

Pedro Maria Larrañaga Mugica

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3298405/publications.pdf>

Version: 2024-02-01

255
papers

14,000
citations

53794

45
h-index

23533

111
g-index

279
all docs

279
docs citations

279
times ranked

15228
citing authors

#	ARTICLE	IF	CITATIONS
1	A review of feature selection techniques in bioinformatics. <i>Bioinformatics</i> , 2007, 23, 2507-2517.	4.1	4,126
2	New insights into the classification and nomenclature of cortical GABAergic interneurons. <i>Nature Reviews Neuroscience</i> , 2013, 14, 202-216.	10.2	707
3	An empirical comparison of four initialization methods for the K-Means algorithm. <i>Pattern Recognition Letters</i> , 1999, 20, 1027-1040.	4.2	687
4	Machine learning in bioinformatics. <i>Briefings in Bioinformatics</i> , 2006, 7, 86-112.	6.5	674
5	Genetic Algorithms for the Travelling Salesman Problem: A Review of Representations and Operators. <i>Artificial Intelligence Review</i> , 1999, 13, 129-170.	15.7	612
6	Filter versus wrapper gene selection approaches in DNA microarray domains. <i>Artificial Intelligence in Medicine</i> , 2004, 31, 91-103.	6.5	367
7	A survey on multi-output regression. <i>Wiley Interdisciplinary Reviews: Data Mining and Knowledge Discovery</i> , 2015, 5, 216-233.	6.8	367
8	Structure learning of Bayesian networks by genetic algorithms: a performance analysis of control parameters. <i>IEEE Transactions on Pattern Analysis and Machine Intelligence</i> , 1996, 18, 912-926.	13.9	294
9	Feature Subset Selection by Bayesian network-based optimization. <i>Artificial Intelligence</i> , 2000, 123, 157-184.	5.8	211
10	Learning Bayesian network structures by searching for the best ordering with genetic algorithms. <i>IEEE Transactions on Systems, Man and Cybernetics, Part A: Systems and Humans</i> , 1996, 26, 487-493.	2.9	205
11	A community-based transcriptomics classification and nomenclature of neocortical cell types. <i>Nature Neuroscience</i> , 2020, 23, 1456-1468.	14.8	183
12	Discrete Bayesian Network Classifiers. <i>ACM Computing Surveys</i> , 2014, 47, 1-43.	23.0	180
13	Multi-dimensional classification with Bayesian networks. <i>International Journal of Approximate Reasoning</i> , 2011, 52, 705-727.	3.3	152
14	Discontinuous and diachronous evolution of the Main Ethiopian Rift: Implications for development of continental rifts. <i>Earth and Planetary Science Letters</i> , 2008, 265, 96-111.	4.4	129
15	Bayesian classifiers based on kernel density estimation: Flexible classifiers. <i>International Journal of Approximate Reasoning</i> , 2009, 50, 341-362.	3.3	117
16	Protein Folding in Simplified Models With Estimation of Distribution Algorithms. <i>IEEE Transactions on Evolutionary Computation</i> , 2008, 12, 418-438.	10.0	110
17	A review on evolutionary algorithms in Bayesian network learning and inference tasks. <i>Information Sciences</i> , 2013, 233, 109-125.	6.9	110
18	Feature subset selection by Bayesian networks: a comparison with genetic and sequential algorithms. <i>International Journal of Approximate Reasoning</i> , 2001, 27, 143-164.	3.3	107

#	ARTICLE	IF	CITATIONS
19	Supervised classification with conditional Gaussian networks: Increasing the structure complexity from naive Bayes. <i>International Journal of Approximate Reasoning</i> , 2006, 43, 1-25.	3.3	95
20	Bayesian networks in neuroscience: a survey. <i>Frontiers in Computational Neuroscience</i> , 2014, 8, 131.	2.1	94
21	Parkinson's Disease Subtypes Identified from Cluster Analysis of Motor and Non-motor Symptoms. <i>Frontiers in Aging Neuroscience</i> , 2017, 9, 301.	3.4	94
22	Inexact graph matching by means of estimation of distribution algorithms. <i>Pattern Recognition</i> , 2002, 35, 2867-2880.	8.1	90
23	Multi-label classification with Bayesian network-based chain classifiers. <i>Pattern Recognition Letters</i> , 2014, 41, 14-22.	4.2	84
24	Multiobjective Estimation of Distribution Algorithm Based on Joint Modeling of Objectives and Variables. <i>IEEE Transactions on Evolutionary Computation</i> , 2014, 18, 519-542.	10.0	80
25	Comparison between supervised and unsupervised classifications of neuronal cell types: A case study. <i>Developmental Neurobiology</i> , 2011, 71, 71-82.	3.0	78
26	A Survey of L_1 Regression. <i>International Statistical Review</i> , 2013, 81, 361-387.	1.9	78
27	Inexact graph matching for model-based recognition: Evaluation and comparison of optimization algorithms. <i>Pattern Recognition</i> , 2005, 38, 2099-2113.	8.1	74
28	A review on probabilistic graphical models in evolutionary computation. <i>Journal of Heuristics</i> , 2012, 18, 795-819.	1.4	70
29	Feature selection in Bayesian classifiers for the prognosis of survival of cirrhotic patients treated with TIPS. <i>Journal of Biomedical Informatics</i> , 2005, 38, 376-388.	4.3	69
30	GENE SELECTION FOR CANCER CLASSIFICATION USING WRAPPER APPROACHES. <i>International Journal of Pattern Recognition and Artificial Intelligence</i> , 2004, 18, 1373-1390.	1.2	68
31	Three-Dimensional Spatial Distribution of Synapses in the Neocortex: A Dual-Beam Electron Microscopy Study. <i>Cerebral Cortex</i> , 2014, 24, 1579-1588.	2.9	68
32	Decomposing Bayesian networks: triangulation of the moral graph with genetic algorithms. <i>Statistics and Computing</i> , 1997, 7, 19-34.	1.5	67
33	Predicting survival in malignant skin melanoma using Bayesian networks automatically induced by genetic algorithms. An empirical comparison between different approaches. <i>Artificial Intelligence in Medicine</i> , 1998, 14, 215-230.	6.5	64
34	Predicting dementia development in Parkinson's disease using Bayesian network classifiers. <i>Psychiatry Research - Neuroimaging</i> , 2013, 213, 92-98.	1.8	64
35	A review of estimation of distribution algorithms in bioinformatics. <i>BioData Mining</i> , 2008, 1, 6.	4.0	61
36	Machine Learning: An Indispensable Tool in Bioinformatics. <i>Methods in Molecular Biology</i> , 2010, 593, 25-48.	0.9	61

