

Gordon Pipa

List of Publications by Year in descending order

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Version: 2024-02-01

88
papers

3,990
citations

293460

24
h-index

150775

59
g-index

102
all docs

102
docs citations

102
times ranked

5595
citing authors

#	ARTICLE	IF	CITATIONS
1	Bayesian Hierarchical Models can Infer Interpretable Predictions of Leaf Area Index From Heterogeneous Datasets. <i>Frontiers in Environmental Science</i> , 2022, 9, .	1.5	0
2	Talking Cars, Doubtful Users – A Population Study in Virtual Reality. <i>IEEE Transactions on Human-Machine Systems</i> , 2022, 52, 602-612.	2.5	3
3	Learning sparse and meaningful representations through embodiment. <i>Neural Networks</i> , 2021, 134, 23-41.	3.3	3
4	Real-time dialogue between experimenters and dreamers during REM sleep. <i>Current Biology</i> , 2021, 31, 1417-1427.e6.	1.8	51
5	Westdrive X LoopAR: An Open-Access Virtual Reality Project in Unity for Evaluating User Interaction Methods during Takeover Requests. <i>Sensors</i> , 2021, 21, 1879.	2.1	6
6	Feasible and Adaptive Multimodal Trajectory Prediction with Semantic Maneuver Fusion. , 2021, , .		3
7	A trajectory-based loss function to learn missing terms in bifurcating dynamical systems. <i>Scientific Reports</i> , 2021, 11, 20394.	1.6	5
8	Biologically Inspired Deep Learning Model for Efficient Foveal-Peripheral Vision. <i>Frontiers in Computational Neuroscience</i> , 2021, 15, 746204.	1.2	2
9	Project Westdrive: Unity City With Self-Driving Cars and Pedestrians for Virtual Reality Studies. <i>Frontiers in ICT</i> , 2020, 7, .	3.6	4
10	Reliability and comparability of human brain structural covariance networks. <i>NeuroImage</i> , 2020, 220, 117104.	2.1	37
11	Predicting epileptic seizures using nonnegative matrix factorization. <i>PLoS ONE</i> , 2020, 15, e0228025.	1.1	24
12	Adaptive Blending Units: Trainable Activation Functions for Deep Neural Networks. <i>Advances in Intelligent Systems and Computing</i> , 2020, , 37-50.	0.5	4
13	How does the method change what we measure? Comparing virtual reality and text-based surveys for the assessment of moral decisions in traffic dilemmas. <i>PLoS ONE</i> , 2019, 14, e0223108.	1.1	12
14	Moral Judgements on the Actions of Self-Driving Cars and Human Drivers in Dilemma Situations From Different Perspectives. <i>Frontiers in Psychology</i> , 2019, 10, 2415.	1.1	35
15	A Bayesian Monte Carlo approach for predicting the spread of infectious diseases. <i>PLoS ONE</i> , 2019, 14, e0225838.	1.1	21
16	Human Decisions in Moral Dilemmas are Largely Described by Utilitarianism: Virtual Car Driving Study Provides Guidelines for Autonomous Driving Vehicles. <i>Science and Engineering Ethics</i> , 2019, 25, 399-418.	1.7	85
17	Combining Deep Learning and (Structural) Feature-Based Classification Methods for Copyright-Protected PDF Documents. <i>Lecture Notes in Computer Science</i> , 2019, , 69-75.	1.0	0
18	Bistable Perception in Conceptor Networks. <i>Lecture Notes in Computer Science</i> , 2019, , 24-34.	1.0	0

