José C PrÃ-ncipe

List of Publications by Year in descending order

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357 papers 13,511 citations

³⁸⁷⁴² 50 h-index

28297 105 g-index

358 all docs

358 docs citations

358 times ranked

7535 citing authors

#	Article	IF	Citations
1	Multiscale principle of relevant information for hyperspectral image classification. Machine Learning, 2023, 112, 1227-1252.	5.4	5
2	Modularizing Deep Learning via Pairwise Learning With Kernels. IEEE Transactions on Neural Networks and Learning Systems, 2022, 33, 1441-1451.	11.3	7
3	Functional Bayesian Filter. IEEE Transactions on Signal Processing, 2022, 70, 57-71.	5.3	12
4	A self-learning cognitive architecture exploiting causality from rewards. Neural Networks, 2022, 150, 274-292.	5.9	1
5	Target Detection and Segmentation in Circular-Scan Synthetic Aperture Sonar Images Using Semisupervised Convolutional Encoder–Decoders. IEEE Journal of Oceanic Engineering, 2022, 47, 1099-1128.	3.8	8
6	Minimum Error Entropy Kalman Filter. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2021, 51, 5819-5829.	9.3	97
7	Understanding Convolutional Neural Networks With Information Theory: An Initial Exploration. IEEE Transactions on Neural Networks and Learning Systems, 2021, 32, 435-442.	11.3	30
8	Associations between MSE and SSIM as cost functions in linear decomposition with application to bit allocation for sparse coding. Neurocomputing, 2021, 422, 139-149.	5.9	17
9	Effects of Outliers on the Maximum Correntropy Estimation: A Robustness Analysis. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2021, 51, 4007-4012.	9.3	14
10	Slow Dynamics of Acute Postoperative Pain Intensity Time Series Determined via Wavelet Analysis Are Associated With the Risk of Severe Postoperative Day 30 Pain. Anesthesia and Analgesia, 2021, 132, 1465-1474.	2.2	3
11	Coral Image Segmentation with Point-Supervision via Latent Dirichlet Allocation with Spatial Coherence. Journal of Marine Science and Engineering, 2021, 9, 157.	2.6	1
12	Marked point process representation of oscillatory dynamics underlying working memory. Journal of Neural Engineering, 2021, 18, 026016.	3.5	3
13	A multi-channel peripheral nerve stimulator with integrate-and-fire encoding. Journal of Medical Engineering and Technology, 2021, 45, 187-196.	1.4	O
14	Toward a Kernel-Based Uncertainty Decomposition Framework for Data and Models. Neural Computation, 2021, 33, 1164-1198.	2.2	0
15	Interpretable fault detection using projections of mutual information matrix. Journal of the Franklin Institute, 2021, 358, 4028-4057.	3.4	3
16	Deep Deterministic Information Bottleneck with Matrix-Based Entropy Functional., 2021,,.		8
17	Reinforcement Learning in Reproducing Kernel Hilbert Spaces. IEEE Signal Processing Magazine, 2021, 38, 34-45.	5.6	3
18	Unsupervised foveal vision neural architecture with top-down attention. Neural Networks, 2021, 141, 145-159.	5.9	3

#	Article	IF	CITATIONS
19	Biologically-Inspired Pulse Signal Processing for Intelligence at the Edge. Frontiers in Artificial Intelligence, 2021, 4, 568384.	3.4	3
20	MIMO Modeling by Learning Explicitly the Projection Space: The Maximum Correlation Ratio Cost Function. IEEE Transactions on Signal Processing, 2021, 69, 6039-6054.	5.3	2
21	Faster Convergence in Deep-Predictive-Coding Networks to Learn Deeper Representations. IEEE Transactions on Neural Networks and Learning Systems, 2021, PP, 1-15.	11.3	2
22	A Taxonomy for Neural Memory Networks. IEEE Transactions on Neural Networks and Learning Systems, 2020, 31, 1780-1793.	11.3	14
23	On Kernel Method–Based Connectionist Models and Supervised Deep Learning Without Backpropagation. Neural Computation, 2020, 32, 97-135.	2.2	9
24	Probability Density Rank-Based Quantization for Convex Universal Learning Machines. IEEE Transactions on Neural Networks and Learning Systems, 2020, 31, 3100-3113.	11.3	9
25	Regularized Training of Convolutional Autoencoders using the RÃ@nyi-Stratonovich Value of Information. , 2020, , .		0
26	Cognitive Architecture for Video Games. , 2020, , .		1
27	Odor tracking in aquatic organisms: the importance of temporal and spatial intermittency of the turbulent plume. Scientific Reports, 2020, 10, 7961.	3.3	20
28	Augmented Space Linear Models. IEEE Transactions on Signal Processing, 2020, 68, 2724-2738.	5.3	4
29	Theory and Algorithms for Pulse Signal Processing. IEEE Transactions on Circuits and Systems I: Regular Papers, 2020, 67, 2707-2718.	5.4	4
30	Measuring the Discrepancy between Conditional Distributions: Methods, Properties and Applications. , 2020, , .		6
31	Procedural Memory Augmented Deep Reinforcement Learning. IEEE Transactions on Artificial Intelligence, 2020, 1, 105-120.	4.7	2
32	Short-term prediction of glucose in type 1 diabetes using kernel adaptive filters. Medical and Biological Engineering and Computing, 2019, 57, 27-46.	2.8	21
33	Clustering Neural Patterns in Kernel Reinforcement Learning Assists Fast Brain Control in Brain-Machine Interfaces. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2019, 27, 1684-1694.	4.9	19
34	Multivariate Extension of Matrix-based Renyi's \hat{i}_{\pm} -order Entropy Functional. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2019, 42, 1-1.	13.9	29
35	Maximum Correntropy Criterion With Variable Center. IEEE Signal Processing Letters, 2019, 26, 1212-1216.	3.6	71
36	Kernel Kalman Filtering With Conditional Embedding and Maximum Correntropy Criterion. IEEE Transactions on Circuits and Systems I: Regular Papers, 2019, 66, 4265-4277.	5.4	41