#	ARTICLE	IF	CITATIONS
37	Learning Bayesian classifiers from positive and unlabeled examples. Pattern Recognition Letters, 2007, 28, 2375-2384.	4.2	59
38	Learning Bayesian networks in the space of structures by estimation of distribution algorithms. International Journal of Intelligent Systems, 2003, 18, 205-220.	5.7	58
39	Probabilistic graphical models in artificial intelligence. Applied Soft Computing Journal, 2011, 11, 1511-1528.	7.2	58
40	Mathematical modelling of UMDAc algorithm with tournament selection. Behaviour on linear and quadratic functions. International Journal of Approximate Reasoning, 2002, 31, 313-340.	3.3	57
41	Bayesian classification for the selection of in vitro human embryos using morphological and clinical data. Computer Methods and Programs in Biomedicine, 2008, 90, 104-116.	4.7	54
42	Using Bayesian networks in the construction of a bi-level multi-classifier. A case study using intensive care unit patients data. Artificial Intelligence in Medicine, 2001, 22, 233-248.	6.5	53
43	Clustering of Data Streams With Dynamic Gaussian Mixture Models: An IoT Application in Industrial Processes. IEEE Internet of Things Journal, 2018, 5, 3533-3547.	8.7	53
44	Regularized logistic regression without a penalty term: An application to cancer classification with microarray data. Expert Systems With Applications, 2011, 38, 5110-5118.	7.6	52
45	Unveiling relevant non-motor Parkinson's disease severity symptoms using a machine learning approach. Artificial Intelligence in Medicine, 2013, 58, 195-202.	6.5	50
46	Three-dimensional distribution of cortical synapses: a replicated point pattern-based analysis. Frontiers in Neuroanatomy, 2014, 8, 85.	1.7	49
47	Feature subset selection by genetic algorithms and estimation of distribution algorithms. Artificial Intelligence in Medicine, 2001, 23, 187-205.	6.5	45
48	Machine Learning Approach for the Outcome Prediction of Temporal Lobe Epilepsy Surgery. PLoS ONE, 2013, 8, e62819.	2.5	45
49	Dimensionality reduction in unsupervised learning of conditional Gaussian networks. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2001, 23, 590-603.	13.9	44
50	Predicting citation count of <i>Bioinformatics</i> papers within four years of publication. Bioinformatics, 2009, 25, 3303-3309.	4.1	44
51	A comparison of clustering quality indices using outliers and noise. Intelligent Data Analysis, 2012, 16, 703-715.	0.9	44
52	Multi-Dimensional Classification with Super-Classes. IEEE Transactions on Knowledge and Data Engineering, 2014, 26, 1720-1733.	5.7	43
53	An improved Bayesian structural EM algorithm for learning Bayesian networks for clustering. Pattern Recognition Letters, 2000, 21, 779-786.	4.2	41
54	Globally Multimodal Problem Optimization Via an Estimation of Distribution Algorithm Based on Unsupervised Learning of Bayesian Networks. Evolutionary Computation, 2005, 13, 43-66.	3.0	40

