Jan PlatoÅ¡

List of Publications by Year
in descending order

188 papers	1,349 citations	566801 15 h-index	525886 27 g-index
202 all docs	202 docs citations	202 times ranked	1086 citing authors

#	Article	IF	Citations
1	Automation of cleaning and ensembles for outliers detection in questionnaire data. Expert Systems With Applications, 2022, 206, 117809.	4.4	1
2	Population data mobility retrieval at territory of Czechia in pandemic COVIDâ€19 period. Concurrency Computation Practice and Experience, 2021, 33, e6105.	1.4	4
3	Highâ€dimensional data classification model based on random projection and Baggingâ€•support vector machine. Concurrency Computation Practice and Experience, 2021, 33, e6095.	1.4	3
4	Short-term natural gas consumption forecasting from long-term data collection. Energy, 2021, 218, 119430.	4.5	18
5	Case Study of Anaerobic Digestion Process Stability Detected by Dissolved Hydrogen Concentration. Processes, 2021, 9, 106.	1.3	4
6	Cliques Are Bricks for k-CT Graphs. Mathematics, 2021, 9, 1160.	1.1	3
7	Quantum inspired metaâ€heuristic approaches for automatic clustering of colour images. International Journal of Intelligent Systems, 2021, 36, 4852-4901.	3.3	5
8	Behaviour associated with the presence of a school sports ground: Visual information for policy makers. Children and Youth Services Review, 2021, 128, 106150.	1.0	2
9	Preprocessing COVID-19 Radiographic Images by Evolutionary Column Subset Selection. Advances in Intelligent Systems and Computing, 2021, , 425-436.	0.5	3
10	High-Dimensional Data Clustering Algorithm Based on Stacked-Random Projection. Advances in Intelligent Systems and Computing, 2021, , 391-401.	0.5	1
11	A Comparison between Deep Belief Network and LSTM in Chaotic Time Series Forecasting. , 2021, , .		0
12	Prediction of Hourly Vehicle Flows by Optimized Evolutionary Fuzzy Rules. Lecture Notes in Electrical Engineering, 2020, , 313-324.	0.3	0
13	Chest X-ray enhancement to interpret pneumonia malformation based on fuzzy soft set and Dempsterâ€"Shafer theory of evidence. Applied Soft Computing Journal, 2020, 86, 105889.	4.1	14
14	JPEG steganography with particle swarm optimization accelerated by AVX. Concurrency Computation Practice and Experience, 2020, 32, e5448.	1.4	5
15	Novel quantum inspired approaches for automatic clustering of gray level images using Particle Swarm Optimization, Spider Monkey Optimization and Ageist Spider Monkey Optimization algorithms. Applied Soft Computing Journal, 2020, 88, 106040.	4.1	24
16	Self-organizing Migrating Algorithm for the Single Row Facility Layout Problem. , 2020, , .		1
17	Sentiment Analysis of COVID-19 tweets by Deep Learning Classifiersâ€"A study to show how popularity is affecting accuracy in social media. Applied Soft Computing Journal, 2020, 97, 106754.	4.1	244
18	Clustering and Closure Coefficient Based on k-CT Components. IEEE Access, 2020, 8, 101145-101152.	2.6	4

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19	High-Dimensional Text Clustering by Dimensionality Reduction and Improved Density Peak. Wireless Communications and Mobile Computing, 2020, 2020, 1-16.	0.8	7
20	A Robust Deep Model for Human Action Recognition in Restricted Video Sequences. , 2020, , .		2
21	Border Collie Optimization. IEEE Access, 2020, 8, 109177-109197.	2.6	56
22	Colonoscopy contrast-enhanced by intuitionistic fuzzy soft sets for polyp cancer localization. Applied Soft Computing Journal, 2020, 95, 106492.	4.1	3
23	Lightweight Spectral–Spatial Squeeze-and- Excitation Residual Bag-of-Features Learning for Hyperspectral Classification. IEEE Transactions on Geoscience and Remote Sensing, 2020, 58, 5277-5290.	2.7	69
24	Differential evolution for the optimization of low-discrepancy generalized Halton sequences. Swarm and Evolutionary Computation, 2020, 54, 100649.	4.5	11
25	An Analysis of Convolutional Neural Network for Fashion Images Classification (Fashion-MNIST). Advances in Intelligent Systems and Computing, 2020, , 85-95.	0.5	13
26	CAPTCHA Recognition Based on Kohonen Maps. Advances in Intelligent Systems and Computing, 2020, , 296-305.	0.5	3
27	Segmentation of CAPTCHA Using Corner Detection and Clustering. Advances in Intelligent Systems and Computing, 2020, , 655-666.	0.5	2
28	Solving the single row facility layout problem by differential evolution. , 2020, , .		5
29	5. Quantum inspired automatic clustering algorithms: A comparative study of Genetic algorithm and Bat algorithm. , 2020, , 89-114.		3
30	Optimization of Generalized Halton Sequences by Differential Evolution. Lecture Notes in Computer Science, 2020, , 370-382.	1.0	1
31	Text Classification Based on Topic Modeling and Chi-square. Advances in Intelligent Systems and Computing, 2020, , 513-520.	0.5	3
32	Statistical-based system combination approach to gain advantages over different machine translation systems. Heliyon, 2019, 5, e02504.	1.4	16
33	Random Key Self–Organizing Migrating Algorithm for Permutation Problems. , 2019, , .		2
34	Enhancement of dronogram aid to visual interpretation of target objects via intuitionistic fuzzy hesitant sets. Information Sciences, 2019, 500, 67-86.	4.0	5
35	A Disturbance Activation Approach to Collision Avoidance Autonomous Driving. , 2019, , .		1
36	A Fast Trajectory Tracking Control Design for Autonomous Driving. , 2019, , .		0

