory nerve. Journal of the Acoustical Society of America, 1991, 90, 263-273.	1.1	63
65	Frequency resolution and spectral integration (critical band analysis) in single units of the cat primary auditory cortex. Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology, 1997, 181, 635-650.	1.6	57
66	Stimulus-Based State Control in the Thalamocortical System. Journal of Neuroscience, 2000, 20, 7011-7016.	3.6	57
67	Spatial Organization of Frequency Response Areas and Rate/Level Functions in the Developing AI. Journal of Neurophysiology, 2004, 91, 841-854.	1.8	57
68	Frequency-Modulation Encoding in the Primary Auditory Cortex of the Awake Owl Monkey. Journal of Neurophysiology, 2007, 98, 2182-2195.	1.8	54
69	Cortical Interneurons Differentially Regulate the Effects of Acoustic Context. Cell Reports, 2017, 20, 771-778.	6.4	54
70	Spectral envelope coding in cat primary auditory cortex: linear and non-linear effects of stimulus characteristics. European Journal of Neuroscience, 1998, 10, 926-940.	2.6	53
71	Feature Selectivity and Interneuronal Cooperation in the Thalamocortical System. Journal of Neuroscience, 2001, 21, 8136-8144.	3.6	53
72	Functional Organization of Squirrel Monkey Primary Auditory Cortex: Responses to Frequency-Modulation Sweeps. Journal of Neurophysiology, 2005, 94, 1299-1311.	1.8	47

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73	Receptive field dimensionality increases from the auditory midbrain to cortex. Journal of Neurophysiology, 2012, 107, 2594-2603.	1.8	47
74	Functional organization and hemispheric comparison of primary auditory cortex in the common marmoset (Callithrix jacchus). Journal of Comparative Neurology, 2005, 487, 391-406.	1.6	46
75	Neural mechanisms of tinnitus. European Archives of Oto-Rhino-Laryngology, 1993, 249, 441-6.	1.6	42
76	Plasticity in Primary Auditory Cortex of Monkeys with Altered Vocal Production. Journal of Neuroscience, 2005, 25, 2490-2503.	3.6	41
77	Functional organization of the auditory cortex: maps and mechanisms. Current Opinion in Neurobiology, 1992, 2, 516-521.	4.2	39
78	Selectively eliminating cochlear microphonic contamination from the frequency-following response. Electroencephalography and Clinical Neurophysiology, 1990, 75, 88-96.	0.3	38
79	Coordinated neuronal ensembles in primary auditory cortical columns. ELife, 2018, 7, .	6.0	38
80	The Contribution of Spike Threshold to Acoustic Feature Selectivity, Spike Information Content, and Information Throughput. Journal of Neuroscience, 2005, 25, 9524-9534.	3.6	37
81	Forward masking of the auditory nerve neurophonic (ANN) and the frequency following response (FFR). Hearing Research, 1985, 20, 45-62.	2.0	35
82	The Central Auditory System: A Functional Analysis. , 2005, , 1-68.		35
83	Electrical Cochlear Stimulation in the Deaf Cat: Comparisons Between Psychophysical and Central Auditory Neuronal Thresholds. Journal of Neurophysiology, 2000, 83, 2145-2162.	1.8	30
84	Spatial Interaction Between Spectral Integration and Frequency Gradient in Primary Auditory Cortex. Journal of Neurophysiology, 2007, 98, 2933-2942.	1.8	30
85	Chronic reduction in inhibition reduces receptive field size in mouse auditory cortex. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 13829-13834.	7.1	30
86	Spectrotemporal Processing in Spectral Tuning Modules of Cat Primary Auditory Cortex. PLoS ONE, 2012, 7, e31537.	2.5	29
87	Identification of a Monogenic Locus (jams1) Causing Juvenile Audiogenic Seizures in Mice. Journal of Neuroscience, 2002, 22, 10088-10093.	3.6	28
88	The Effects of the Argon Laser on Temperature Within the Cochlea. Acta Oto-Laryngologica, 1982, 93, 341-348.	0.9	27
89	Auditory Cortical Local Subnetworks Are Characterized by Sharply Synchronous Activity. Journal of Neuroscience, 2013, 33, 18503-18514.	3.6	27
90	Effects of Signal-to-Noise Ratio on Auditory Cortical Frequency Processing. Journal of Neuroscience, 2016, 36, 2743-2756.	3.6	27