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37	Understanding autoencoders with information theoretic concepts. Neural Networks, 2019, 117, 104-123.	5.9	88
38	IEEE Fellows - Class of 2019 [Society Briefs]. IEEE Computational Intelligence Magazine, 2019, 14, 9-12.	3.2	0
39	A Differential-geometric Approach for Globally Solving a Non-convex, Discontinuous Depth Estimation Problem for Plenoptic Camera Images. , 2019, , .		0
40	Simple Stopping Criteria for Information Theoretic Feature Selection. Entropy, 2019, 21, 99.	2.2	6
41	Predicting wrist kinematics from motor unit discharge timings for the control of active prostheses. Journal of NeuroEngineering and Rehabilitation, 2019, 16, 47.	4.6	65
42	Concept drift detection and adaptation with hierarchical hypothesis testing. Journal of the Franklin Institute, 2019, 356, 3187-3215.	3.4	34
43	Using a Recurrent Kernel Learning Machine for Small-Sample Image Classification. , 2019, , .		1
44	Fast segmentation for large and sparsely labeled coral images. , 2019, , .		7
45	Discrimination of Movement-Related Cortical Potentials Exploiting Unsupervised Learned Representations From ECoGs. Frontiers in Neuroscience, 2019, 13, 1248.	2.8	1
46	Marine Animal Classification With Correntropy-Loss-Based Multiview Learning. IEEE Journal of Oceanic Engineering, 2019, 44, 1116-1129.	3.8	4
47	A real-time, power-efficient architecture for mean-shift image segmentation. Journal of Real-Time Image Processing, 2018, 14, 379-394.	3.5	23
48	A flexible testing environment for visual question answering with performance evaluation. Neurocomputing, 2018, 291, 128-135.	5.9	5
49	Complex correntropy function: Properties, and application to a channel equalization problem. Expert Systems With Applications, 2018, 107, 173-181.	7.6	28
50	Fairness constrained diffusion adaptive power control for dense small cell network. Telecommunication Systems, 2018, 68, 373-384.	2.5	1
51	Insights Into the Robustness of Minimum Error Entropy Estimation. IEEE Transactions on Neural Networks and Learning Systems, 2018, 29, 731-737.	11.3	51
52	Hierarchical linear dynamical systems for unsupervised musical note recognition. Journal of the Franklin Institute, 2018, 355, 1638-1662.	3.4	1
53	Surprise-Novelty Information Processing for Gaussian Online Active Learning (SNIP-GOAL)., 2018,,.		3
54	Kernelized Q-Learning for Large-Scale, Potentially Continuous, Markov Decision Processes., 2018,,.		0

#	Article	IF	Citations
55	JOINT IMAGE SEGMENTATION AND CLASSIFICATION WITH APPLICATION TO CLUTTERED CORAL IMAGES. , 2018, , .		0
56	Nearest-Instance-Centroid-Estimation Linear Discriminant Analysis (Nice Lda)., 2018,,.		0
57	Correntropy Based Hierarchical Linear Dynamical System For Speech Recognition. , 2018, , .		2
58	Partitioning Relational Matrices of Similarities or Dissimilarities Using the Value of Information. , 2018, , .		1
59	Guided Policy Exploration for Markov Decision Processes Using an Uncertainty-Based Value-of-Information Criterion. IEEE Transactions on Neural Networks and Learning Systems, 2018, 29, 2080-2098.	11.3	18
60	Biologically-Inspired Spike-Based Automatic Speech Recognition of Isolated Digits Over a Reproducing Kernel Hilbert Space. Frontiers in Neuroscience, 2018, 12, 194.	2.8	5
61	Robust Period Estimation Using Mutual Information for Multiband Light Curves in the Synoptic Survey Era. Astrophysical Journal, Supplement Series, 2018, 236, 12.	7.7	24
62	Quantized Attention-Gated Kernel Reinforcement Learning for Brain–Machine Interface Decoding. IEEE Transactions on Neural Networks and Learning Systems, 2017, 28, 873-886.	11.3	27
63	Maximum correntropy Kalman filter. Automatica, 2017, 76, 70-77.	5.0	533
64	Kernel Risk-Sensitive Loss: Definition, Properties and Application to Robust Adaptive Filtering. IEEE Transactions on Signal Processing, 2017, 65, 2888-2901.	5.3	130
65	Man/machine interface based on the discharge timings of spinal motor neurons after targeted muscle reinnervation. Nature Biomedical Engineering, 2017, 1 , .	22.5	245
66	Marine animal classification using UMSLI in HBOI optical test facility. Multimedia Tools and Applications, 2017, 76, 23117-23138.	3.9	6
67	Transfer Learning in Adaptive Filters: The Nearest Instance Centroid-Estimation Kernel Least-Mean-Square Algorithm. IEEE Transactions on Signal Processing, 2017, 65, 6520-6535.	5.3	42
68	Adaptive filtering based on extended kernel recursive maximum correntropy. , 2017, , .		1
69	A new type of distance metric and its use for clustering. Evolving Systems, 2017, 8, 167-177.	3.9	22
70	Fusing attention with visual question answering. , 2017, , .		0
71	A novel methodology to quantify dense EEG in cognitive tasks. , 2017, , .		1
72	Fast feedforward non-parametric deep learning network with automatic feature extraction. , 2017, , .		2