#	ARTICLE	IF	CITATIONS
55	Identification of a biomarker panel for colorectal cancer diagnosis. BMC Cancer, 2012, 12, 43.	2.6	40
56	Relationship among research collaboration, number of documents and number of citations: a case study in Spanish computer science production in 2000â€“2009. Scientometrics, 2013, 95, 689-716.	3.0	40
57	Bayesian networks for interpretable machine learning and optimization. Neurocomputing, 2021, 456, 648-665.	5.9	40
58	Bayesian network multi-classifiers for protein secondary structure prediction. Artificial Intelligence in Medicine, 2004, 31, 117-136.	6.5	38
59	GA-EDA: Hybrid Evolutionary Algorithm Using Genetic and Estimation of Distribution Algorithms. Lecture Notes in Computer Science, 2004, , 361-371.	1.3	37
60	Markov blanket-based approach for learning multi-dimensional Bayesian network classifiers: An application to predict the European Quality of Life-5 Dimensions (EQ-5D) from the 39-item Parkinsonâ€™s Disease Questionnaire (PDQ-39). Journal of Biomedical Informatics, 2012, 45, 1175-1184.	4.3	37
61	Mateda-2.0: A <i>MATLAB</i> Package for the Implementation and Analysis of Estimation of Distribution Algorithms. Journal of Statistical Software, 2010, 35, .	3.7	37
62	Applying genetic algorithms to search for the best hierarchical clustering of a dataset. Pattern Recognition Letters, 1999, 20, 911-918.	4.2	36
63	A new measure for gene expression biclustering based on non-parametric correlation. Computer Methods and Programs in Biomedicine, 2013, 112, 367-397.	4.7	36
64	Learning Recursive Bayesian Multinets for Data Clustering by Means of Constructive Induction. Machine Learning, 2002, 47, 63-89.	5.4	35
65	Side chain placement using estimation of distribution algorithms. Artificial Intelligence in Medicine, 2007, 39, 49-63.	6.5	34
66	Combining variable neighborhood search and estimation of distribution algorithms in the protein side chain placement problem. Journal of Heuristics, 2008, 14, 519-547.	1.4	34
67	Predicting human immunodeficiency virus inhibitors using multi-dimensional Bayesian network classifiers. Artificial Intelligence in Medicine, 2013, 57, 219-229.	6.5	32
68	Machine Learning-based CPS for Clustering High throughput Machining Cycle Conditions. Procedia Manufacturing, 2017, 10, 997-1008.	1.9	32
69	Prioritization of candidate cancer genesâ€™an aid to oncogenomic studies. Nucleic Acids Research, 2008, 36, e115-e115.	14.5	31
70	Genetic algorithms: bridging the convergence gap. Theoretical Computer Science, 1999, 229, 11-22.	0.9	30
71	Selection of human embryos for transfer by Bayesian classifiers. Computers in Biology and Medicine, 2008, 38, 1177-1186.	7.0	30
72	Prognostic score in acute meningococemia. Critical Care Medicine, 1988, 16, 168-169.	0.9	29

#	ARTICLE	IF	CITATIONS
73	Laminar Differences in Dendritic Structure of Pyramidal Neurons in the Juvenile Rat Somatosensory Cortex. <i>Cerebral Cortex</i> , 2016, 26, 2811-2822.	2.9	29
74	Research topics in discrete estimation of distribution algorithms based on factorizations. <i>Memetic Computing</i> , 2009, 1, 35-54.	4.0	28
75	Classification of neocortical interneurons using affinity propagation. <i>Frontiers in Neural Circuits</i> , 2013, 7, 185.	2.8	28
76	The Vallecas Project: A Cohort to Identify Early Markers and Mechanisms of Alzheimer's Disease. <i>Frontiers in Aging Neuroscience</i> , 2015, 7, 181.	3.4	28
77	UNSUPERVISED LEARNING OF BAYESIAN NETWORKS VIA ESTIMATION OF DISTRIBUTION ALGORITHMS: AN APPLICATION TO GENE EXPRESSION DATA CLUSTERING. <i>International Journal of Uncertainty, Fuzziness and Knowledge-Based Systems</i> , 2004, 12, 63-82.	1.9	26
78	Exact Bayesian network learning in estimation of distribution algorithms. , 2007, , .		26
79	Peakbin Selection in Mass Spectrometry Data Using a Consensus Approach with Estimation of Distribution Algorithms. <i>IEEE/ACM Transactions on Computational Biology and Bioinformatics</i> , 2011, 8, 760-774.	3.0	26
80	Analysis of the behaviour of genetic algorithms when learning Bayesian network structure from data. <i>Pattern Recognition Letters</i> , 1997, 18, 1269-1273.	4.2	25
81	LEARNING BAYESIAN NETWORKS IN THE SPACE OF ORDERINGS WITH ESTIMATION OF DISTRIBUTION ALGORITHMS. <i>International Journal of Pattern Recognition and Artificial Intelligence</i> , 2004, 18, 607-625.	1.2	25
82	Bayesian Model Averaging of Naive Bayes for Clustering. <i>IEEE Transactions on Systems, Man, and Cybernetics</i> , 2006, 36, 1149-1161.	5.0	25
83	Data Mining Validation of Fluconazole Breakpoints Established by the European Committee on Antimicrobial Susceptibility Testing. <i>Antimicrobial Agents and Chemotherapy</i> , 2009, 53, 2949-2954.	3.2	25
84	Learning Bayesian networks for clustering by means of constructive induction. <i>Pattern Recognition Letters</i> , 1999, 20, 1219-1230.	4.2	24
85	Evaluation by Data Mining Techniques of Fluconazole Breakpoints Established by the Clinical and Laboratory Standards Institute (CLSI) and Comparison with Those of the European Committee on Antimicrobial Susceptibility Testing (EUCAST). <i>Antimicrobial Agents and Chemotherapy</i> , 2010, 54, 1541-1546.	3.2	24
86	3D morphology-based clustering and simulation of human pyramidal cell dendritic spines. <i>PLoS Computational Biology</i> , 2018, 14, e1006221.	3.2	24
87	Detecting reliable gene interactions by a hierarchy of Bayesian network classifiers. <i>Computer Methods and Programs in Biomedicine</i> , 2008, 91, 110-121.	4.7	23
88	Triangulation of Bayesian networks with recursive estimation of distribution algorithms. <i>International Journal of Approximate Reasoning</i> , 2009, 50, 472-484.	3.3	23
89	Regularized continuous estimation of distribution algorithms. <i>Applied Soft Computing Journal</i> , 2013, 13, 2412-2432.	7.2	23
90	Wrapper discretization by means of estimation of distribution algorithms. <i>Intelligent Data Analysis</i> , 2007, 11, 525-545.	0.9	22