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91	Encoding of Temporal Information by Timing, Rate, and Place in Cat Auditory Cortex. PLoS ONE, 2010, 5, e11531.	2.5	27
92	Synaptic plasticity as a cortical coding scheme. Current Opinion in Neurobiology, 2015, 35, 185-199.	4.2	26
93	Representation of CV-sounds in cat primary auditory cortex: intensity dependence. Speech Communication, 2003, 41, 93-106.	2.8	25
94	Neuronal Responses in Cat Primary Auditory Cortex to Electrical Cochlear Stimulation: IV. Activation Pattern for Sinusoidal Stimulation. Journal of Neurophysiology, 2003, 89, 3190-3204.	1.8	25
95	Time course of adaptation and recovery from adaptation in the cat auditoryâ€nerve neurophonic. Journal of the Acoustical Society of America, 1990, 88, 857-864.	1.1	23
96	Diverse effects of stimulus history in waking mouse auditory cortex. Journal of Neurophysiology, 2017, 118, 1376-1393.	1.8	23
97	Two thalamic pathways to primary auditory cortex. Neuroscience, 2008, 152, 151-159.	2.3	22
98	Realignment of Interaural Cortical Maps in Asymmetric Hearing Loss. Journal of Neuroscience, 2009, 29, 7065-7078.	3.6	22
99	Functional Topographies in the Primary Auditory Cortex of the Cat. Acta Oto-Laryngologica, 1991, 111, 7-16.	0.9	22
100	Behavioral training enhances cortical temporal processing in neonatally deafened juvenile cats. Journal of Neurophysiology, 2011, 106, 944-959.	1.8	21
101	Improved stimulus representation by short interspike intervals in primary auditory cortex. Journal of Neurophysiology, 2011, 105, 1908-1917.	1.8	21
102	Passive stimulation and behavioral training differentially transform temporal processing in the inferior colliculus and primary auditory cortex. Journal of Neurophysiology, 2017, 117, 47-64.	1.8	21
103	Functional Networks of Parvalbumin-Immunoreactive Neurons in Cat Auditory Cortex. Journal of Neuroscience, 2011, 31, 13333-13342.	3.6	20
104	Spectral Context Affects Temporal Processing in Awake Auditory Cortex. Journal of Neuroscience, 2013, 33, 9431-9450.	3.6	20
105	Modulation-Frequency-Specific Adaptation in Awake Auditory Cortex. Journal of Neuroscience, 2015, 35, 5904-5916.	3.6	20
106	Effects of extracochlear direct current stimulation on the ensemble auditory nerve activity of cats. Hearing Research, 1986, 21, 213-226.	2.0	19
107	Behavioral and Neurophysiological Thresholds for Electrical Cochlear Stimulation in the Deaf Cat. Audiology and Neuro-Otology, 2000, 5, 31-38.	1.3	19
108	Primary auditory cortical responses to electrical stimulation of the thalamus. Journal of Neurophysiology, 2014, 111, 1077-1087.	1.8	19