#	Article	IF	Citations
73	Automatic insect recognition using optical flight dynamics modeled by kernel adaptive ARMA network. , 2017, , .		5
74	Balancing exploration and exploitation in reinforcement learning using a value of information criterion. , 2017, , .		18
75	Robust support vector machines based on the rescaled hinge loss function. Pattern Recognition, 2017, 63, 139-148.	8.1	76
76	Topographical measures of functional connectivity as biomarkers for post-stroke motor recovery. Journal of NeuroEngineering and Rehabilitation, 2017, 14, 67.	4.6	57
77	Autoencoders trained with relevant information: Blending Shannon and Wiener's perspectives. , 2017,		6
78	A Saccade Based Framework for Real-Time Motion Segmentation Using Event Based Vision Sensors. Frontiers in Neuroscience, 2017, 11, 83.	2.8	9
79	A Marked Point Process Framework for Extracellular Electrical Potentials. Frontiers in Systems Neuroscience, 2017, 11, 95.	2.5	12
80	Undersea LiDAR imager for unobtrusive and eye safe marine wildlife detection and classification., $2017, , .$		7
81	Correntropy induced joint power and admission control algorithm for dense small cell network. IET Communications, 2016, 10, 2154-2161.	2.2	12
82	Restoring Behavior via Inverse Neurocontroller in a Lesioned Cortical Spiking Model Driving a Virtual Arm. Frontiers in Neuroscience, 2016, 10, 28.	2.8	32
83	Insights into Entropy as a Measure of Multivariate Variability. Entropy, 2016, 18, 196.	2.2	26
84	Empirical data analysis: A new tool for data analytics. , 2016, , .		29
85	A Study of Musical Pitch Distance Using a Self-Organized Hierarchical Linear Dynamical System on Acoustic Signals. Computer Music Journal, 2016, 40, 68-82.	0.1	3
86	Kernel adaptive filtering subject to equality function constraints. , 2016, , .		0
87	Smelling Time: A Neural Basis for Olfactory Scene Analysis. Trends in Neurosciences, 2016, 39, 649-655.	8.6	22
88	Fault detection via recurrence time statistics and one-class classification. Pattern Recognition Letters, 2016, 84, 8-14.	4.2	16
89	Kernel Learning for Dynamic Texture Synthesis. IEEE Transactions on Image Processing, 2016, 25, 4782-4795.	9.8	32
90	A reconfigurable parallel FPGA accelerator for the adapt-then-combine diffusion LMS algorithm. , 2016, , .		0

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91	Predicting visual attention using gamma kernels. , 2016, , .		7
92	Information point set registration for shape recognition. , 2016, , .		5
93	Kernel least mean square with adaptive kernel size. Neurocomputing, 2016, 191, 95-106.	5.9	83
94	Generalized Correntropy for Robust Pub _newline ? Adaptive Filtering. IEEE Transactions on Signal Processing, 2016, 64, 3376-3387.	5.3	515
95	The Kernel Adaptive Autoregressive-Moving-Average Algorithm. IEEE Transactions on Neural Networks and Learning Systems, 2016, 27, 334-346.	11.3	27
96	Sparse Least Logarithmic Absolute Difference Algorithm with Correntropy-Induced Metric Penalty. Circuits, Systems, and Signal Processing, 2016, 35, 1077-1089.	2.0	15
97	Efficient and robust deep learning with Correntropy-induced loss function. Neural Computing and Applications, 2016, 27, 1019-1031.	5.6	67
98	Neurally Encoding Time for Olfactory Navigation. PLoS Computational Biology, 2016, 12, e1004682.	3.2	33
99	Marine animal classification using combined CNN and hand-designed image features. , 2015, , .		28
100	Proportionate Minimum Error Entropy Algorithm for Sparse System Identification. Entropy, 2015, 17, 5995-6006.	2.2	24
101	Convergence of a Fixed-Point Minimum Error Entropy Algorithm. Entropy, 2015, 17, 5549-5560.	2.2	29
102	Kernel Temporal Differences for Neural Decoding. Computational Intelligence and Neuroscience, 2015, 2015, 1-17.	1.7	9
103	Functional Connectivity in Frequency-Tagged Cortical Networks During Active Harm Avoidance. Brain Connectivity, 2015, 5, 292-302.	1.7	10
104	An algorithm based on non-squared sum of the errors. Signal Processing, 2015, 117, 188-191.	3.7	3
105	Parallel flow in Deep Predictive Coding Networks. , 2015, , .		0
106	A switch kernel width method of correntropy for channel estimation., 2015,,.		20
107	Group feature selection in image classification with multiple kernel learning. , 2015, , .		4
108	A model based approach to exploration of continuous-state MDPs using Divergence-to-Go., 2015,,.		2

#	Article	IF	CITATIONS
109	A New Clustering Separation Measure Based on Negentropy. Journal of Control, Automation and Electrical Systems, 2015, 26, 28-45.	2.0	4
110	Context Dependent Encoding Using Convolutional Dynamic Networks. IEEE Transactions on Neural Networks and Learning Systems, 2015, 26, 1992-2004.	11.3	7
111	Online Active Learning for Automatic Target Recognition. IEEE Journal of Oceanic Engineering, 2015, 40, 583-591.	3.8	14
112	Measures of Entropy From Data Using Infinitely Divisible Kernels. IEEE Transactions on Information Theory, 2015, 61, 535-548.	2.4	61
113	A NOVEL, FULLY AUTOMATED PIPELINE FOR PERIOD ESTIMATION IN THE EROS 2 DATA SET. Astrophysical Journal, Supplement Series, 2015, 216, 25.	7.7	8
114	Convergence of a Fixed-Point Algorithm under Maximum Correntropy Criterion. IEEE Signal Processing Letters, 2015, 22, 1723-1727.	3.6	249
115	Minimum Error Entropy Algorithms with Sparsity Penalty Constraints. Entropy, 2015, 17, 3419-3437.	2.2	20
116	Universal Approximation with Convex Optimization: Gimmick or Reality? [Discussion Forum]. IEEE Computational Intelligence Magazine, 2015, 10, 68-77.	3.2	48
117	An Adaptive Signal Processing Framework for PV Power Maximization. Circuits, Systems, and Signal Processing, 2015, 34, 2973-2992.	2.0	5
118	Mixed generative and supervised learning modes in Deep Predictive Coding Networks. , 2015, , .		0
119	Linear discriminant analysis with an information divergence criterion. , 2015, , .		1
120	Repairing lesions via kernel adaptive inverse control in a biomimetic model of sensorimotor cortex. , 2015, , .		6
121	A variable step-size adaptive algorithm under maximum correntropy criterion. , 2015, , .		10
122	Self-organizing maps with information theoretic learning. Neurocomputing, 2015, 147, 3-14.	5.9	17
123	Representing and decomposing neural potential signals. Current Opinion in Neurobiology, 2015, 31, 13-17.	4.2	9
124	Quantized mixture kernel least mean square., 2014,,.		6
125	Dynamic sparse coding with smoothing proximal gradient method. , 2014, , .		5
126	Intermittency Coding in the Primary Olfactory System: A Neural Substrate for Olfactory Scene Analysis. Journal of Neuroscience, 2014, 34, 941-952.	3.6	28