#	ARTICLE	IF	CITATIONS
19	2D:4D and spatial abilities: From rats to humans. <i>Neurobiology of Learning and Memory</i> , 2018, 151, 85-87.	1.0	11
20	A Unifying Framework of Synaptic and Intrinsic Plasticity in Neural Populations. <i>Neural Computation</i> , 2018, 30, 945-986.	1.3	10
21	Investigating consciousness in the sleep laboratory – an interdisciplinary perspective on lucid dreaming. <i>Interdisciplinary Science Reviews</i> , 2018, 43, 192-207.	1.0	13
22	Autonomous Vehicles Require Socio-Political Acceptance – An Empirical and Philosophical Perspective on the Problem of Moral Decision Making. <i>Frontiers in Behavioral Neuroscience</i> , 2018, 12, 31.	1.0	54
23	Response: Commentary: Using Virtual Reality to Assess Ethical Decisions in Road Traffic Scenarios: Applicability of Value-of-Life-Based Models and Influences of Time Pressure. <i>Frontiers in Behavioral Neuroscience</i> , 2018, 12, 128.	1.0	1
24	No effect of δ -GPC on lucid dream induction or dream content. <i>Somnologie</i> , 2017, 21, 180-186.	0.9	6
25	Cortical Spike Synchrony as a Measure of Input Familiarity. <i>Neural Computation</i> , 2017, 29, 2491-2510.	1.3	13
26	Using Virtual Reality to Assess Ethical Decisions in Road Traffic Scenarios: Applicability of Value-of-Life-Based Models and Influences of Time Pressure. <i>Frontiers in Behavioral Neuroscience</i> , 2017, 11, 122.	1.0	70
27	Classifying Bio-Inspired Model of Point-Light Human Motion Using Echo State Networks. <i>Lecture Notes in Computer Science</i> , 2017, , 84-91.	1.0	3
28	Serial Spike Time Correlations Affect Probability Distribution of Joint Spike Events. <i>Frontiers in Computational Neuroscience</i> , 2016, 10, 139.	1.2	1
29	Persistent Memory in Single Node Delay-Coupled Reservoir Computing. <i>PLoS ONE</i> , 2016, 11, e0165170.	1.1	4
30	RM-SORN: a reward-modulated self-organizing recurrent neural network. <i>Frontiers in Computational Neuroscience</i> , 2015, 9, 36.	1.2	11
31	Application of Parallel Factor Analysis (PARAFAC) to electrophysiological data. <i>Frontiers in Neuroinformatics</i> , 2015, 8, 84.	1.3	5
32	Assessing Coupling Dynamics from an Ensemble of Time Series. <i>Entropy</i> , 2015, 17, 1958-1970.	1.1	48
33	A Statistical Framework to Infer Delay and Direction of Information Flow from Measurements of Complex Systems. <i>Neural Computation</i> , 2015, 27, 1555-1608.	1.3	18
34	Homeostatic Plasticity for Single Node Delay-Coupled Reservoir Computing. <i>Neural Computation</i> , 2015, 27, 1159-1185.	1.3	5
35	Untangling cross-frequency coupling in neuroscience. <i>Current Opinion in Neurobiology</i> , 2015, 31, 51-61.	2.0	455
36	An Introduction to Delay-Coupled Reservoir Computing. <i>Springer Series in Bio-/neuroinformatics</i> , 2015, , 63-90.	0.1	7

