

# Levin Kuhlmann

## List of Publications by Year in descending order

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Version: 2024-02-01

67  
papers

2,537  
citations

236925

25  
h-index

214800

47  
g-index

75  
all docs

75  
docs citations

75  
times ranked

1964  
citing authors

#	ARTICLE	IF	CITATIONS
1	Coherent false seizure prediction in epilepsy, coincidence or providence?. <i>Clinical Neurophysiology</i> , 2022, 133, 157-164.	1.5	5
2	Machine Learning for Predicting Epileptic Seizures Using EEG Signals: A Review. <i>IEEE Reviews in Biomedical Engineering</i> , 2021, 14, 139-155.	18.0	148
3	Interictal spike localization for epilepsy surgery using magnetoencephalography beamforming. <i>Clinical Neurophysiology</i> , 2021, 132, 928-937.	1.5	4
4	A Two-Layer LSTM Deep Learning Model for Epileptic Seizure Prediction. , 2021, , .		6
5	Seizure likelihood varies with day-to-day variations in sleep duration in patients with refractory focal epilepsy: A longitudinal electroencephalography investigation. <i>EClinicalMedicine</i> , 2021, 37, 100934.	7.1	33
6	Seizure Susceptibility Prediction in Uncontrolled Epilepsy. <i>Frontiers in Neurology</i> , 2021, 12, 721491.	2.4	8
7	Identifying seizure risk factors: A comparison of sleep, weather, and temporal features using a Bayesian forecast. <i>Epilepsia</i> , 2021, 62, 371-382.	5.1	21
8	Association of Short-term Heart Rate Variability and Sudden Unexpected Death in Epilepsy. <i>Neurology</i> , 2021, 97, .	1.1	25
9	Epileptic Seizure Onset Predicts Its Duration. <i>European Journal of Neurology</i> , 2021, , .	3.3	3
10	A Generative Model to Synthesize EEG Data for Epileptic Seizure Prediction. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2021, 29, 2322-2332.	4.9	27
11	Comparison of Patient Specific and General Classification of Epileptic Seizure Prediction. , 2021, , .		1
12	Ensembling crowdsourced seizure prediction algorithms using long-term human intracranial EEG. <i>Epilepsia</i> , 2020, 61, e7-e12.	5.1	15
13	Towards a comprehensive pipeline to identify and functionally annotate long noncoding RNA (lncRNA). <i>Computers in Biology and Medicine</i> , 2020, 127, 104028.	7.0	16
14	Critical slowing down as a biomarker for seizure susceptibility. <i>Nature Communications</i> , 2020, 11, 2172.	12.8	133
15	Forecasting cycles of seizure likelihood. <i>Epilepsia</i> , 2020, 61, 776-786.	5.1	76
16	Predicting epileptic seizures using nonnegative matrix factorization. <i>PLoS ONE</i> , 2020, 15, e0228025.	2.5	24
17	Viability of Preictal High-Frequency Oscillation Rates as a Biomarker for Seizure Prediction. <i>Frontiers in Human Neuroscience</i> , 2020, 14, 612899.	2.0	12
18	Source-level Cortical Power Changes for Xenon and Nitrous Oxide-induced Reductions in Consciousness in Healthy Male Volunteers. <i>Anesthesiology</i> , 2020, 132, 1017-1033.	2.5	12

#	ARTICLE	IF	CITATIONS
19	Epileptic Seizure Detection Using Convolutional Neural Network: A Multi-Biosignal study. , 2020, , .		13
20	A taxonomy of seizure dynamotypes. ELife, 2020, 9, .	6.0	86
21	Computationally Efficient Epileptic Seizure Prediction based on Extremely Randomised Trees. , 2020, , .		4
22	Epileptic Seizure Forecasting With Generative Adversarial Networks. IEEE Access, 2019, 7, 143999-144009.	4.2	54
23	Postictal suppression and seizure durations: A patient-specific, long-term <scp>iEEG</scp> analysis. Epilepsia, 2018, 59, 1027-1036.	5.1	14
24	Recording Brain Electromagnetic Activity During the Administration of the Gaseous Anesthetic Agents Xenon and Nitrous Oxide in Healthy Volunteers. Journal of Visualized Experiments, 2018, , .	0.3	4
25	Assessing nitrous oxide effect using electroencephalographically-based depth of anesthesia measures cortical state and cortical input. Journal of Clinical Monitoring and Computing, 2018, 32, 173-188.	1.6	9
26	Convolutional Neural Networks for Epileptic Seizure Prediction. , 2018, , .		30
27	Seizure pathways: A model-based investigation. PLoS Computational Biology, 2018, 14, e1006403.	3.2	37
28	Integer Convolutional Neural Network for Seizure Detection. IEEE Journal on Emerging and Selected Topics in Circuits and Systems, 2018, 8, 849-857.	3.6	51
29	Convolutional Neural Networks for seizure prediction using intracranial and scalp electroencephalogram. Neural Networks, 2018, 105, 104-111.	5.9	391
30	Epilepsyecosystem.org: crowd-sourcing reproducible seizure prediction with long-term human intracranial EEG. Brain, 2018, 141, 2619-2630.	7.6	105
31	Seizure prediction " ready for a new era. Nature Reviews Neurology, 2018, 14, 618-630.	10.1	284
32	Tracking Electroencephalographic Changes Using Distributions of Linear Models: Application to Propofol-Based Depth of Anesthesia Monitoring. IEEE Transactions on Biomedical Engineering, 2017, 64, 870-881.	4.2	9
33	Supervised learning in automatic channel selection for epileptic seizure detection. Expert Systems With Applications, 2017, 86, 199-207.	7.6	49
34	The circadian profile of epilepsy improves seizure forecasting. Brain, 2017, 140, 2169-2182.	7.6	156
35	Statistical Performance Analysis of Data-Driven Neural Models. International Journal of Neural Systems, 2017, 27, 1650045.	5.2	6
36	Probing to Observe Neural Dynamics Investigated with Networked Kuramoto Oscillators. International Journal of Neural Systems, 2017, 27, 1650038.	5.2	10