#	Article	IF	Citations
127	Projentropy: Using entropy to optimize spatial projections. , 2014, , .		3
128	An Extended Result on the Optimal Estimation Under the Minimum Error Entropy Criterion. Entropy, 2014, 16, 2223-2233.	2.2	1
129	A Note on the W-S Lower Bound of the MEE Estimation. Entropy, 2014, 16, 814-824.	2.2	0
130	A Tensor-Product-Kernel Framework for Multiscale Neural Activity Decoding and Control. Computational Intelligence and Neuroscience, 2014, 2014, 1-16.	1.7	12
131	An asymmetric stagewise least square loss function for imbalanced classification. , 2014, , .		4
132	Pitch estimation using non-negative matrix factorization. , 2014, , .		0
133	Correntropy kernel temporal differences for reinforcement learning brain machine interfaces. , 2014, , .		2
134	Sparse kernel recursive least squares using L <inf>1</inf> regularization and a fixed-point sub-iteration. , 2014, , .		6
135	Neural Decoding with Kernel-Based Metric Learning. Neural Computation, 2014, 26, 1080-1107.	2.2	34
136	On the optimization properties of the correntropic loss function in data analysis. Optimization Letters, 2014, 8, 823-839.	1.6	27
137	The C-loss function for pattern classification. Pattern Recognition, 2014, 47, 441-453.	8.1	99
138	Learning Nonlinear Generative Models of Time Series With a Kalman Filter in RKHS. IEEE Transactions on Signal Processing, 2014, 62, 141-155.	5.3	36
139	Steady-State Mean-Square Error Analysis for Adaptive Filtering under the Maximum Correntropy Criterion. IEEE Signal Processing Letters, 2014, 21, 880-884.	3.6	354
140	Trimmed affine projection algorithms. , 2014, , .		5
141	Computational intelligence in control. Annual Reviews in Control, 2014, 38, 233-242.	7.9	16
142	Computational Intelligence Challenges and Applications on Large-Scale Astronomical Time Series Databases. IEEE Computational Intelligence Magazine, 2014, 9, 27-39.	3.2	55
143	Learning dependence from samples. International Journal of Bioinformatics Research and Applications, 2014, 10, 43.	0.2	3
144	Feature selection based on survival Cauchy-Schwartz mutual information. , 2014, , .		4

#	Article	lF	CITATIONS
145	Cognitive Architectures for Sensory Processing. Proceedings of the IEEE, 2014, 102, 514-525.	21.3	11
146	Quantized Kernel Recursive Least Squares Algorithm. IEEE Transactions on Neural Networks and Learning Systems, 2013, 24, 1484-1491.	11.3	170
147	A fast proximal method for convolutional sparse coding. , 2013, , .		50
148	Quantifying bursting neuron activity from calcium signals using blind deconvolution. Journal of Neuroscience Methods, 2013, 218, 196-205.	2.5	12
149	Invexity of the Minimum Error Entropy Criterion. IEEE Signal Processing Letters, 2013, 20, 1159-1162.	3.6	10
150	A scalable RC architecture for mean-shift clustering. , 2013, , .		11
151	Fixed budget quantized kernel least-mean-square algorithm. Signal Processing, 2013, 93, 2759-2770.	3.7	67
152	Kernel minimum error entropy algorithm. Neurocomputing, 2013, 121, 160-169.	5.9	99
153	Diffusion least-mean squares over adaptive networks with dynamic topologies. , 2013, , .		3
154	A parameter-free kernel design based on cumulative distribution function for correntropy. , 2013, , .		1
155	Mixture kernel least mean square. , 2013, , .		27
156	Survival kernel with application to kernel adaptive filtering. , 2013, , .		7
157	Analysis on extended kernel recursive least squares algorithm. , 2013, , .		0
158	A Novel Nonparametric Distance Estimator for Densities with Error Bounds. Entropy, 2013, 15, 1609-1623.	2.2	4
159	Kernel recurrent system trained by real-time recurrent learning algorithm. , 2013, , .		4
160	A greedy algorithm for model selection of tensor decompositions. , 2013, , .		5
161	The Cortical Mouse: A Piece of Forgotten History in Noninvasive Brain–Computer Interfaces. IEEE Pulse, 2013, 4, 26-29.	0.3	4
162	On the Smoothed Minimum Error Entropy Criterion. Entropy, 2012, 14, 2311-2323.	2.2	19

#	Article	lF	Citations
163	Conditional Association. Neural Computation, 2012, 24, 1882-1905.	2.2	6
164	Strictly Positive-Definite Spike Train Kernels for Point-Process Divergences. Neural Computation, 2012, 24, 2223-2250.	2.2	24
165	STOCHASTIC INFORMATION GRADIENT ALGORITHM WITH GENERALIZED GAUSSIAN DISTRIBUTION MODEL. Journal of Circuits, Systems and Computers, 2012, 21, 1250006.	1.5	15
166	Data-driven tree-structured Bayesian network for image segmentation. , 2012, , .		1
167	Some Further Results on the Minimum Error Entropy Estimation. Entropy, 2012, 14, 966-977.	2.2	20
168	Survival Information Potential: A New Criterion for Adaptive System Training. IEEE Transactions on Signal Processing, 2012, 60, 1184-1194.	5.3	69
169	Temporal context in object recognition. , 2012, , .		1
170	Maximum Correntropy Estimation Is a Smoothed MAP Estimation. IEEE Signal Processing Letters, 2012, 19, 491-494.	3.6	256
171	Sequential causal estimation and learning from time-varying images. , 2012, , .		0
172	Kernel classifier with Correntropy loss. , 2012, , .		9
173	Nearest Neighbor Distributions for imbalanced classification. , 2012, , .		18
174	An adaptive kernel width update for correntropy. , 2012, , .		19
175	Hidden state estimation using the Correntropy Filter with fixed point update and adaptive kernel size. , 2012, , .		65
176	Mean square convergence analysis for kernel least mean square algorithm. Signal Processing, 2012, 92, 2624-2632.	3.7	41
177	A novel extended kernel recursive least squares algorithm. Neural Networks, 2012, 32, 349-357.	5.9	23
178	Quantifying Cognitive State From EEG Using Dependence Measures. IEEE Transactions on Biomedical Engineering, 2012, 59, 2773-2781.	4.2	23
179	Correntropy-based spectrum sensing for wireless microphones in man-made noise environments. , 2012, , .		1
180	An Information Theoretic Algorithm for Finding Periodicities in Stellar Light Curves. IEEE Transactions on Signal Processing, 2012, 60, 5135-5145.	5.3	34

