

Florian Mormann

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7806030/publications.pdf>

Version: 2024-02-01

91
papers

11,285
citations

53660

45
h-index

49773

87
g-index

95
all docs

95
docs citations

95
times ranked

9482
citing authors

#	ARTICLE	IF	CITATIONS
1	Indications of nonlinear deterministic and finite-dimensional structures in time series of brain electrical activity: Dependence on recording region and brain state. <i>Physical Review E</i> , 2001, 64, 061907.	0.8	2,068
2	Mean phase coherence as a measure for phase synchronization and its application to the EEG of epilepsy patients. <i>Physica D: Nonlinear Phenomena</i> , 2000, 144, 358-369.	1.3	1,099
3	Seizure prediction: the long and winding road. <i>Brain</i> , 2007, 130, 314-333.	3.7	919
4	On the predictability of epileptic seizures. <i>Clinical Neurophysiology</i> , 2005, 116, 569-587.	0.7	442
5	Epileptic seizures are preceded by a decrease in synchronization. <i>Epilepsy Research</i> , 2003, 53, 173-185.	0.8	407
6	Memory formation by neuronal synchronization. <i>Brain Research Reviews</i> , 2006, 52, 170-182.	9.1	402
7	High-frequency neural activity and human cognition: Past, present and possible future of intracranial EEG research. <i>Progress in Neurobiology</i> , 2012, 98, 279-301.	2.8	383
8	Phase/amplitude reset and theta-gamma interaction in the human medial temporal lobe during a continuous word recognition memory task. <i>Hippocampus</i> , 2005, 15, 890-900.	0.9	344
9	Persistent cognitive impairment, hippocampal atrophy and EEG changes in sepsis survivors. <i>Journal of Neurology, Neurosurgery and Psychiatry</i> , 2013, 84, 62-69.	0.9	341
10	Sustained Neural Activity Patterns during Working Memory in the Human Medial Temporal Lobe. <i>Journal of Neuroscience</i> , 2007, 27, 7807-7816.	1.7	240
11	Sepsis causes neuroinflammation and concomitant decrease of cerebral metabolism. <i>Journal of Neuroinflammation</i> , 2008, 5, 38.	3.1	223
12	Memory Consolidation by Replay of Stimulus-Specific Neural Activity. <i>Journal of Neuroscience</i> , 2013, 33, 19373-19383.	1.7	214
13	Latency and Selectivity of Single Neurons Indicate Hierarchical Processing in the Human Medial Temporal Lobe. <i>Journal of Neuroscience</i> , 2008, 28, 8865-8872.	1.7	188
14	Automated detection of a pre-seizure state based on a decrease in synchronization in intracranial electroencephalogram recordings from epilepsy patients. <i>Physical Review E</i> , 2003, 67, 021912.	0.8	184
15	Its Possible Use for Interictal Focus Localization, Seizure Anticipation, and Prevention. <i>Journal of Clinical Neurophysiology</i> , 2001, 18, 209-222.	0.9	173
16	Measuring synchronization in coupled model systems: A comparison of different approaches. <i>Physica D: Nonlinear Phenomena</i> , 2007, 225, 29-42.	1.3	171
17	Seizure prediction for therapeutic devices: A review. <i>Journal of Neuroscience Methods</i> , 2016, 260, 270-282.	1.3	146
18	Neuronal Shot Noise and Brownian $1/f^2$ Behavior in the Local Field Potential. <i>PLoS ONE</i> , 2009, 4, e4338.	1.1	142