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37	Kinesthetic and vestibular information modulate alpha activity during spatial navigation: a mobile EEG study. <i>Frontiers in Human Neuroscience</i> , 2014, 8, 71.	1.0	90
38	Neuronal oscillations form parietal/frontal networks during contour integration. <i>Frontiers in Integrative Neuroscience</i> , 2014, 8, 64.	1.0	20
39	Spatiotemporal Computations of an Excitable and Plastic Brain: Neuronal Plasticity Leads to Noise-Robust and Noise-Constructive Computations. <i>PLoS Computational Biology</i> , 2014, 10, e1003512.	1.5	28
40	Forced-choice decision-making in modified trolley dilemma situations: a virtual reality and eye tracking study. <i>Frontiers in Behavioral Neuroscience</i> , 2014, 8, 426.	1.0	105
41	Preoperative Interleukin-22 Values Add Valuable Information for Outcome Prediction Following Orthotopic Liver Transplantation: A Preliminary Study. <i>Annals of Transplantation</i> , 2014, 19, 503-512.	0.5	1
42	Optimized Temporal Multiplexing for Reservoir Computing with a Single Delay-Coupled Node. <i>IEICE Proceeding Series</i> , 2014, 1, 519-522.	0.0	2
43	Impact of Spike Train Autostructure on Probability Distribution of Joint Spike Events. <i>Neural Computation</i> , 2013, 25, 1123-1163.	1.3	35
44	Encoding Through Patterns: Regression Tree-Based Neuronal Population Models. <i>Neural Computation</i> , 2013, 25, 1953-1993.	1.3	11
45	Missing mass approximations for the partition function of stimulus driven Ising models. <i>Frontiers in Computational Neuroscience</i> , 2013, 7, 96.	1.2	4
46	Teildisziplinen der Kognitionswissenschaft. , 2013, , 23-151.		0
47	Memory Trace in Spiking Neural Networks. <i>Lecture Notes in Computer Science</i> , 2013, , 264-271.	1.0	0
48	Mapping of Visual Receptive Fields by Tomographic Reconstruction. <i>Neural Computation</i> , 2012, 24, 2543-2578.	1.3	9
49	Statistical modeling approach for detecting generalized synchronization. <i>Physical Review E</i> , 2012, 85, 056215.	0.8	17
50	Context Matters: The Illusive Simplicity of Macaque V1 Receptive Fields. <i>PLoS ONE</i> , 2012, 7, e39699.	1.1	17
51	Extraction of Network Topology From Multi-Electrode Recordings: Is there a Small-World Effect?. <i>Frontiers in Computational Neuroscience</i> , 2011, 5, 4.	1.2	93
52	Higher Order Spike Synchrony in Prefrontal Cortex during Visual Memory. <i>Frontiers in Computational Neuroscience</i> , 2011, 5, 23.	1.2	24
53	Spike Train Auto-Structure Impacts Post-Synaptic Firing and Timing-Based Plasticity. <i>Frontiers in Computational Neuroscience</i> , 2011, 5, 60.	1.2	0
54	Bivariate and Multivariate NeuroXidence: A Robust and Reliable Method to Detect Modulations of Spike-Spike Synchronization Across Experimental Conditions. <i>Frontiers in Neuroinformatics</i> , 2011, 5, 14.	1.3	4

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55	LOW HEMOGLOBIN LEVELS DURING NORMOVOLEMIA ARE ASSOCIATED WITH ELECTROCARDIOGRAPHIC CHANGES IN PIGS. Shock, 2011, 35, 375-381.	1.0	5
56	A new look at gamma? High- (>60ÅHz) Î³-band activity in cortical networks: Function, mechanisms and impairment. Progress in Biophysics and Molecular Biology, 2011, 105, 14-28.	1.4	173
57	Transfer entropyâ€”a model-free measure of effective connectivity for the neurosciences. Journal of Computational Neuroscience, 2011, 30, 45-67.	0.6	753
58	Applying the Multivariate Time-Rescaling Theorem to Neural Population Models. Neural Computation, 2011, 23, 1452-1483.	1.3	13
59	Emerging Bayesian Priors in a Self-Organizing Recurrent Network. Lecture Notes in Computer Science, 2011, , 127-134.	1.0	7
60	Effect of the Topology and Delayed Interactions in Neuronal Networks Synchronization. PLoS ONE, 2011, 6, e19900.	1.1	50
61	Goodness-of-fit tests for neural population models: the multivariate time-rescaling theorem. BMC Neuroscience, 2010, 11, .	0.8	0
62	Discrete Time Rescaling Theorem: Determining Goodness of Fit for Discrete Time Statistical Models of Neural Spiking. Neural Computation, 2010, 22, 2477-2506.	1.3	48
63	A Color-Based Visualization Technique for Multielectrode Spike Trains. Journal of Neurophysiology, 2009, 102, 3766-3778.	0.9	8
64	Performance- and stimulus-dependent oscillations in monkey prefrontal cortex during short-term memory. Frontiers in Integrative Neuroscience, 2009, 3, 25.	1.0	28
65	SORN: a Self-organizing Recurrent Neural Network. Frontiers in Computational Neuroscience, 2009, 3, 23.	1.2	178
66	Neural synchrony in cortical networks: history, concept and current status. Frontiers in Integrative Neuroscience, 2009, 3, 17.	1.0	571
67	NeuroXidence: reliable and efficient analysis of an excess or deficiency of joint-spike events. BMC Neuroscience, 2009, 10, .	0.8	0
68	Auto-structure of spike trains matters for testing on synchronous activity. BMC Neuroscience, 2009, 10, .	0.8	1
69	A mechanism for achieving zero-lag long-range synchronization of neural activity. BMC Neuroscience, 2009, 10, .	0.8	1
70	Detection of task-related synchronous firing patterns. BMC Neuroscience, 2009, 10, .	0.8	0
71	EEG processing with TESPAPAR for depth of anesthesia detection. BMC Neuroscience, 2009, 10, .	0.8	2
72	EEG under anesthesiaâ€”Feature extraction with TESPAPAR. Computer Methods and Programs in Biomedicine, 2009, 95, 191-202.	2.6	14