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181	Online learning using a Bayesian surprise metric. , 2012, , .		7
182	Cellular Basis for Response Diversity in the Olfactory Periphery. PLoS ONE, 2012, 7, e34843.	2.5	10
183	Extraction of signals with higher order temporal structure using Correntropy. Signal Processing, 2012, 92, 1844-1852.	3.7	3
184	Locally linear embedding based on correntropy measure for visualization and classification. Neurocomputing, 2012, 80, 19-30.	5.9	20
185	Deformable Bayesian Network: A Robust Framework for Underwater Sensor Fusion. IEEE Journal of Oceanic Engineering, 2012, 37, 166-184.	3.8	3
186	Time-Based Compression and Classification of Heartbeats. IEEE Transactions on Biomedical Engineering, 2012, 59, 1641-1648.	4.2	84
187	Quantized Kernel Least Mean Square Algorithm. IEEE Transactions on Neural Networks and Learning Systems, 2012, 23, 22-32.	11.3	356
188	Approximate reconstruction of bandlimited functions for the integrate and fire sampler. Advances in Computational Mathematics, 2012, 36, 67-78.	1.6	46
189	Adaptive background estimation using an information theoretic cost for hidden state estimation. , $2011, \ldots$		24
190	Irregular Tree-Structured Bayesian Network for image segmentation., 2011,,.		4
191	Symbiotic Brain-Machine Interface decoding using simultaneous motor and reward neural representation. , 2011, , .		0
192	Closed-form cauchy-schwarz PDF divergence for mixture of Gaussians. , 2011, , .		46
193	A nonparametric information theoretic approach for change detection in time series. , 2011, , .		O
194	From compressive to adaptive sampling of neural and ECG recordings. , 2011, , .		13
195	Towards closed-loop brain-machine experiments across wide-area networks. , 2011, , .		0
196	Stochastic kernel temporal difference for reinforcement learning., 2011,,.		7
197	A real-time reconstruction algorithm for the integrate and fire sampler. , 2011, , .		O
198	Kernel adaptive filtering with maximum correntropy criterion. , 2011, , .		135

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199	A Unified Framework for Quadratic Measures of Independence. IEEE Transactions on Signal Processing, 2011, 59, 3624-3635.	5.3	16
200	Period Estimation in Astronomical Time Series Using Slotted Correntropy. IEEE Signal Processing Letters, 2011, 18, 371-374.	3.6	25
201	A metric approach toward point process divergence. , 2011, , .		2
202	The integrate-and-fire sampler: A special type of asynchronous & amp; #x03A3; - & amp; #x0394; modulator. , 2011, , .		3
203	Integrate and fire circuit as an ADC replacement. , 2011, , .		18
204	Efficient temporal decomposition of local field potentials., 2011,,.		1
205	Statistical Coding and Decoding of Heartbeat Intervals. PLoS ONE, 2011, 6, e20227.	2.5	14
206	A variable step-size SIG algorithm for realizing the optimal adaptive FIR filter. International Journal of Control, Automation and Systems, 2011, 9, 1049-1055.	2.7	7
207	A test of independence based on a generalized correlation function. Signal Processing, 2011, 91, 15-27.	3.7	27
208	Information theoretic learning with adaptive kernels. Signal Processing, 2011, 91, 203-213.	3.7	46
209	Extended Kalman filter using a kernel recursive least squares observer. , 2011, , .		12
210	Latent state visualization of neural firing rates. , 2011, , .		3
211	A robust point matching algorithm for non-rigid registration using the Cauchy-Schwarz divergence. , 2011, , .		9
212	Modified embedding for multi-regime detection in nonstationary streaming data. , $2011,$		0
213	An efficient rank-deficient computation of the Principle of Relevant Information. , $2011, \ldots$		3
214	Evaluating dependence in spike train metric spaces. , 2011, , .		6
215	Sparse analog associative memory via L1-regularization and thresholding. , $2011, \ldots$		0
216	Estimation of symmetric chi-square divergence for point processes. , 2011, , .		3

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217	A comparison of binless spike train measures. Neural Computing and Applications, 2010, 19, 405-419.	5.6	44
218	Modulation Selection from a Battery Power Efficiency Perspective. IEEE Transactions on Communications, 2010, 58, 1907-1911.	7.8	16
219	Visualization and modelling of STLmax topographic brain activity maps. Journal of Neuroscience Methods, 2010, 189, 281-294.	2.5	23
220	Quantification of inter-trial non-stationarity in spike trains from periodically stimulated neural cultures. , 2010, , .		4
221	Information Theoretic Learning. Information Science and Statistics, 2010, , .	1.8	577
222	A Test of Granger Non-causality Based on Nonparametric Conditional Independence. , 2010, , .		1
223	Dynamic factor graphs: A novel framework for multiple features data fusion. , 2010, , .		7
224	A loss function for classification based on a robust similarity metric. , 2010, , .		34
225	Information theoretic learning applied to wind power modeling. , 2010, , .		1
226	Fixed-budget kernel recursive least-squares. , 2010, , .		71
227	A conditional independence perspective of variable selection. , 2010, , .		0
228	Binary classification based on SVDD projection and nearest neighbors. , 2010, , .		1
229	Cooperative Diversity of Spectrum Sensing for Cognitive Radio Systems. IEEE Transactions on Signal Processing, 2010, 58, 3218-3227.	5.3	231
230	Extraction of Signals With Specific Temporal Structure Using Kernel Methods. IEEE Transactions on Signal Processing, 2010, 58, 5142-5150.	5. 3	12
231	A parallel hardware architecture for information-theoretic adaptive filtering. , 2010, , .		3
232	Life detection based on Correntropy Spectral Density. , 2010, , .		5
233	Self organizing maps with the correntropy induced metric. , 2010, , .		7
234	Variable Selection: A Statistical Dependence Perspective. , 2010, , .		12

