Seif Eldawlatly

List of Publications by Year
in descending order

58 papers	369 citations	1307366 7 h-index	1199470 12 g-index
59 all docs	59 docs citations	59 times ranked	403 citing authors

#	Article	IF	Citations
1	Identifying Functional Connectivity in Large-Scale Neural Ensemble Recordings: A Multiscale Data Mining Approach. Neural Computation, 2009, 21, 450-477.	1.3	66
2	On the Use of Dynamic Bayesian Networks in Reconstructing Functional Neuronal Networks from Spike Train Ensembles. Neural Computation, 2010, 22, 158-189.	1.3	54
3	Epileptic seizure prediction using zero-crossings analysis of EEG wavelet detail coefficients. , 2016, , .		29
4	NeuroQuest: A comprehensive analysis tool for extracellular neural ensemble recordings. Journal of Neuroscience Methods, 2012, 204, 189-201.	1.3	20
5	Performance analysis of a Principal Component Analysis ensemble classifier for Emotiv headset P300 spellers. , 2014, 2014, 5032-5.		17
6	Millisecond-Timescale Local Network Coding in the Rat Primary Somatosensory Cortex. PLoS ONE, 2011, 6, e21649.	1.1	15
7	MindEdit: A P300-based text editor for mobile devices. Computers in Biology and Medicine, 2017, 80, 97-106.	3.9	14
8	WeBB: A brain-computer interface web browser based on steady-state visual evoked potentials. , 2017, , .		12
9	A deep learning approach to single-trial classification for P300 spellers. , 2018, , .		12
10	A principal component analysis ensemble classifier for P300 speller applications. , 2013, , .		11
11	Modulating Lateral Geniculate Nucleus Neuronal Firing for Visual Prostheses: A Kalman Filter-Based Strategy. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2017, 25, 1917-1927.	2.7	10
12	A Long Short-Term Memory Autoencoder Approach for EEG Motor Imagery Classification. , 2020, , .		9
13	Synergistic Coding by Cortical Neural Ensembles. IEEE Transactions on Information Theory, 2010, 56, 875-889.	1.5	8
14	Temporal precision in populationâ€"but not individual neuronâ€"dynamics reveals rapid experience-dependent plasticity in the rat barrel cortex. Frontiers in Computational Neuroscience, 2014, 8, 155.	1.2	8
15	An Intermixed Color Paradigm for P300 Spellers: A Comparison with Gray-Scale Spellers. , 2017, , .		7
16	P300-based applications for interacting with smart mobile devices. , 2015, , .		6
17	Graphical Models of Functional and Effective Neuronal Connectivity. , 2010, , 129-174.		5
18	Dynamic Bayesian Networks for EEG motor imagery feature extraction. , 2015, , .		5

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19	Predicting all star player in the national basketball association using random forest. , 2017, , .		5
20	Brain-in-Car: A Brain Activity-based Emotion Recognition Embedded System for Automotive. , 2019, , .		5
21	The Importance of Discretization Methods in Machine Learning Applications: A Case Study of Predicting ICU Mortality. Advances in Intelligent Systems and Computing, 2021, , 214-224.	0.5	5
22	Decoding Arm Kinematics from EMG Signals Using Kalman Filter. , 2018, , .		4
23	Reconstructing functional neuronal circuits using dynamic Bayesian networks. , 2008, 2008, 5531-4.		3
24	EEG spectral analysis for attention state assessment: Graphical versus classical classification techniques. , 2012, , .		3
25	Principal component analysis-based spectral recognition for SSVEP-based Brain-Computer Interfaces. , 2015, , .		3
26	A Kalman-based encoder for electrical stimulation modulation in a thalamic network model. , 2015, , .		3
27	In-silico development and assessment of a Kalman filter motor decoder for prosthetic hand control. Computers in Biology and Medicine, 2021, 132, 104353.	3.9	3
28	Electrode Dropout Compensation in Visual Prostheses: An Optimal Object Placement Approach. , 2021, 2021, 6515-6518.		3
29	Inferring neuronal functional connectivity using dynamic Bayesian networks. BMC Neuroscience, 2008, 9, .	0.8	2
30	Identifying functional connectivity of motor neuronal ensembles improves the performance of population decoders. , 2009, , .		2
31	NeuroQuest: A comprehensive tool for large scale neural data processing and analysis. , 2009, , .		2
32	Tuning electrical stimulation for thalamic visual prosthesis: An autoencoder-based approach. , 2016, 2016, 5431-5434.		2
33	Moving object detection and background enhancement for thalamic visual prostheses. , 2016, 2016, 4711-4714.		2
34	Using Autoencoders for Feature Enhancement in Motor Imagery Brain-Computer Interfaces. , 2017, , .		2
35	A deep convolutional visual encoding model of neuronal responses in the LGN. Brain Informatics, 2021, 8, 11.	1.8	2
36	An Ensemble Classification Technique of Neurodegenerative Diseases from Gait Analysis. , 2020, , .		2