#	ARTICLE	IF	CITATIONS
19	On-line, voluntary control of human temporal lobe neurons. <i>Nature</i> , 2010, 467, 1104-1108.	13.7	140
20	All together now: Analogies between chimera state collapses and epileptic seizures. <i>Scientific Reports</i> , 2016, 6, 23000.	1.6	133
21	A category-specific response to animals in the right human amygdala. <i>Nature Neuroscience</i> , 2011, 14, 1247-1249.	7.1	129
22	Seizure prediction by nonlinear EEG analysis. <i>IEEE Engineering in Medicine and Biology Magazine</i> , 2003, 22, 57-63.	1.1	127
23	Monitoring spike train synchrony. <i>Journal of Neurophysiology</i> , 2013, 109, 1457-1472.	0.9	127
24	Testing the null hypothesis of the nonexistence of a pre-seizure state. <i>Physical Review E</i> , 2003, 67, 010901.	0.8	122
25	Synergy of Direct and Indirect Cholinergic Septo-Hippocampal Pathways Coordinates Firing in Hippocampal Networks. <i>Journal of Neuroscience</i> , 2015, 35, 8394-8410.	1.7	118
26	Bivariate surrogate techniques: Necessity, strengths, and caveats. <i>Physical Review E</i> , 2003, 68, 066202.	0.8	107
27	Persistent Single-Neuron Activity during Working Memory in the Human Medial Temporal Lobe. <i>Current Biology</i> , 2017, 27, 1026-1032.	1.8	104
28	Left hippocampal pathology is associated with atypical language lateralization in patients with focal epilepsy. <i>Brain</i> , 2006, 129, 346-351.	3.7	103
29	Single Neurons in the Human Brain Encode Numbers. <i>Neuron</i> , 2018, 100, 753-761.e4.	3.8	98
30	Seizure prediction: Any better than chance?. <i>Clinical Neurophysiology</i> , 2009, 120, 1465-1478.	0.7	87
31	Prospective use of subtraction ictal SPECT coregistered to MRI (SISCOM) in presurgical evaluation of epilepsy. <i>Epilepsia</i> , 2011, 52, 2239-2248.	2.6	78
32	What is the present-day EEG evidence for a preictal state?. <i>Epilepsy Research</i> , 2011, 97, 243-251.	0.8	75
33	Improved spatial characterization of the epileptic brain by focusing on nonlinearity. <i>Epilepsy Research</i> , 2006, 69, 30-44.	0.8	74
34	Reliable Analysis of Single-Unit Recordings from the Human Brain under Noisy Conditions: Tracking Neurons over Hours. <i>PLoS ONE</i> , 2016, 11, e0166598.	1.1	73
35	State-of-the-Art of Seizure Prediction. <i>Journal of Clinical Neurophysiology</i> , 2007, 24, 147-153.	0.9	72
36	Measure profile surrogates: A method to validate the performance of epileptic seizure prediction algorithms. <i>Physical Review E</i> , 2004, 69, 061915.	0.8	66