#	Article	IF	CITATIONS
235	Differential EEG., 2009, , .		O
236	Decoding hand trajectories from ECoG recordings via kernel least-mean-square algorithm., 2009,,.		6
237	Correntropy based matched filtering for classification in sidescan sonar imagery. , 2009, , .		6
238	An integrated recording system using an asynchronous pulse representation. , 2009, , .		0
239	Prerequesites for symbiotic brain-machine interfaces. , 2009, , .		1
240	Hierarchical clustering of neural data using Linked-Mixtures of Hidden Markov Models for Brain Machine Interfaces. , 2009, , .		1
241	Compression of neural signals using discriminative coding for wireless applications. , 2009, , .		7
242	Modulation Selection from a Battery Power Efficiency Perspective: A Case Study of PPM and OOK. , 2009, , .		4
243	Selecting neural subsets for kinematics decoding by information theoretical analysis in motor Brain Machine Interfaces. , 2009, , .		3
244	Detection-interference dilemma for spectrum sensing in cognitive radio systems., 2009,,.		1
245	Sequential Monte Carlo Point-Process Estimation of Kinematics from Neural Spiking Activity for Brain-Machine Interfaces. Neural Computation, 2009, 21, 2894-2930.	2.2	46
246	Coadaptive Brain–Machine Interface via Reinforcement Learning. IEEE Transactions on Biomedical Engineering, 2009, 56, 54-64.	4.2	144
247	The correntropy MACE filter. Pattern Recognition, 2009, 42, 871-885.	8.1	61
248	Mean shift: An information theoretic perspective. Pattern Recognition Letters, 2009, 30, 222-230.	4.2	45
249	Single-trial P300 estimation with a spatiotemporal filtering method. Journal of Neuroscience Methods, 2009, 177, 488-496.	2.5	22
250	Correntropy as a novel measure for nonlinearity tests. Signal Processing, 2009, 89, 14-23.	3.7	98
251	A low complexity robust detector in impulsive noise. Signal Processing, 2009, 89, 1902-1909.	3.7	30
252	Liquid state machines and cultured cortical networks: The separation property. BioSystems, 2009, 95, 90-97.	2.0	45

#	Article	IF	CITATIONS
253	Extended Kernel Recursive Least Squares Algorithm. IEEE Transactions on Signal Processing, 2009, 57, 3801-3814.	5.3	177
254	A Reproducing Kernel Hilbert Space Framework for Spike Train Signal Processing. Neural Computation, 2009, 21, 424-449.	2.2	83
255	Using Correntropy as a cost function in linear adaptive filters. , 2009, , .		183
256	A biphasic integrate-and-fire system. , 2009, , .		0
257	Cooperative Diversity of Spectrum Sensing in Cognitive Radio Networks. , 2009, , .		4
258	Quantifying neuronal importance in value-based Brain-Machine Interfaces. , 2009, , .		0
259	An Information Theoretic Approach of Designing Sparse Kernel Adaptive Filters. IEEE Transactions on Neural Networks, 2009, 20, 1950-1961.	4.2	176
260	Theories, Analysis, and Bounds of the Finite-Support Approximation for the Inverses of Mixing-Phase FIR Systems. IEEE Transactions on Circuits and Systems I: Regular Papers, 2009, 56, 2181-2194.	5 . 4	3
261	Estimation of density ratio and its application to design a measure of dependence. , 2009, , .		1
262	Stimulus reconstruction from the biphasic integrate-and-fire sampler. , 2009, , .		14
262	Stimulus reconstruction from the biphasic integrate-and-fire sampler. , 2009, , . Our Second Year. IEEE Reviews in Biomedical Engineering, 2009, 2, 1-1.	18.0	14
		18.0 3.7	
263	Our Second Year. IEEE Reviews in Biomedical Engineering, 2009, 2, 1-1. Recursive complex BSS via generalized eigendecomposition and application in image rejection for BPSK.		1
263	Our Second Year. IEEE Reviews in Biomedical Engineering, 2009, 2, 1-1. Recursive complex BSS via generalized eigendecomposition and application in image rejection for BPSK. Signal Processing, 2008, 88, 1368-1381. Extraction and localization of mesoscopic motor control signals for human ECoG neuroprosthetics.	3.7	6
263 264 265	Our Second Year. IEEE Reviews in Biomedical Engineering, 2009, 2, 1-1. Recursive complex BSS via generalized eigendecomposition and application in image rejection for BPSK. Signal Processing, 2008, 88, 1368-1381. Extraction and localization of mesoscopic motor control signals for human ECoG neuroprosthetics. Journal of Neuroscience Methods, 2008, 167, 63-81. An efficient algorithm for continuous time cross correlogram of spike trains. Journal of	3.7 2.5	1 6 77
263 264 265 266	Our Second Year. IEEE Reviews in Biomedical Engineering, 2009, 2, 1-1. Recursive complex BSS via generalized eigendecomposition and application in image rejection for BPSK. Signal Processing, 2008, 88, 1368-1381. Extraction and localization of mesoscopic motor control signals for human ECoG neuroprosthetics. Journal of Neuroscience Methods, 2008, 167, 63-81. An efficient algorithm for continuous time cross correlogram of spike trains. Journal of Neuroscience Methods, 2008, 168, 514-523. A Pitch Detector Based on a Generalized Correlation Function. IEEE Transactions on Audio Speech and	3.7 2.5 2.5	1 6 77 9
264 265 266 267	Our Second Year. IEEE Reviews in Biomedical Engineering, 2009, 2, 1-1. Recursive complex BSS via generalized eigendecomposition and application in image rejection for BPSK. Signal Processing, 2008, 88, 1368-1381. Extraction and localization of mesoscopic motor control signals for human ECoG neuroprosthetics. Journal of Neuroscience Methods, 2008, 167, 63-81. An efficient algorithm for continuous time cross correlogram of spike trains. Journal of Neuroscience Methods, 2008, 168, 514-523. A Pitch Detector Based on a Generalized Correlation Function. IEEE Transactions on Audio Speech and Language Processing, 2008, 16, 1420-1432.	3.7 2.5 2.5 3.2	1 6 77 9 42

