

# Jonathan Z Simon

## List of Publications by Year in descending order

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110  
papers

8,463  
citations

61984

43  
h-index

58581

82  
g-index

139  
all docs

139  
docs citations

139  
times ranked

4230  
citing authors

#	ARTICLE	IF	CITATIONS
1	Algorithms for Estimating Time-Locked Neural Response Components in Cortical Processing of Continuous Speech. <i>IEEE Transactions on Biomedical Engineering</i> , 2023, 70, 88-96.	4.2	9
2	Parallel processing in speech perception with local and global representations of linguistic context. <i>ELife</i> , 2022, 11, .	6.0	39
3	Bilaterally Reduced Rolandic Beta Band Activity in Minor Stroke Patients. <i>Frontiers in Neurology</i> , 2022, 13, 819603.	2.4	3
4	Local versus long-range connectivity patterns of auditory disturbance in schizophrenia. <i>Schizophrenia Research</i> , 2021, 228, 262-270.	2.0	3
5	Cortical Processing of Arithmetic and Simple Sentences in an Auditory Attention Task. <i>Journal of Neuroscience</i> , 2021, 41, 8023-8039.	3.6	15
6	Neural Markers of Speech Comprehension: Measuring EEG Tracking of Linguistic Speech Representations, Controlling the Speech Acoustics. <i>Journal of Neuroscience</i> , 2021, 41, 10316-10329.	3.6	68
7	Exaggerated cortical representation of speech in older listeners: mutual information analysis. <i>Journal of Neurophysiology</i> , 2020, 124, 1152-1164.	1.8	18
8	High gamma cortical processing of continuous speech in younger and older listeners. <i>NeuroImage</i> , 2020, 222, 117291.	4.2	39
9	Continuous speech processing. <i>Current Opinion in Physiology</i> , 2020, 18, 25-31.	1.8	80
10	Dynamic estimation of auditory temporal response functions via state-space models with Gaussian mixture process noise. <i>PLoS Computational Biology</i> , 2020, 16, e1008172.	3.2	7
11	Poststroke acute dysexecutive syndrome, a disorder resulting from minor stroke due to disruption of network dynamics. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 33578-33585.	7.1	8
12	Granger Causal Inference from Indirect Low-Dimensional Measurements with Application to MEG Functional Connectivity Analysis. , 2020, , .		5
13	Neuro-current response functions: A unified approach to MEG source analysis under the continuous stimuli paradigm. <i>NeuroImage</i> , 2020, 211, 116528.	4.2	14
14	Neural speech restoration at the cocktail party: Auditory cortex recovers masked speech of both attended and ignored speakers. <i>PLoS Biology</i> , 2020, 18, e3000883.	5.6	76
15	Title is missing!. , 2020, 18, e3000883.		0
16	Title is missing!. , 2020, 18, e3000883.		0
17	Title is missing!. , 2020, 18, e3000883.		0
18	Title is missing!. , 2020, 18, e3000883.		0

#	ARTICLE	IF	CITATIONS
19	Title is missing!. , 2020, 18, e3000883.		0
20	Title is missing!. , 2020, 18, e3000883.		0
21	Title is missing!., 2020, 16, e1008172.		0
22	Title is missing!. , 2020, 16, e1008172.		0
23	Title is missing!. , 2020, 16, e1008172.		0
24	Title is missing!., 2020, 16, e1008172.		0
25	Estimation of State-Space Models with Gaussian Mixture Process Noise. , 2019, , .		2
26	Speech-in-noise representation in the aging midbrain and cortex: Effects of hearing loss. PLoS ONE, 2019, 14, e0213899.	2.5	84
27	Real-Time Tracking of Magnetoencephalographic Neuromarkers during a Dynamic Attention-Switching Task. , 2019, 2019, 4148-4151.		4
28	Mutual information analysis of neural representations of speech in noise in the aging midbrain. Journal of Neurophysiology, 2019, 122, 2372-2387.	1.8	12
29	Speech Intelligibility Predicted from Neural Entrainment of the Speech Envelope. JARO - Journal of the Association for Research in Otolaryngology, 2018, 19, 181-191.	1.8	182
30	Neural source dynamics of brain responses to continuous stimuli: Speech processing from acoustics to comprehension. NeuroImage, 2018, 172, 162-174.	4.2	115
31	Delta Vs Gamma Auditory Steady State Synchrony in Schizophrenia. Schizophrenia Bulletin, 2018, 44, 378-387.	4.3	28
32	Restoration and Efficiency of the Neural Processing of Continuous Speech Are Promoted by Prior Knowledge. Frontiers in Systems Neuroscience, 2018, 12, 56.	2.5	17
33	Over-Representation of Speech in Older Adults Originates from Early Response in Higher Order Auditory Cortex. Acta Acustica United With Acustica, 2018, 104, 774-777.	0.8	45
34	Cortical Localization of the Auditory Temporal Response Function from MEG via Non-convex Optimization. , 2018, , .		1
35	Rapid Transformation from Auditory to Linguistic Representations of Continuous Speech. Current Biology, 2018, 28, 3976-3983.e5.	3.9	211
36	Real-Time Decoding of Auditory Attention from EEG via Bayesian Filtering. , 2018, 2018, 25-28.		4