#	ARTICLE	IF	CITATIONS
91	Learning Factorizations in Estimation of Distribution Algorithms Using Affinity Propagation. <i>Evolutionary Computation</i> , 2010, 18, 515-546.	3.0	22
92	Estimation of Distribution Algorithms: A New Evolutionary Computation Approach for Graph Matching Problems. <i>Lecture Notes in Computer Science</i> , 2001, , 454-469.	1.3	21
93	Multi-dimensional Bayesian network classifiers: A survey. <i>Artificial Intelligence Review</i> , 2021, 54, 519-559.	15.7	21
94	Models and Simulation of 3D Neuronal Dendritic Trees Using Bayesian Networks. <i>Neuroinformatics</i> , 2011, 9, 347-369.	2.8	20
95	Cost-sensitive selective naive Bayes classifiers for predicting the increase of the h-index for scientific journals. <i>Neurocomputing</i> , 2014, 135, 42-52.	5.9	20
96	Bayesian network modeling of the consensus between experts: An application to neuron classification. <i>International Journal of Approximate Reasoning</i> , 2014, 55, 3-22.	3.3	20
97	Directional naive Bayes classifiers. <i>Pattern Analysis and Applications</i> , 2015, 18, 225-246.	4.6	20
98	Machine-tool condition monitoring with Gaussian mixture models-based dynamic probabilistic clustering. <i>Engineering Applications of Artificial Intelligence</i> , 2020, 89, 103434.	8.1	20
99	Prototype Selection and Feature Subset Selection by Estimation of Distribution Algorithms. A Case Study in the Survival of Cirrhotic Patients Treated with TIPS. <i>Lecture Notes in Computer Science</i> , 2001, , 20-29.	1.3	20
100	Interactions and Dependencies in Estimation of Distribution Algorithms. , 0, , .		19
101	A partially supervised classification approach to dominant and recessive human disease gene prediction. <i>Computer Methods and Programs in Biomedicine</i> , 2007, 85, 229-237.	4.7	19
102	Comparing supervised learning methods for classifying sex, age, context and individual Mudi dogs from barking. <i>Animal Cognition</i> , 2015, 18, 405-421.	1.8	19
103	Bayesian Network Classifiers for Categorizing Cortical GABAergic Interneurons. <i>Neuroinformatics</i> , 2015, 13, 193-208.	2.8	19
104	Cluster methods for assessing research performance: exploring Spanish computer science. <i>Scientometrics</i> , 2013, 97, 571-600.	3.0	18
105	Structure Learning of Bayesian Networks by Hybrid Genetic Algorithms. <i>Lecture Notes in Statistics</i> , 1996, , 165-174.	0.2	18
106	Bayesian Sparse Partial Least Squares. <i>Neural Computation</i> , 2013, 25, 3318-3339.	2.2	17
107	Towards a supervised classification of neocortical interneuron morphologies. <i>BMC Bioinformatics</i> , 2018, 19, 511.	2.6	17
108	The Convergence Behavior of the PBIL Algorithm: A Preliminary Approach. , 2001, , 228-231.		17

#	ARTICLE	IF	CITATIONS
109	Mining probabilistic models learned by EDAs in the optimization of multi-objective problems. , 2009, , .		16
110	Classifying evolving data streams with partially labeled data. Intelligent Data Analysis, 2011, 15, 655-670.	0.9	16
111	Long-term forecasting of multivariate time series in industrial furnaces with dynamic Gaussian Bayesian networks. Engineering Applications of Artificial Intelligence, 2021, 103, 104301.	8.1	16
112	Microarray Analysis of Autoimmune Diseases by Machine Learning Procedures. IEEE Transactions on Information Technology in Biomedicine, 2009, 13, 341-350.	3.2	15
113	Random Positions of Dendritic Spines in Human Cerebral Cortex. Journal of Neuroscience, 2014, 34, 10078-10084.	3.6	15
114	Classification of GABAergic interneurons by leading neuroscientists. Scientific Data, 2019, 6, 221.	5.3	15
115	Bivariate empirical and n-variate Archimedean copulas in estimation of distribution algorithms. , 2010, , .		14
116	Comparison of metaheuristic strategies for peakbin selection in proteomic mass spectrometry data. Information Sciences, 2013, 222, 229-246.	6.9	14
117	Classification of neural signals from sparse autoregressive features. Neurocomputing, 2013, 111, 21-26.	5.9	14
118	Branching angles of pyramidal cell dendrites follow common geometrical design principles in different cortical areas. Scientific Reports, 2014, 4, 5909.	3.3	14
119	Classifying GABAergic interneurons with semi-supervised projected model-based clustering. Artificial Intelligence in Medicine, 2015, 65, 49-59.	6.5	14
120	Data Publications Correlate with Citation Impact. Frontiers in Neuroscience, 2016, 10, 419.	2.8	14
121	EDA-PSO: A Hybrid Paradigm Combining Estimation of Distribution Algorithms and Particle Swarm Optimization. Lecture Notes in Computer Science, 2010, , 416-423.	1.3	14
122	Representing the behaviour of supervised classification learning algorithms by Bayesian networks. Pattern Recognition Letters, 1999, 20, 1201-1209.	4.2	13
123	Protein Folding in 2-Dimensional Lattices with Estimation of Distribution Algorithms. Lecture Notes in Computer Science, 2004, , 388-398.	1.3	13
124	Learning an L1-Regularized Gaussian Bayesian Network in the Equivalence Class Space. IEEE Transactions on Systems, Man, and Cybernetics, 2010, 40, 1231-1242.	5.0	13
125	Network measures for information extraction in evolutionary algorithms. International Journal of Computational Intelligence Systems, 2013, 6, 1163-1188.	2.7	13
126	Tractability of most probable explanations in multidimensional Bayesian network classifiers. International Journal of Approximate Reasoning, 2018, 93, 74-87.	3.3	13