#	Article	IF	Citations
271	Robust switching blind equalizer for wireless cognitive receivers. IEEE Transactions on Wireless Communications, 2008, 7, 1461-1465.	9.2	27
272	A synthetic averaging method on point process for motor Brain Machine Interfaces. , 2008, , .		0
273	Analysis ECoG features for movement execution using denoising source separation. , 2008, , .		1
274	Content addressable memories in reproducing Kernel Hilbert spaces. , 2008, , .		4
275	The wellposedness analysis of the kernel adaline. , 2008, , .		0
276	Reproducing kernel Hilbert spaces for spike train analysis. Proceedings of the IEEE International Conference on Acoustics, Speech, and Signal Processing, 2008, , .	1.8	4
277	Welcome to Our Inaugural Year. IEEE Reviews in Biomedical Engineering, 2008, 1, 1-1.	18.0	0
278	Kernel Affine Projection Algorithms. Eurasip Journal on Advances in Signal Processing, 2008, 2008, .	1.7	147
279	A Monte Carlo Sequential Estimation of Point Process Optimum Filtering for Brain Machine Interfaces. Neural Networks (IJCNN), International Joint Conference on, 2007, , .	0.0	11
280	Hierarchal Decomposition of Neural Data using Boosted Mixtures of Hidden Markov Chains and its application to a BMI. Neural Networks (IJCNN), International Joint Conference on, 2007, , .	0.0	0
281	Recursively Adapted Radial Basis Function Networks and its Relationship to Resource Allocating Networks and Online Kernel Learning. IEEE International Workshop on Machine Learning for Signal Processing, 2007, , .	0.0	1
282	Spectral Clustering of Synchronous Spike Trains. Neural Networks (IJCNN), International Joint Conference on, 2007, , .	0.0	4
283	Variance and Bias Analysis of Information Potential and Symmetric Information Potential. IEEE International Workshop on Machine Learning for Signal Processing, 2007, , .	0.0	0
284	A New Nonlinear Similarity Measure for Multichannel Biological Signals. Neural Networks (IJCNN), International Joint Conference on, 2007, , .	0.0	6
285	Brain-Machine Interface Control via Reinforcement Learning. , 2007, , .		10
286	Kernel LMS. , 2007, , .		22
287	The Fast Correntropy Mace Filter. , 2007, , .		4
288	A Novel Switching Scheme Between Adaptive Information Algorithms. Neural Networks (IJCNN), International Joint Conference on, 2007, , .	0.0	0

#	Article	IF	CITATIONS
289	Information Theoretical Estimators of Tuning Depth and Time Delay for Motor Cortex Neurons. , 2007, , .		1
290	An Associative Memory Readout in ESN for Neural Action Potential Detection. Neural Networks (IJCNN), International Joint Conference on, 2007, , .	0.0	3
291	A Novel Weighted LBG Algorithm for Neural Spike Compression. Neural Networks (IJCNN), International Joint Conference on, 2007, , .	0.0	4
292	Single-trial ERP estimation based on spatio-temporal filtering. , 2007, , .		2
293	A Novel Pitch Determination Algorithm based on Generalized Correlation Function. IEEE International Workshop on Machine Learning for Signal Processing, 2007, , .	0.0	6
294	Echo State Networks for Motor Control of Human ECoG Neuroprosthetics., 2007,,.		5
295	Wireless, In Vivo Neural Recording using a Custom Integrated Bioamplifier and the Pico System. , 2007, , .		10
296	Analysis and Design of Echo State Networks. Neural Computation, 2007, 19, 111-138.	2.2	248
297	Water Inflow Forecasting using the Echo State Network: a Brazilian Case Study. Neural Networks (IJCNN), International Joint Conference on, 2007, , .	0.0	31
298	Information Theoretic Vector Quantization with Fixed Point Updates. Neural Networks (IJCNN), International Joint Conference on, 2007, , .	0.0	4
299	The Laplacian Classifier. IEEE Transactions on Signal Processing, 2007, 55, 3262-3271.	5.3	11
300	Robust Adaptive Minimum Entropy Beamformer in Impulsive Noise. , 2007, , .		8
301	Florida Wireless Implantable Recording Electrodes (FWIRE) for Brain Machine Interfaces. , 2007, , .		19
302	Correntropy: Properties and Applications in Non-Gaussian Signal Processing. IEEE Transactions on Signal Processing, 2007, 55, 5286-5298.	5.3	1,240
303	Information cut for clustering using a gradient descent approach. Pattern Recognition, 2007, 40, 796-806.	8.1	31
304	A unifying criterion for instantaneous blind source separation based on correntropy. Signal Processing, 2007, 87, 1872-1881.	3.7	25
305	A minimum-error entropy criterion with self-adjusting step-size (MEE-SAS). Signal Processing, 2007, 87, 2733-2745.	3.7	26
306	Quasi-sliding mode control strategy based on multiple-linear models. Neurocomputing, 2007, 70, 960-974.	5.9	23

#	Article	IF	CITATIONS
307	Freeman olfactory cortex model: A multiplexed KII network implementation. Analog Integrated Circuits and Signal Processing, 2007, 50, 251-259.	1.4	1
308	Analysis of Biomedical Signals by the Lempel-Ziv Complexity: the Effect of Finite Data Size. IEEE Transactions on Biomedical Engineering, 2006, 53, 2606-2609.	4.2	167
309	A Fixed-Point Minimum Error Entropy Algorithm. IEEE International Workshop on Machine Learning for Signal Processing, 2006, , .	0.0	9
310	Feature extraction using information-theoretic learning. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2006, 28, 1385-1392.	13.9	127
311	From linear adaptive filtering to nonlinear information processing - The design and analysis of information processing systems. IEEE Signal Processing Magazine, 2006, 23, 14-33.	5.6	78
312	Visualization of the Short Term Maximum Lyapunov Exponent Topography in the Epileptic Brain. , 2006, 2006, 4257-60.		10
313	Modeling and Inverse Controller Design for an Unmanned Aerial Vehicle Based on the Self-Organizing Map. IEEE Transactions on Neural Networks, 2006, 17, 445-460.	4.2	44
314	An analysis of entropy estimators for blind source separation. Signal Processing, 2006, 86, 182-194.	3.7	41
315	The Cauchy–Schwarz divergence and Parzen windowing: Connections to graph theory and Mercer kernels. Journal of the Franklin Institute, 2006, 343, 614-629.	3.4	73
316	Some Equivalences between Kernel Methods and Information Theoretic Methods. Journal of Signal Processing Systems, 2006, 45, 49-65.	1.0	24
317	Using non-linear even functions for error minimization in adaptive filters. Neurocomputing, 2006, 70, 9-13.	5.9	8
318	Computation in a reduced KII network based on synchronization. International Journal of Intelligent Systems, 2006, 21, 919-935.	5.7	2
319	Independently Coupled HMM Switching Classifier for a Bimodel Brain-Machine Interface. IEEE International Workshop on Machine Learning for Signal Processing, 2006, , .	0.0	2
320	Analysis of Amplitude Modulated Control Features for ECoG Neuroprosthetics. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2006, , .	0.5	0
321	Analysis of the Correlation between Local Field Potentials and Neuronal Firing Rate in the Motor Cortex. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2006, , .	0.5	0
322	A Wireless Power Interface for Rechargeable Battery Operated Neural Recording Implants. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2006, , .	0.5	0
323	Improved Linear BMI Systems via Population Averaging. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2006, , .	0.5	0
324	A Reconfigurable Neural Signal Processor (NSP) for Brain Machine Interfaces. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2006, , .	0.5	0