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37	Real-Time Tracking of Selective Auditory Attention From M/EEG: A Bayesian Filtering Approach. <i>Frontiers in Neuroscience</i> , 2018, 12, 262.	2.8	94
38	Ear and Brain Mechanisms for Parsing the Auditory Scene. <i>Springer Handbook of Auditory Research</i> , 2017, , 1-6.	0.7	3
39	Human Auditory Neuroscience and the Cocktail Party Problem. <i>Springer Handbook of Auditory Research</i> , 2017, , 169-197.	0.7	3
40	Cortical Representations of Speech in a Multitalker Auditory Scene. <i>Journal of Neuroscience</i> , 2017, 37, 9189-9196.	3.6	87
41	Dynamic Estimation of the Auditory Temporal Response Function From MEG in Competing-Speaker Environments. <i>IEEE Transactions on Biomedical Engineering</i> , 2017, 64, 1896-1905.	4.2	37
42	Dynamic cortical representations of perceptual filling-in for missing acoustic rhythm. <i>Scientific Reports</i> , 2017, 7, 17536.	3.3	12
43	Evidence of degraded representation of speech in noise, in the aging midbrain and cortex. <i>Journal of Neurophysiology</i> , 2016, 116, 2346-2355.	1.8	185
44	Encoding of natural sounds by variance of the cortical local field potential. <i>Journal of Neurophysiology</i> , 2016, 115, 2389-2398.	1.8	8
45	Overlapping communities reveal rich structure in large-scale brain networks during rest and task conditions. <i>NeuroImage</i> , 2016, 135, 92-106.	4.2	88
46	Low-power EEG monitor based on compressed sensing with compressed domain noise rejection. , 2016, , .		6
47	Effect of informational content of noise on speech representation in the aging midbrain and cortex. <i>Journal of Neurophysiology</i> , 2016, 116, 2356-2367.	1.8	87
48	Robust decoding of selective auditory attention from MEG in a competing-speaker environment via state-space modeling. <i>NeuroImage</i> , 2016, 124, 906-917.	4.2	67
49	Multi-time resolution analysis of speech: evidence from psychophysics. <i>Frontiers in Neuroscience</i> , 2015, 9, 214.	2.8	51
50	The encoding of auditory objects in auditory cortex: Insights from magnetoencephalography. <i>International Journal of Psychophysiology</i> , 2015, 95, 184-190.	1.0	30
51	Investigating the Neural Correlates of a Streaming Percept in an Informational-Masking Paradigm. <i>PLoS ONE</i> , 2014, 9, e114427.	2.5	16
52	Cortical entrainment to continuous speech: functional roles and interpretations. <i>Frontiers in Human Neuroscience</i> , 2014, 8, 311.	2.0	350
53	Robust cortical entrainment to the speech envelope relies on the spectro-temporal fine structure. <i>NeuroImage</i> , 2014, 88, 41-46.	4.2	234
54	Robust Cortical Encoding of Slow Temporal Modulations of Speech. <i>Advances in Experimental Medicine and Biology</i> , 2013, 787, 373-381.	1.6	15