#	ARTICLE	IF	CITATIONS
127	Random Forests for Regression as a Weighted Sum of k -Potential Nearest Neighbors. IEEE Access, 2019, 7, 25660-25672.	4.2	13
128	BayeSuites: An open web framework for massive Bayesian networks focused on neuroscience. Neurocomputing, 2021, 428, 166-181.	5.9	13
129	The Role of a Priori Information in the Minimization of Contact Potentials by Means of Estimation of Distribution Algorithms. , 2007, , 247-257.		13
130	The Impact of Exact Probabilistic Learning Algorithms in EDAs Based on Bayesian Networks. Studies in Computational Intelligence, 2008, , 109-139.	0.9	13
131	bnclassify: Learning Bayesian Network Classifiers. R Journal, 2019, 10, 455.	1.8	13
132	Combining Bayesian classifiers and estimation of distribution algorithms for optimization in continuous domains. Connection Science, 2007, 19, 297-319.	3.0	12
133	Optimizing Brain Networks Topologies Using Multi-objective Evolutionary Computation. Neuroinformatics, 2011, 9, 3-19.	2.8	12
134	Multi-dimensional classification of GABAergic interneurons with Bayesian network-modeled label uncertainty. Frontiers in Computational Neuroscience, 2014, 8, 150.	2.1	12
135	Learning mixtures of polynomials of multidimensional probability densities from data using B-spline interpolation. International Journal of Approximate Reasoning, 2014, 55, 989-1010.	3.3	12
136	Dynamic Bayesian Network-Based Anomaly Detection for In-Process Visual Inspection of Laser Surface Heat Treatment. , 2017, , 17-24.		12
137	Learning tractable Bayesian networks in the space of elimination orders. Artificial Intelligence, 2019, 274, 66-90.	5.8	12
138	Semiparametric Bayesian networks. Information Sciences, 2022, 584, 564-582.	6.9	12
139	Improvement of naive Bayes collaborative filtering using interval estimation. , 0, , .		11
140	Estimation of Distribution Algorithms as Logistic Regression Regularizers of Microarray Classifiers. Methods of Information in Medicine, 2009, 48, 236-241.	1.2	11
141	Using Bayesian networks to discover relationships between bibliometric indices. A case study of computer science and artificial intelligence journals. Scientometrics, 2011, 89, 523-551.	3.0	11
142	Parameter Control of Genetic Algorithms by Learning and Simulation of Bayesian Networks " A Case Study for the Optimal Ordering of Tables. Journal of Computer Science and Technology, 2013, 28, 720-731.	1.5	11
143	A univocal definition of the neuronal soma morphology using Gaussian mixture models. Frontiers in Neuroanatomy, 2015, 9, 137.	1.7	11
144	Interval-based ranking in noisy evolutionary multi-objective optimization. Computational Optimization and Applications, 2015, 61, 517-555.	1.6	11

#	ARTICLE	IF	CITATIONS
145	Mining multi-dimensional concept-drifting data streams using Bayesian network classifiers. <i>Intelligent Data Analysis</i> , 2016, 20, 257-280.	0.9	11
146	Decision functions for chain classifiers based on Bayesian networks for multi-label classification. <i>International Journal of Approximate Reasoning</i> , 2016, 68, 164-178.	3.3	11
147	Comparing basal dendrite branches in human and mouse hippocampal CA1 pyramidal neurons with Bayesian networks. <i>Scientific Reports</i> , 2020, 10, 18592.	3.3	11
148	Mixtures of Kikuchi Approximations. <i>Lecture Notes in Computer Science</i> , 2006, , 365-376.	1.3	11
149	Adaptive Estimation of Distribution Algorithms. <i>Studies in Computational Intelligence</i> , 2008, , 177-197.	0.9	11
150	Identifying Parkinson's disease subtypes with motor and non-motor symptoms via model-based multi-partition clustering. <i>Scientific Reports</i> , 2021, 11, 23645.	3.3	11
151	GA-EDA: A New Hybrid Cooperative Search Evolutionary Algorithm. <i>Studies in Fuzziness and Soft Computing</i> , 2006, , 187-219.	0.8	10
152	Optimizing logistic regression coefficients for discrimination and calibration using estimation of distribution algorithms. <i>Top</i> , 2008, 16, 345-366.	1.6	10
153	Guest Editorial: Special Issue on Evolutionary Algorithms Based on Probabilistic Models. <i>IEEE Transactions on Evolutionary Computation</i> , 2009, 13, 1197-1198.	10.0	10
154	Feature subset selection from positive and unlabelled examples. <i>Pattern Recognition Letters</i> , 2009, 30, 1027-1036.	4.2	10
155	Dendritic-branching angles of pyramidal neurons of the human cerebral cortex. <i>Brain Structure and Function</i> , 2017, 222, 1847-1859.	2.3	10
156	Lazy lasso for local regression. <i>Computational Statistics</i> , 2012, 27, 531-550.	1.5	9
157	Ensemble transcript interaction networks: A case study on Alzheimer's disease. <i>Computer Methods and Programs in Biomedicine</i> , 2012, 108, 442-450.	4.7	9
158	A Directional-Linear Bayesian Network and Its Application for Clustering and Simulation of Neural Somas. <i>IEEE Access</i> , 2019, 7, 69907-69921.	4.2	9
159	Three-dimensional spatial modeling of spines along dendritic networks in human cortical pyramidal neurons. <i>PLoS ONE</i> , 2017, 12, e0180400.	2.5	9
160	Regularized logistic regression and multiobjective variable selection for classifying MEG data. <i>Biological Cybernetics</i> , 2012, 106, 389-405.	1.3	8
161	Genetic algorithms and Gaussian Bayesian networks to uncover the predictive core set of bibliometric indices. <i>Journal of the Association for Information Science and Technology</i> , 2016, 67, 1703-1721.	2.9	8
162	Comparing the Electrophysiology and Morphology of Human and Mouse Layer 2/3 Pyramidal Neurons With Bayesian Networks. <i>Frontiers in Neuroinformatics</i> , 2021, 15, 580873.	2.5	8