#	Article	IF	CITATIONS
325	Effects of Acute Hippocampal Stimulation on EEG Dynamics. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2006, , .	0.5	0
326	A mutual information extension to the matched filter. Signal Processing, 2005, 85, 927-935.	3.7	28
327	Quantifying spatio-temporal dependencies in epileptic ECOG. Signal Processing, 2005, 85, 2082-2100.	3.7	4
328	Multiplicative multifractal modeling and discrimination of human neuronal activity. Physics Letters, Section A: General, Atomic and Solid State Physics, 2005, 344, 253-264.	2.1	51
329	Fast error whitening algorithms for system identification and control with noisy data. Neurocomputing, 2005, 69, 158-181.	5.9	4
330	Vector quantization using information theoretic concepts. Natural Computing, 2005, 4, 39-51.	3.0	58
331	Cortical Ensemble Adaptation to Represent Velocity of an Artificial Actuator Controlled by a Brain-Machine Interface. Journal of Neuroscience, 2005, 25, 4681-4693.	3.6	266
332	Modeling and Detection of Limit-Cycle Oscillations Using Adaptable Linear Models. Journal of Aircraft, 2005, 42, 1575-1587.	2.4	0
333	Guest Editorial Special Issue on Information Theoretic Learning. IEEE Transactions on Neural Networks, 2004, 15, 789-791.	4.2	2
334	Advanced Search Algorithms for Information-Theoretic Learning With Kernel-Based Estimators. IEEE Transactions on Neural Networks, 2004, 15, 874-884.	4.2	37
335	Minimax Mutual Information Approach for Independent Component Analysis. Neural Computation, 2004, 16, 1235-1252.	2.2	53
336	Ascertaining the Importance of Neurons to Develop Better Brain-Machine Interfaces. IEEE Transactions on Biomedical Engineering, 2004, 51, 943-953.	4.2	95
337	Fast RLS-Like Algorithm for Generalized Eigendecomposition and its Applications. Journal of Signal Processing Systems, 2004, 37, 333-344.	1.0	36
338	Asymptotic SNR-performance of some image combination techniques for phased-array MRI. Signal Processing, 2004, 84, 997-1003.	3.7	5
339	Measuring the signal-to-noise ratio in magnetic resonance imaging: a caveat. Signal Processing, 2004, 84, 1035-1040.	3.7	29
340	Dynamical Analysis of Neural Oscillators in an Olfactory Cortex Model. IEEE Transactions on Neural Networks, 2004, 15, 1053-1062.	4.2	31
341	Feature Selection in MLPs and SVMs Based on Maximum Output Information. IEEE Transactions on Neural Networks, 2004, 15, 937-948.	4.2	91
342	Adaptive epileptic seizure prediction system. IEEE Transactions on Biomedical Engineering, 2003, 50, 616-627.	4.2	370

#	Article	IF	CITATIONS
343	Maximum margin equalizers trained with the Adatron algorithm. Signal Processing, 2003, 83, 593-602.	3.7	10
344	Improving pattern recognition of electronic nose data with time-delay neural networks. Sensors and Actuators B: Chemical, 2003, 96, 385-389.	7.8	51
345	A Neural Network Perspective to Extended Luenberger Observers. Measurement and Control, 2002, 35, 10-16.	1.8	12
346	Blind source separation using Renyi's α-marginal entropies. Neurocomputing, 2002, 49, 25-38.	5.9	53
347	Beyond second-order statistics for learning: A pairwise interaction model for entropy estimation. Natural Computing, 2002, 1, 85-108.	3.0	15
348	Time Series Segmentation Using a Novel Adaptive Eigendecomposition Algorithm. Journal of Signal Processing Systems, 2002, 32, 7-17.	1.0	7
349	A Monaural Cue Sound Localizer. Analog Integrated Circuits and Signal Processing, 2000, 23, 163-172.	1.4	14
350	Analog Hardware Implementation of Continuous-Time Adaptive Filter Structures. Analog Integrated Circuits and Signal Processing, 1999, 18, 209-227.	1.4	10
351	Information processing models for sleep staging. Expert Systems With Applications, 1993, 6, 399-409.	7.6	7
352	STL: A Spatio-Temporal characterization of focal interictal events. Brain Topography, 1993, 5, 215-228.	1.8	6
353	A Markov Chain Framework for the Simple Genetic Algorithm. Evolutionary Computation, 1993, 1, 269-288.	3.0	141
354	The gamma modelâ€"A new neural model for temporal processing. Neural Networks, 1992, 5, 565-576.	5.9	220
355	A new algorithm for the detection of tool breakage in milling. International Journal of Machine Tools and Manufacture, 1991, 31, 443-454.	13.4	15
356	An expert system for multichannel sleep EEG/EOG signal analysis. ISA Transactions, 1989, 28, 45-51.	5.7	7
357	A data compression algorithm for the electroencephalogram. International Journal of Bio-medical Computing, 1988, 22, 83-95.	0.5	4