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37	Introduction. International Journal of Neural Systems, 2017, 27, 1702001.	5.2	3
38	Neural mass model-based tracking of anesthetic brain states. NeuroImage, 2016, 133, 438-456.	4.2	37
39	Role of Multiple-Scale Modeling of Epilepsy in Seizure Forecasting. Journal of Clinical Neurophysiology, 2015, 32, 220-226.	1.7	36
40	Seizure Prediction: Science Fiction or Soon to Become Reality?. Current Neurology and Neuroscience Reports, 2015, 15, 73.	4.2	59
41	Parameter and State Estimation of Nonlinear Systems Using a Multi-Observer Under the Supervisory Framework. IEEE Transactions on Automatic Control, 2015, 60, 2336-2349.	5.7	41
42	State and parameter estimation of nonlinear systems: A multi-observer approach. , 2014, , .		1
43	Extending Communication for Patients with Disorders of Consciousness. Journal of Neuroimaging, 2014, 24, 31-38.	2.0	18
44	Observability limits for networked oscillators. Automatica, 2014, 50, 1087-1099.	5.0	8
45	Approximate, Computationally Efficient Online Learning in Bayesian Spiking Neurons. Neural Computation, 2014, 26, 472-496.	2.2	4
46	Alterations in the Functional Connectivity of Frontal Lobe Networks Preceding Emergence Delirium in Children. Anesthesiology, 2014, 121, 740-752.	2.5	38
47	PATIENT-SPECIFIC NEURAL MASS MODELING - STOCHASTIC AND DETERMINISTIC METHODS. , 2013, , .		11
48	Mechanisms of Seizure Propagation in 2-Dimensional Centre-Surround Recurrent Networks. PLoS ONE, 2013, 8, e71369.	2.5	27
49	Modulation of Functional EEG Networks by the NMDA Antagonist Nitrous Oxide. PLoS ONE, 2013, 8, e56434.	2.5	33
50	Estimating the unmeasured membrane potential of neuronal populations from the EEG using a class of deterministic nonlinear filters. Journal of Neural Engineering, 2012, 9, 026001.	3.5	14
51	A robust circle criterion observer with application to neural mass models. Automatica, 2012, 48, 2986-2989.	5.0	42
52	Online learning in Bayesian Spiking Neurons. , 2012, , .		0
53	Parameter and state estimation for a class of neural mass models. , 2012, , .		6
54	Convergence analysis of efficient online learning in Bayesian spiking neurons. BMC Neuroscience, 2012, 13, .	1.9	0

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55	Probing for cortical excitability. , 2011, 2011, 1644-7.		1
56	Electrical probing of cortical excitability in patients with epilepsy. <i>Epilepsy and Behavior</i> , 2011, 22, S110-S118.	1.7	52
57	A Computational Study of How Orientation Bias in the Lateral Geniculate Nucleus Can Give Rise to Orientation Selectivity in Primary Visual Cortex. <i>Frontiers in Systems Neuroscience</i> , 2011, 5, 81.	2.5	19
58	A nonlinear estimator for the activity of neuronal populations in the hippocampus. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2011, 44, 9899-9904.	0.4	0
59	The perturbation response and power spectrum of a mean-field of IF neurons with inhomogeneous inputs. <i>BMC Neuroscience</i> , 2010, 11, .	1.9	0
60	Patient-specific bivariate-synchrony-based seizure prediction for short prediction horizons. <i>Epilepsy Research</i> , 2010, 91, 214-231.	1.6	64
61	Analysis of the power spectra, autocorrelation function and EEG time-series signal of a network of leaky integrate-and-fire neurons with conductance-based synapses. <i>BMC Neuroscience</i> , 2009, 10, .	1.9	0
62	Seizure Detection Using Seizure Probability Estimation: Comparison of Features Used to Detect Seizures. <i>Annals of Biomedical Engineering</i> , 2009, 37, 2129-2145.	2.5	46
63	210. Spatiotemporal patterns of high frequency oscillation from intracranial EEG before and during seizure. <i>Journal of Clinical Neuroscience</i> , 2009, 16, 472-473.	1.5	0
64	Correlation analysis of seizure detection features. , 2008, , .		8
65	A neural model of 3D shape-from-texture: Multiple-scale filtering, boundary grouping, and surface filling-in. <i>Vision Research</i> , 2007, 47, 634-672.	1.4	40
66	Summation of spatiotemporal input patterns in leaky integrate-and-fire neurons: application to neurons in the cochlear nucleus receiving converging auditory nerve fiber input. <i>Journal of Computational Neuroscience</i> , 2002, 12, 55-73.	1.0	28
67	Measurement of the limiting equivalent conductivities and mobilities of the most prevalent ionic species of EGTA (EGTA <sup>2-</sup> and EGTA <sup>3-</sup> ) for use in electrophysiological experiments. <i>Journal of Neuroscience Methods</i> , 1999, 89, 41-47.	2.5	5