#	ARTICLE	IF	CITATIONS
163	Multi-objective Optimization with Joint Probabilistic Modeling of Objectives and Variables. Lecture Notes in Computer Science, 2011, , 298-312.	1.3	8
164	Performance evaluation of compromise conditional Gaussian networks for data clustering. International Journal of Approximate Reasoning, 2001, 28, 23-50.	3.3	7
165	Mouse p53-Deficient Cancer Models as Platforms for Obtaining Genomic Predictors of Human Cancer Clinical Outcomes. PLoS ONE, 2012, 7, e42494.	2.5	7
166	Tractable learning of Bayesian networks from partially observed data. Pattern Recognition, 2019, 91, 190-199.	8.1	7
167	Inference of Population Structure Using Genetic Markers and a Bayesian Model Averaging Approach for Clustering. Journal of Computational Biology, 2008, 15, 207-220.	1.6	6
168	Optimal row and column ordering to improve table interpretation using estimation of distribution algorithms. Journal of Heuristics, 2011, 17, 567-588.	1.4	6
169	Wrapper positive Bayesian network classifiers. Knowledge and Information Systems, 2012, 33, 631-654.	3.2	6
170	PREDICTING THE EQ-5D FROM THE PARKINSON'S DISEASE QUESTIONNAIRE PDQ-8 USING MULTI-DIMENSIONAL BAYESIAN NETWORK CLASSIFIERS. Biomedical Engineering - Applications, Basis and Communications, 2014, 26, 1450015.	0.6	6
171	Multi-dimensional Bayesian Network Classifier Trees. Lecture Notes in Computer Science, 2018, , 354-363.	1.3	6
172	MultiMap: A Tool to Automatically Extract and Analyse Spatial Microscopic Data From Large Stacks of Confocal Microscopy Images. Frontiers in Neuroanatomy, 2018, 12, 37.	1.7	6
173	Patient specific prediction of temporal lobe epilepsy surgical outcomes. Epilepsia, 2021, 62, 2113-2122.	5.1	6
174	Mining Concept-Drifting Data Streams Containing Labeled and Unlabeled Instances. Lecture Notes in Computer Science, 2010, , 531-540.	1.3	6
175	A Guide to the Literature on Inferring Genetic Networks by Probabilistic Graphical Models. , 2005, , 215-238.		5
176	Discriminative Learning of Bayesian Network Classifiers via the TM Algorithm. Lecture Notes in Computer Science, 2005, , 148-160.	1.3	5
177	Predicting the h-index with cost-sensitive naive Bayes. , 2011, , .		5
178	Affinity propagation enhanced by estimation of distribution algorithms. , 2011, , .		5
179	Learning Bayesian networks with low inference complexity. Progress in Artificial Intelligence, 2016, 5, 15-26.	2.4	5
180	A regularity index for dendrites - local statistics of a neuron's input space. PLoS Computational Biology, 2018, 14, e1006593.	3.2	5