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55	Power and phase properties of oscillatory neural responses in the presence of background activity. <i>Journal of Computational Neuroscience</i> , 2013, 34, 337-343.	1.0	53
56	Mechanisms Underlying Selective Neuronal Tracking of Attended Speech at a "Cocktail Party". <i>Neuron</i> , 2013, 77, 980-991.	8.1	732
57	Physiological evidence for auditory modulation filterbanks: Cortical responses to concurrent modulations. <i>Journal of the Acoustical Society of America</i> , 2013, 133, EL7-EL12.	1.1	24
58	Adaptive Temporal Encoding Leads to a Background-Insensitive Cortical Representation of Speech. <i>Journal of Neuroscience</i> , 2013, 33, 5728-5735.	3.6	315
59	Emergence of neural encoding of auditory objects while listening to competing speakers. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 11854-11859.	7.1	695
60	Neural coding of continuous speech in auditory cortex during monaural and dichotic listening. <i>Journal of Neurophysiology</i> , 2012, 107, 78-89.	1.8	414
61	Sensitivity to temporal modulation rate and spectral bandwidth in the human auditory system: MEG evidence. <i>Journal of Neurophysiology</i> , 2012, 107, 2033-2041.	1.8	75
62	Diffusion kurtosis as an in vivo imaging marker for reactive astrogliosis in traumatic brain injury. <i>NeuroImage</i> , 2012, 59, 467-477.	4.2	265
63	The Elicitation of Audiovisual Steady-State Responses: Multi-Sensory Signal Congruity and Phase Effects. <i>Brain Topography</i> , 2011, 24, 134-148.	1.8	8
64	Neural dynamics of attending and ignoring in human auditory cortex. <i>Neuropsychologia</i> , 2010, 48, 3262-3271.	1.6	64
65	Competing Streams at the Cocktail Party: Exploring the Mechanisms of Attention and Temporal Integration. <i>Journal of Neuroscience</i> , 2010, 30, 12084-12093.	3.6	59
66	Magnetoencephalography and Auditory Neural Representations. <i>IFMBE Proceedings</i> , 2010, , 45-48.	0.3	0
67	Auditory Streaming at the Cocktail Party: Simultaneous Neural and Behavioral Studies of Auditory Attention. , 2010, , 545-553.		1
68	Detection of Interaural Time Differences in the Alligator. <i>Journal of Neuroscience</i> , 2009, 29, 7978-7990.	3.6	56
69	Interaction between Attention and Bottom-Up Saliency Mediates the Representation of Foreground and Background in an Auditory Scene. <i>PLoS Biology</i> , 2009, 7, e1000129.	5.6	153
70	Neural Representations of Complex Temporal Modulations in the Human Auditory Cortex. <i>Journal of Neurophysiology</i> , 2009, 102, 2731-2743.	1.8	46
71	Sensor noise suppression. <i>Journal of Neuroscience Methods</i> , 2008, 168, 195-202.	2.5	68
72	Denosing based on spatial filtering. <i>Journal of Neuroscience Methods</i> , 2008, 171, 331-339.	2.5	196