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73	General Anesthesia Increases Temporal Precision and Decreases Power of the Brainstem Auditory-evoked Response-related Segments of the Electroencephalogram. <i>Anesthesiology</i> , 2009, 111, 340-355.	1.3	5
74	Far in Space and Yet in Synchrony: Neuronal Mechanisms for Zero-Lag Long-Range Synchronization. , 2009, , 143-167.		0
75	NeuroXidence: reliable and efficient analysis of an excess or deficiency of joint-spike events. <i>Journal of Computational Neuroscience</i> , 2008, 25, 64-88.	0.6	69
76	Dynamical relaying can yield zero time lag neuronal synchrony despite long conduction delays. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 17157-17162.	3.3	310
77	Behavioral performance modulates spike field coherence in monkey prefrontal cortex. <i>NeuroReport</i> , 2008, 19, 235-238.	0.6	17
78	Predictive Coding in Cortical Microcircuits. <i>Lecture Notes in Computer Science</i> , 2008, , 386-395.	1.0	2
79	Auto-structure of Presynaptic Activity Defines Postsynaptic Firing Statistics and Can Modulate STDP-Based Structure Formation and Learning. <i>Lecture Notes in Computer Science</i> , 2008, , 413-422.	1.0	1
80	Achieving synchronization of networks by an auxiliary hub. <i>Europhysics Letters</i> , 2007, 77, 50010.	0.7	14
81	Fading memory and time series prediction in recurrent networks with different forms of plasticity. <i>Neural Networks</i> , 2007, 20, 312-322.	3.3	107
82	How specific is synchronous neuronal firing?. <i>BMC Neuroscience</i> , 2007, 8, .	0.8	0
83	Importance of electrophysiological signal features assessed by classification trees. <i>Neurocomputing</i> , 2007, 70, 2017-2021.	3.5	0
84	Validation of task-related excess of spike coincidences based on NeuroXidence. <i>Neurocomputing</i> , 2007, 70, 2064-2068.	3.5	32
85	Zero-Lag Long Range Synchronization of Neurons Is Enhanced by Dynamical Relaying. <i>Lecture Notes in Computer Science</i> , 2007, , 904-913.	1.0	2
86	Non-parametric significance estimation of joint-spike events by shuffling and resampling. <i>Neurocomputing</i> , 2003, 52-54, 31-37.	3.5	45
87	Significance of joint-spike events based on trial-shuffling by efficient combinatorial methods. <i>Complexity</i> , 2003, 8, 79-86.	0.9	18
88	Real-Time Dialogue between Experimenters and Dreamers During rem Sleep. <i>SSRN Electronic Journal</i> , 0, , .	0.4	4