#	ARTICLE	IF	CITATIONS
181	A circular-linear dependence measure under Johnsonâ€™Wehrly distributions and its application in Bayesian networks. <i>Information Sciences</i> , 2019, 486, 240-253.	6.9	5
182	Continuous Estimation of Distribution Algorithms Based on Factorized Gaussian Markov Networks. <i>Adaptation, Learning, and Optimization</i> , 2012, , 157-173.	0.6	5
183	Data mining in genomics and proteomics. <i>Artificial Intelligence in Medicine</i> , 2004, 31, iii-iv.	6.5	4
184	What is behind a summary-evaluation decision?. <i>Behavior Research Methods</i> , 2008, 40, 597-612.	4.0	4
185	Multidimensional statistical analysis of the parameterization of a genetic algorithm for the optimal ordering of tables. <i>Expert Systems With Applications</i> , 2010, 37, 804-815.	7.6	4
186	Forward stagewise naïve Bayes. <i>Progress in Artificial Intelligence</i> , 2012, 1, 57-69.	2.4	4
187	Dendritic branching angles of pyramidal cells across layers of the juvenile rat somatosensory cortex. <i>Journal of Comparative Neurology</i> , 2016, 524, 2567-2576.	1.6	4
188	Circular Bayesian classifiers using wrapped Cauchy distributions. <i>Data and Knowledge Engineering</i> , 2019, 122, 101-115.	3.4	4
189	A review of Gaussian Markov models for conditional independence. <i>Journal of Statistical Planning and Inference</i> , 2020, 206, 127-144.	0.6	4
190	Autoregressive Asymmetric Linear Gaussian Hidden Markov Models. <i>IEEE Transactions on Pattern Analysis and Machine Intelligence</i> , 2021, PP, 1-1.	13.9	4
191	Evolutionary Bayesian Classifier-Based Optimization in Continuous Domains. <i>Lecture Notes in Computer Science</i> , 2006, , 529-536.	1.3	4
192	Bayesian Optimization of the PC Algorithm for Learning Gaussian Bayesian Networks. <i>Lecture Notes in Computer Science</i> , 2018, , 44-54.	1.3	4
193	Patterns of Dendritic Basal Field Orientation of Pyramidal Neurons in the Rat Somatosensory Cortex. <i>ENeuro</i> , 2018, 5, ENEURO.0142-18.2018.	1.9	4
194	PyBNesian: An extensible python package for Bayesian networks. <i>Neurocomputing</i> , 2022, 504, 204-209.	5.9	4
195	Average Time Complexity of Estimation of Distribution Algorithms. <i>Lecture Notes in Computer Science</i> , 2005, , 42-49.	1.3	3
196	Component weighting functions for adaptive search with EDAs. , 2008, , .		3
197	A new feature extraction method for signal classification applied to cord dorsum potential detection. <i>Journal of Neural Engineering</i> , 2012, 9, 056009.	3.5	3
198	Semi-supervised projected model-based clustering. <i>Data Mining and Knowledge Discovery</i> , 2014, 28, 882-917.	3.7	3

#	ARTICLE	IF	CITATIONS
199	Dendritic and Axonal Wiring Optimization of Cortical GABAergic Interneurons. Neuroinformatics, 2016, 14, 453-464.	2.8	3
200	Frobenius Norm Regularization for the Multivariate Von Mises Distribution. International Journal of Intelligent Systems, 2017, 32, 153-176.	5.7	3
201	Information Theory and Classification Error in Probabilistic Classifiers. Lecture Notes in Computer Science, 2006, , 347-351.	1.3	3
202	Discriminative vs. Generative Learning of Bayesian Network Classifiers. Lecture Notes in Computer Science, 2007, , 453-464.	1.3	3
203	Adding Probabilistic Dependencies to the Search of Protein Side Chain Configurations Using EDAs. Lecture Notes in Computer Science, 2008, , 1120-1129.	1.3	3
204	Probabilistic Graphical Markov Model Learning: An Adaptive Strategy. Lecture Notes in Computer Science, 2009, , 225-236.	1.3	3
205	Development of a Cyber-Physical System based on selective Gaussian naïve Bayes model for a self-predict laser surface heat treatment process control. , 2016, , 1-8.		3
206	Explainable Machine Learning for Longitudinal Multi-Omic Microbiome. Mathematics, 2022, 10, 1994.	2.2	3
207	Hybrid semiparametric Bayesian networks. Test, 2022, 31, 299-327.	1.1	3
208	Bayesian networks, rule induction and logistic regression in the prediction of women survival suffering from breast cancer. Lecture Notes in Computer Science, 1997, , 303-308.	1.3	2
209	Structure of the high-order Boltzmann machine from independence maps. IEEE Transactions on Neural Networks, 1997, 8, 1351-1358.	4.2	2
210	Regularized k-order markov models in EDAs. , 2011, , .		2
211	Conditional Density Approximations with Mixtures of Polynomials. International Journal of Intelligent Systems, 2015, 30, 236-264.	5.7	2
212	Univariate and bivariate truncated von Mises distributions. Progress in Artificial Intelligence, 2017, 6, 171-180.	2.4	2
213	Network design through forests with degree- and role-constrained minimum spanning trees. Journal of Heuristics, 2017, 23, 31-51.	1.4	2
214	On generating random Gaussian graphical models. International Journal of Approximate Reasoning, 2020, 125, 240-250.	3.3	2
215	Structure Learning of High-Order Dynamic Bayesian Networks via Particle Swarm Optimization with Order Invariant Encoding. Lecture Notes in Computer Science, 2021, , 158-171.	1.3	2
216	Analysis of the Univariate Marginal Distribution Algorithm modeled by Markov chains. Lecture Notes in Computer Science, 2003, , 510-517.	1.3	2