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109	Regional variations of noise-induced changes in operating range in cat AI. Hearing Research, 2000, 141, 107-116.	2.0	18
110	Spectral and Intensity Coding in the Auditory Midbrain. , 2005, , 312-345.		18
111	Spectral integration plasticity in cat auditory cortex induced by perceptual training. Experimental Brain Research, 2008, 184, 493-509.	1.5	18
112	Background noise exerts diverse effects on the cortical encoding of foreground sounds. Journal of Neurophysiology, 2017, 118, 1034-1054.	1.8	18
113	Perceptual Training Restores Impaired Cortical Temporal Processing Due to Lead Exposure. Cerebral Cortex, 2016, 26, 334-345.	2.9	17
114	Auditory Cortical Plasticity Dependent on Environmental Noise Statistics. Cell Reports, 2020, 30, 4445-4458.e5.	6.4	17
115	Encoding of alternating acoustical signals in the medial geniculate body of guinea pigs. Hearing Research, 1980, 3, 265-278.	2.0	16
116	Mammalian Auditory Cortexâ€"Some Comparative Observations. , 1992, , 673-688.		16
117	Effect of Argon Laser Stapedotomy on Cochlear Potentials:II Alteration of the Compound Action Potential (CAP). Acta Oto-Laryngologica, 1983, 95, 47-53.	0.9	15
118	Local connection patterns of parvalbumin-positive inhibitory interneurons in rat primary auditory cortex. Hearing Research, 2011, 274, 121-128.	2.0	14
119	Distinct core thalamocortical pathways to central and dorsal primary auditory cortex. Hearing Research, 2011, 274, 95-104.	2.0	14
120	Representation of loudness in the auditory cortex. Handbook of Clinical Neurology / Edited By P J Vinken and G W Bruyn, 2015, 129, 73-84.	1.8	14
121	A Critical Role of Inhibition in Temporal Processing Maturation in the Primary Auditory Cortex. Cerebral Cortex, 2018, 28, 1610-1624.	2.9	14
122	Spectral Processing in Auditory Cortex. , 2011, , 275-308.		13
123	Influence of Argon Laser Stapedotomy on Cochlear Potentials III.Extracochlear Recorded DC Potential. Acta Oto-Laryngologica, 1983, 96, 49-55.	0.9	10
124	Auditory neurophonic responses to amplitude-modulated tones: Transfer functions and forward masking. Hearing Research, 1987, 31, 79-91.	2.0	10
125	Spatial organization of repetition rate processing in cat anterior auditory field. Hearing Research, 2011, 280, 70-81.	2.0	8
126	Synchrony, connectivity, and functional similarity in auditory midbrain local circuits. Neuroscience, 2016, 335, 30-53.	2.3	8

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127	Adaptation and recovery from adaptation of the auditory nerve neurophonic (ANN) using long duration tones. Hearing Research, 1992, 62, 131-141.	2.0	7
128	The Inferior Colliculus: Past, Present, and Future. , 2005, , 626-640.		6
129	Time-varying sounds: amplitude envelope modulations. , 2010, , .		4
130	Anisomorphic cortical reorganization in asymmetric sensorineural hearing loss. Journal of Neurophysiology, 2017, 118, 932-948.	1.8	4
131	Challenges to a Neuroanatomical Theory of Forebrain Auditory Plasticity. , 2005, , 109-125.		3
132	Information diversity in individual auditory cortical neurons is associated with functionally distinct coordinated neuronal ensembles. Scientific Reports, 2021, 11, 4064.	3.3	2
133	A Tribute to Jeffery A. Winer. Hearing Research, 2011, 274, 1-2.	2.0	1
134	Auditory Cortical Function: Insights from Current Approaches. Acoustics Today, 2012, 8, 42.	1.0	1
135	Spectral plasticity in monkey primary auditory cortex limits performance generalization in a temporal discrimination task. Journal of Neurophysiology, 2020, 124, 1798-1814.	1.8	1
136	Stimulus dependent transformations between synaptic and spiking receptive fields in auditory cortex. Nature Communications, 2020, 11, 1102.	12.8	1
137	Distinct Manifestations of Cooperative, Multidimensional Stimulus Representations in Different Auditory Forebrain Stations. Cerebral Cortex, 2020, 30, 3130-3147.	2.9	1
138	Plasticity of Multidimensional Receptive Fields in Core Rat Auditory Cortex Directed by Sound Statistics. Neuroscience, 2021, 467, 150-170.	2.3	1
139	Functional organization of spectral receptive fields in the primary auditory cortex of the owl monkey. , 1999, 415, 460.		1
140	Toward a Synthesis of Cellular Auditory Forebrain Functional Organization. , 2011, , 679-686.		1
141	Primary Auditory Cortex II. Some Functional Considerations. , 2020, , 657-680.		1
142	Listening post. Nature, 1996, 383, 34-34.	27.8	0
143	Input limitations for cortical combination-sensitive neurons coding stop-consonants?. Behavioral and Brain Sciences, 1998, 21, 284-284.	0.7	0
144	3 Splice. , 2008, , 1-1.		0

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145	Auditory Cortical Areas. , 2008, , 210-214.		0