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73	Auditory temporal edge detection in human auditory cortex. <i>Brain Research</i> , 2008, 1213, 78-90.	2.2	39
74	A Sensorimotor Approach to Sound Localization. <i>Neural Computation</i> , 2008, 20, 603-635.	2.2	50
75	MEG Signal Denoising Based on Time-Shift PCA. , 2007, , .		0
76	Temporal Symmetry in Primary Auditory Cortex: Implications for Cortical Connectivity. <i>Neural Computation</i> , 2007, 19, 583-638.	2.2	34
77	Processing Asymmetry of Transitions between Order and Disorder in Human Auditory Cortex. <i>Journal of Neuroscience</i> , 2007, 27, 5207-5214.	3.6	71
78	Stimulus Context Affects Auditory Cortical Responses to Changes in Interaural Correlation. <i>Journal of Neurophysiology</i> , 2007, 98, 224-231.	1.8	19
79	Concurrent Encoding of Frequency and Amplitude Modulation in Human Auditory Cortex: Encoding Transition. <i>Journal of Neurophysiology</i> , 2007, 98, 3473-3485.	1.8	19
80	Denoising based on time-shift PCA. <i>Journal of Neuroscience Methods</i> , 2007, 165, 297-305.	2.5	192
81	Delayed detection of tonal targets in background noise in dyslexia. <i>Brain and Language</i> , 2007, 102, 80-90.	1.6	22
82	Human Auditory Cortical Processing of Transitions Between "Order" and "Disorder". , 2007, , 323-331.		1
83	Concurrent Encoding of Frequency and Amplitude Modulation in Human Auditory Cortex: MEG Evidence. <i>Journal of Neurophysiology</i> , 2006, 96, 2712-2723.	1.8	46
84	Stimulus-invariant processing and spectrotemporal reverse correlation in primary auditory cortex. <i>Journal of Computational Neuroscience</i> , 2006, 20, 111-136.	1.0	53
85	Neural Response Correlates of Detection of Monaurally and Binaurally Created Pitches in Humans. <i>Cerebral Cortex</i> , 2006, 16, 835-848.	2.9	84
86	Fully complex magnetoencephalography. <i>Journal of Neuroscience Methods</i> , 2005, 149, 64-73.	2.5	25
87	Human Auditory Cortical Processing of Changes in Interaural Correlation. <i>Journal of Neuroscience</i> , 2005, 25, 8518-8527.	3.6	57
88	The enigma of cortical responses: Slow yet precise. , 2005, , 484-493.		2
89	Dynamics of Precise Spike Timing in Primary Auditory Cortex. <i>Journal of Neuroscience</i> , 2004, 24, 1159-1172.	3.6	142
90	Auditory M50 and M100 responses to broadband noise: functional implications. <i>NeuroReport</i> , 2004, 15, 2455-2458.	1.2	53

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91	Modeling coincidence detection in nucleus laminaris. <i>Biological Cybernetics</i> , 2003, 89, 388-396.	1.3	44
92	Spectro-Temporal Response Field Characterization With Dynamic Ripples in Ferret Primary Auditory Cortex. <i>Journal of Neurophysiology</i> , 2001, 85, 1220-1234.	1.8	364
93	Robust spectrotemporal reverse correlation for the auditory system: optimizing stimulus design. <i>Journal of Computational Neuroscience</i> , 2000, 9, 85-111.	1.0	212
94	A dendritic model of coincidence detection in the avian brainstem. <i>Neurocomputing</i> , 1999, 26-27, 263-269.	5.9	22
95	Hamiltonian thermodynamics of a Lovelock black hole. <i>Physical Review D</i> , 1997, 55, 3525-3535.	4.7	31
96	The physics of time travel. <i>Physics World</i> , 1994, 7, 27-34.	0.0	3
97	Einstein equation with quantum corrections reduced to second order. <i>Physical Review D</i> , 1993, 47, 1339-1355.	4.7	133
98	Unitarity of interacting fields in curved spacetime. <i>Physical Review D</i> , 1992, 46, 4442-4455.	4.7	13
99	Failure of unitarity for interacting fields on spacetimes with closed timelike curves. <i>Physical Review D</i> , 1992, 46, 4456-4469.	4.7	37
100	No Starobinsky inflation from self-consistent semiclassical gravity. <i>Physical Review D</i> , 1992, 45, 1953-1960.	4.7	63
101	Time travel on a string. <i>Nature</i> , 1992, 357, 19-21.	27.8	8
102	Stability of flat space, semiclassical gravity, and higher derivatives. <i>Physical Review D</i> , 1991, 43, 3308-3316.	4.7	107
103	Higher-derivative Lagrangians, nonlocality, problems, and solutions. <i>Physical Review D</i> , 1990, 41, 3720-3733.	4.7	318
104	Black hole evaporation and higher-derivative gravity. <i>General Relativity and Gravitation</i> , 1989, 21, 761-766.	2.0	17
105	Black-hole thermodynamics in Lovelock gravity. <i>Physical Review D</i> , 1988, 38, 2434-2444.	4.7	315
106	General relativity in a (2+1)-dimensional space-time: An electrically charged solution. <i>General Relativity and Gravitation</i> , 1986, 18, 1019-1035.	2.0	64
107	MEG Adaptive Noise Suppression using Fast LMS. , 0, , .		9
108	Complex Valued Equivalent-Current Dipole Fits for MEG Responses. , 0, , .		0

#	ARTICLE	IF	CITATIONS
109	MEG Responses to Speech and Stimuli With Speechlike Modulations. , 0, , .		1
110	Significance tests for MEG response detection. , 0, , .		3