#	ARTICLE	IF	CITATIONS
217	Parallel Stochastic Search for Protein Secondary Structure Prediction. Lecture Notes in Computer Science, 2004, , 1162-1169.	1.3	2
218	Learning Conditional Linear Gaussian Classifiers with Probabilistic Class Labels. Lecture Notes in Computer Science, 2013, , 139-148.	1.3	2
219	On Applying Supervised Classification Techniques in Medicine. Lecture Notes in Computer Science, 2001, , 14-19.	1.3	2
220	Bayesian Classifiers with Consensus Gene Selection: A Case Study in the Systemic Lupus Erythematosus. Mathematics in Industry, 2008, , 560-565.	0.3	2
221	Gaussian-Stacking Multiclassifiers for Human Embryo Selection. , 2009, , 307-331.		2
222	Análisis de la actividad científica de las universidades públicas españolas en el Área de las tecnologías informáticas. Revista Española De Documentación Científica, 2013, 36, e002.	0.4	2
223	Genetic algorithms elitist probabilistic of degree 1, a generalization of simulated annealing. Lecture Notes in Computer Science, 1993, , 208-217.	1.3	2
224	Machine Learning Inspired Approaches to Combine Standard Medical Measures at an Intensive Care Unit?. Lecture Notes in Computer Science, 1999, , 366-371.	1.3	2
225	Multipartition clustering of mixed data with Bayesian networks. International Journal of Intelligent Systems, 2022, 37, 2188-2218.	5.7	2
226	Estimation of distribution algorithms using Gaussian Bayesian networks to solve industrial optimization problems constrained by environment variables. Journal of Combinatorial Optimization, 2022, 44, 1077-1098.	1.3	2
227	Structure learning approaches in causal probabilistics networks. , 1993, , 227-232.		1
228	Editorial Introduction Special Issue on Estimation of Distribution Algorithms. Evolutionary Computation, 2005, 13, v-vi.	3.0	1
229	Sparse regularized local regression. Computational Statistics and Data Analysis, 2013, 62, 122-135.	1.2	1
230	Towards optimal neuronal wiring through estimation of distribution algorithms. , 2013, , .		1
231	AN L1-REGULARIZED NAÏVE BAYES-INSPIRED CLASSIFIER FOR DISCARDING REDUNDANT AND IRRELEVANT PREDICTORS. International Journal on Artificial Intelligence Tools, 2013, 22, 1350019.	1.0	1
232	Wiring Economy of Pyramidal Cells in the Juvenile Rat Somatosensory Cortex. PLoS ONE, 2016, 11, e0165915.	2.5	1
233	Incremental Learning of Latent Forests. IEEE Access, 2020, 8, 224420-224432.	4.2	1
234	Sparse Cholesky Covariance Parametrization for Recovering Latent Structure in Ordered Data. IEEE Access, 2020, 8, 154614-154624.	4.2	1

#	ARTICLE	IF	CITATIONS
235	Efficient Anomaly Detection in a Laser-Surface Heat-Treatment Process via Laser-Spot Tracking. IEEE/ASME Transactions on Mechatronics, 2021, 26, 405-415.	5.8	1
236	Multidimensional continuous time Bayesian network classifiers. International Journal of Intelligent Systems, 0, , .	5.7	1
237	Using Probabilistic Dependencies Improves the Search of Conductance-Based Compartmental Neuron Models. Lecture Notes in Computer Science, 2010, , 170-181.	1.3	1
238	Synergies between Network-Based Representation and Probabilistic Graphical Models for Classification, Inference and Optimization Problems in Neuroscience. Lecture Notes in Computer Science, 2010, , 149-158.	1.3	1
239	Learning Bayesian Networks by Floating Search Methods. Studies in Fuzziness and Soft Computing, 2004, , 181-200.	0.8	1
240	Augmented Semi-naive Bayes Classifier. Lecture Notes in Computer Science, 2013, , 159-167.	1.3	1
241	Discretization of Expression Quantitative Trait Loci in Association Analysis Between Genotypes and Expression Data. Current Bioinformatics, 2015, 10, 144-164.	1.5	1
242	Asymmetric Hidden Markov Models with Continuous Variables. Lecture Notes in Computer Science, 2018, , 98-107.	1.3	1
243	A Fast Metropolis-Hastings Method for Generating Random Correlation Matrices. Lecture Notes in Computer Science, 2018, , 117-124.	1.3	1
244	On nonlinearity in neural encoding models applied to the primary visual cortex. Network: Computation in Neural Systems, 2011, 22, 97-125.	3.6	0
245	Maximizing the number of polychronous groups in spiking networks. , 2012, , .		0
246	Bayesian networks to answer challenging neuroscience questions. , 2013, , .		0
247	Architecture for anomaly detection in a laser heating surface process. , 2017, , .		0
248	Semi-supervised Projected Clustering for Classifying GABAergic Interneurons. Lecture Notes in Computer Science, 2013, , 156-165.	1.3	0
249	Learning Mixtures of Polynomials of Conditional Densities from Data. Lecture Notes in Computer Science, 2013, , 363-372.	1.3	0
250	Expressive Power of Binary Relevance and Chain Classifiers Based on Bayesian Networks for Multi-label Classification. Lecture Notes in Computer Science, 2014, , 519-534.	1.3	0
251	Towards Gaussian Bayesian Network Fusion. Lecture Notes in Computer Science, 2015, , 519-528.	1.3	0
252	Tree-Structured Bayesian Networks for Wrapped Cauchy Directional Distributions. Lecture Notes in Computer Science, 2016, , 207-216.	1.3	0

#	ARTICLE	IF	CITATIONS
253	GA-EDA: A New Hybrid Cooperative Search Evolutionary Algorithm. , 2006, , 187-219.		0
254	Bayesian Classifiers in Optimization: An EDA-like Approach. , 2006, , 221-242.		0
255	Rejoinder on: Hybrid semiparametric Bayesian networks. Test, 0, , .	1.1	0