#	ARTICLE	IF	CITATIONS
37	Seizure anticipation: from algorithms to clinical practice. <i>Current Opinion in Neurology</i> , 2006, 19, 187-193.	1.8	64
38	Independent delta/theta rhythms in the human hippocampus and entorhinal cortex. <i>Frontiers in Human Neuroscience</i> , 2008, 2, 3.	1.0	64
39	Controversies in epilepsy: Debates held during the Fourth International Workshop on Seizure Prediction. <i>Epilepsy and Behavior</i> , 2010, 19, 4-16.	0.9	61
40	MEASURING THE DIRECTIONALITY OF COUPLING: PHASE VERSUS STATE SPACE DYNAMICS AND APPLICATION TO EEG TIME SERIES. <i>International Journal of Neural Systems</i> , 2007, 17, 139-148.	3.2	58
41	Selectivity of pyramidal cells and interneurons in the human medial temporal lobe. <i>Journal of Neurophysiology</i> , 2011, 106, 1713-1721.	0.9	57
42	Seizure prediction and documentation – two important problems. <i>Lancet Neurology</i> , The, 2013, 12, 531-532.	4.9	54
43	Presurgical Language fMRI in Patients with Drug-resistant Epilepsy: Effects of Task Performance. <i>Epilepsia</i> , 2006, 47, 880-886.	2.6	51
44	MEASURING SYNCHRONIZATION IN THE EPILEPTIC BRAIN: A COMPARISON OF DIFFERENT APPROACHES. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2007, 17, 3539-3544.	0.7	50
45	Using bivariate signal analysis to characterize the epileptic focus: The benefit of surrogates. <i>Physical Review E</i> , 2011, 83, 046203.	0.8	49
46	Responses of Human Medial Temporal Lobe Neurons Are Modulated by Stimulus Repetition. <i>Journal of Neurophysiology</i> , 2010, 103, 97-107.	0.9	47
47	Recollection in the human hippocampal-entorhinal cell circuitry. <i>Nature Communications</i> , 2019, 10, 1503.	5.8	47
48	Single-Neuron Correlates of Conscious Perception in the Human Medial Temporal Lobe. <i>Current Biology</i> , 2017, 27, 2991-2998.e2.	1.8	46
49	Anesthesia-induced loss of consciousness disrupts auditory responses beyond primary cortex. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 11770-11780.	3.3	40
50	Single-Cell Responses to Face Adaptation in the Human Medial Temporal Lobe. <i>Neuron</i> , 2014, 84, 363-369.	3.8	37
51	Neurons in the human amygdala encode face identity, but not gaze direction. <i>Nature Neuroscience</i> , 2015, 18, 1568-1570.	7.1	37
52	Seizure prediction: making mileage on the long and winding road. <i>Brain</i> , 2016, 139, 1625-1627.	3.7	37
53	Scene-selective coding by single neurons in the human parahippocampal cortex. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 1153-1158.	3.3	37
54	Representation of abstract semantic knowledge in populations of human single neurons in the medial temporal lobe. <i>PLoS Biology</i> , 2019, 17, e3000290.	2.6	35

#	ARTICLE	IF	CITATIONS
55	The Architecture of Human Memory: Insights from Human Single-Neuron Recordings. <i>Journal of Neuroscience</i> , 2021, 41, 883-890.	1.7	35
56	Discerning nonstationarity from nonlinearity in seizure-free and pre-seizure EEG recordings from epilepsy patients. <i>IEEE Transactions on Biomedical Engineering</i> , 2003, 50, 634-639.	2.5	32
57	Inter-network and intra-network communications during bursting dynamics: Applications to seizure prediction. <i>Physical Review E</i> , 2007, 76, 021920.	0.8	29
58	Detecting directional coupling in the human epileptic brain: Limitations and potential pitfalls. <i>Physical Review E</i> , 2008, 77, 011914.	0.8	29
59	Rhinalâ€“hippocampal coupling during declarative memory formation: Dependence on item characteristics. <i>Neuroscience Letters</i> , 2006, 407, 37-41.	1.0	24
60	An Unsupervised Online Spike-Sorting Framework. <i>International Journal of Neural Systems</i> , 2016, 26, 1550042.	3.2	24
61	Estimating phase synchronization in dynamical systems using cellular nonlinear networks. <i>Physical Review E</i> , 2005, 71, 061926.	0.8	23
62	Association between scalp hair-whorl direction and hemispheric language dominance. <i>NeuroImage</i> , 2006, 30, 539-543.	2.1	23
63	A cellular neural network based method for classification of magnetic resonance images: Towards an automated detection of hippocampal sclerosis. <i>Journal of Neuroscience Methods</i> , 2008, 170, 324-331.	1.3	21
64	Assessing criticality in pre-seizure single-neuron activity of human epileptic cortex. <i>PLoS Computational Biology</i> , 2021, 17, e1008773.	1.5	19
65	A distributed computing system for multivariate time series analyses of multichannel neurophysiological data. <i>Journal of Neuroscience Methods</i> , 2006, 152, 190-201.	1.3	18
66	Concept neurons in the human medial temporal lobe flexibly represent abstract relations between concepts. <i>Nature Communications</i> , 2021, 12, 6164.	5.8	16
67	Improved statistical test for nonstationarity using recurrence time statistics. <i>Physical Review E</i> , 2004, 69, 046111.	0.8	15
68	Neuronal Firing in Human Epileptic Cortex: The Ins and Outs of Synchrony during Seizures. <i>Epilepsy Currents</i> , 2013, 13, 100-102.	0.4	15
69	Neurons in the Human Left Amygdala Automatically Encode Subjective Value Irrespective of Task. <i>Cerebral Cortex</i> , 2019, 29, 265-272.	1.6	15
70	Patterns of single-neuron activity during associative recognition memory in the human medial temporal lobe. <i>NeuroImage</i> , 2020, 221, 117214.	2.1	15
71	Neuronal codes for arithmetic rule processing in the human brain. <i>Current Biology</i> , 2022, 32, 1275-1284.e4.	1.8	15
72	Burst firing of single neurons in the human medial temporal lobe changes before epileptic seizures. <i>Clinical Neurophysiology</i> , 2016, 127, 3329-3334.	0.7	14