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37	Monitoring and Predicting Driving Performance Using EEG Activity. , 2020, , .		2
38	Inferring functional cortical networks from spike train ensembles using Dynamic Bayesian Networks. , 2009, , .		1
39	Causal neuronal networks provide functional signatures of stimulus encoding. , 2010, 2010, 5460-3.		1
40	Enhancement of mobile development of brain-computer platforms. , 2015, , .		1
41	BNEL_VP: An image processing toolbox for visual prostheses. , 2017, , .		1
42	Contextualized Word Representations for Self-Attention Network. , 2018, , .		1
43	A Taxonomy of Discretization Techniques based on Class Labels and Attributes' Relationship. , 2019, , .		1
44	Revamping signal processing for adaptive, real time, bi-directional Brain Machine Interface systems. Proceedings of the IEEE International Conference on Acoustics, Speech, and Signal Processing, 2008, , .	1.8	0
45	Coding stimulus information with cooperative neural populations. , 2009, , .		0
46	Decoding spike train ensembles using the cooperative interaction between task-dependent cortical neurons. BMC Neuroscience, 2009, 10, .	0.8	0
47	An information theoretic approach to identify the role of higher-order interactions between cortical neurons in stimulus coding. , 2009, , .		0
48	Causal networks in the rat barrel cortex provide a signature of stimulus encoding. BMC Neuroscience, 2010, 11, .	0.8	0
49	Network dynamics associated with experience-dependent plasticity in the rat somatosensory cortex. BMC Neuroscience, 2011, 12, .	0.8	0
50	Automated Cell-Type Classification and Death-Detection of Spinal Motoneurons. , 2018, , .		0
51	Visual encoding in rat lateral geniculate nucleus: An artificial neural network approach. , 2018, , .		0
52	A Classification Approach to Recognize the Firing of Spinal Motoneurons in Amyotrophic Lateral Sclerosis. , 2020, 2020, 3680-3683.		0
53	Neuroprotective Effect of Chrysin in Rat Model of Parkinsons Disease: Histopathological Evidence. Egyptian Journal of Experimental Biology Zoology, 2021, 17, 67.	0.1	0
54	A two-stage classification framework for epileptic seizure prediction using EEG wavelet-based features. , 2021, , 263-286.		0

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55	Biomedical computing in the Arab world. Communications of the ACM, 2021, 64, 108-113.	3.3	0
56	On the Extraction of High-Level Visual Features from Lateral Geniculate Nucleus Activity: A Rat Study. Lecture Notes in Computer Science, 2021, , 35-45.	1.0	0
57	Majority-Vote Over Multiple ECG Segments for Risk Assessment (MOMESRA): A Machine Learning Approach for Predicting Cardiovascular Events. , 2021, , .		0
58	An Ensemble Classification Approach for Recognizing Steady-state Visually Evoked Potentials Frequencies. , 2021, , .		0