#	ARTICLE	IF	CITATIONS
73	Declarative memory formation in hippocampal sclerosis: an intracranial event-related potentials study. <i>NeuroReport</i> , 2007, 18, 317-321.	0.6	12
74	The neurobiology of consciousness. , 2010, , 24-46.		12
75	Multivariate representation of food preferences in the human brain. <i>Brain and Cognition</i> , 2016, 110, 43-52.	0.8	12
76	Seizure prediction. <i>Scholarpedia Journal</i> , 2008, 3, 5770.	0.3	11
77	EEG analysis with nonlinear excitable media. <i>Journal of Clinical Neurophysiology</i> , 2005, 22, 314-29.	0.9	9
78	Cue discriminability predicts instrumental conditioning. <i>Consciousness and Cognition</i> , 2018, 61, 49-60.	0.8	8
79	Detecting determinism from point processes. <i>Physical Review E</i> , 2014, 90, 062906.	0.8	6
80	Duplicate Detection of Spike Events: A Relevant Problem in Human Single-Unit Recordings. <i>Brain Sciences</i> , 2021, 11, 761.	1.1	6
81	Seizure Anticipation: Do Mathematical Measures Correlate with Video-EEG Evaluation?. <i>Epilepsia</i> , 2005, 46, 1335-1336.	2.6	5
82	An online adaptive screening procedure for selective neuronal responses. <i>Journal of Neuroscience Methods</i> , 2017, 291, 36-42.	1.3	4
83	Seizure Onset Zone Lateralization Using a Non-linear Analysis of Micro vs. Macro Electroencephalographic Recordings During Seizure-Free Stages of the Sleep-Wake Cycle From Epilepsy Patients. <i>Frontiers in Neurology</i> , 2020, 11, 553885.	1.1	4
84	Single-Neuron Correlates of Decision Confidence in the Human Medial Temporal Lobe. <i>Current Biology</i> , 2020, 30, 4722-4732.e5.	1.8	4
85	Auditory Beat Stimulation Modulates Memory-Related Single-Neuron Activity in the Human Medial Temporal Lobe. <i>Brain Sciences</i> , 2021, 11, 364.	1.1	4
86	Performance of a seizure warning algorithm based on the dynamics of intracranial EEG. <i>Epilepsy Research</i> , 2006, 71, 241-242.	0.8	3
87	Characterizing the spatio-temporal dynamics of the epileptogenic process with nonlinear EEG analyses. , 0, , .		2
88	Detecting Structural Alterations in the Brain using a Cellular Neural Network based Classification of Magnetic Resonance Images. , 2006, , .		2
89	Temporal lobe epilepsy surgery: Piriform cortex resection impacts seizure control in the long-term. <i>Annals of Clinical and Translational Neurology</i> , 2022, 9, 1206-1211.	1.7	2
90	NEURONAL AND NETWORK DYNAMICS PRECEDING EXPERIMENTAL SEIZURES. , 2013, , .		1

#	ARTICLE	IF	CITATIONS
91	The Neurobiology of Consciousness. , 2008, , 367-399.		1