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37	Optimal column subset selection for image classification by genetic algorithms. Annals of Operations Research, 2018, 265, 205-222.	2.6	37
38	An acceleration of quasigroup operations by residue arithmetic. Concurrency Computation Practice and Experience, 2018, 30, e4239.	1.4	2
39	Evaluation of Traveling Salesman Problem Instance Hardness by Clustering. Advances in Intelligent Systems and Computing, 2018, , 379-387.	0.5	0
40	Evaluation of Pseudorandom Number Generators Based on Residue Arithmetic in Differential Evolution. Lecture Notes on Data Engineering and Communications Technologies, 2018, , 336-348.	0.5	0
41	Space-Filling Curves based on Residue NumberÂSystem. Lecture Notes on Data Engineering and Communications Technologies, 2018, , 53-61.	0.5	2
42	Reinforcement Learning inspired Deep Learned Compositional Model for Decision Making in Tracking. , 2018, , .		0
43	Chicago Crime Data Analysis Using PIG in Hadoop. , 2018, , .		0
44	Closed trail distance in a biconnected graph. PLoS ONE, 2018, 13, e0202181.	1.1	10
45	LZ77 Like Lossy Transformation of Quality Scores. , 2018, , .		1
46	PATIENT-ADAPTED AND INTER-PATIENT ECG CLASSIFICATION USING NEURAL NETWORK AND GRADIENT BOOSTING. Neural Network World, 2018, 28, 241-254.	0.5	5
47	Simultaneous Prediction of Wind Speed and Direction by Evolutionary Fuzzy Rule Forest. Procedia Computer Science, 2017, 108, 295-304.	1.2	6
48	Network measures and evaluation of traveling salesman instance hardness. , 2017, , .		2
49	Three-dimensional graph drawing by Kamada-Kawai method with Barzilai-Borwein method. , 2017, , .		0
50	System identification acceleration and improvement with genetic programming usage. , 2017, , .		1
51	Prediction and Evaluation of Zero Order Entropy Changes in Grammar-Based Codes. Entropy, 2017, 19, 223.	1.1	0
52	Evolutionary Feature Subset Selection with Compression-based Entropy Estimation. , 2016, , .		3
53	Genetic algorithm for entropy-based feature subset selection. , 2016, , .		4
54	Message from NBiS 2016 Program Committee Co-Chairs. , 2016, , .		0

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55	Three Types of Differential Evolution Applied to the Facility Location Problem. Advances in Intelligent Systems and Computing, 2016, , 487-499.	0.5	1
56	A Comparison of Differential Evolution and Genetic Algorithms for the Column Subset Selection Problem. Advances in Intelligent Systems and Computing, 2016, , 223-232.	0.5	3
57	Cluster Analysis of Data with Reduced Dimensionality: An Empirical Study. Advances in Intelligent Systems and Computing, 2016, , 121-132.	0.5	3
58	WIND ENERGY POTENTIAL ASSESSMENT BASED ON WIND DIRECTION MODELLING AND MACHINE LEARNING. Neural Network World, 2016, 26, 519-538.	0.5	8
59	Evolutionary Algorithms for Fast Parallel Classification. Advances in Intelligent Systems and Computing, 2016, , 659-670.	0.5	1
60	Message from 3PGCIC 2015 Workshops Chairs. , 2015, , .		0
61	Computation of Kamada-Kawai Algorithm Using Barzilai-Borwein Method. , 2015, , .		3
62	Efficient Area Association Using Space Filling Curves. , 2015, , .		1
63	Generalized Context Transformations -- Enhanced Entropy Reduction. , 2015, , .		0
64	Rough local transfer function for cardiac disorders detection using heart sounds. Logic Journal of the IGPL, 2015, 23, 506-520.	1.3	1
65	A heuristic approach to Active Demand Side Management in Off-Grid systems operated in a Smart-Grid environment. Energy and Buildings, 2015, 96, 272-284.	3.1	38
66	Traditional and self-adaptive differential evolution for the p-median problem. , 2015, , .		8
67	GRAPH VISUALISATION BY CONCURRENT DIFFERENTIAL EVOLUTION. Neural Network World, 2015, 25, 369-386.	0.5	0
68	Utilizing Text Similarity Measurement for Data Compression to Detect Plagiarism in Czech. Advances in Intelligent Systems and Computing, 2015, , 163-172.	0.5	3
69	Local representatives in weighted networks. , 2014, , .		9
70	Clustering using artificial bee colony on CUDA. , 2014, , .		4
71	Genetic Algorithm for the Column Subset Selection Problem. , 2014, , .		8
72	Solving the p-median problem by a simple differential evolution. , 2014, , .		4

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73	Entropy Reduction Using Context Transformations. , 2014, , .		1
74	Multi-class SVM Based Classification Approach for Tomato Ripeness. Advances in Intelligent Systems and Computing, 2014, , 175-186.	0.5	19
75	Nature-Inspired Meta-Heuristics on Modern GPUs: State of the Art and Brief Survey of Selected Algorithms. International Journal of Parallel Programming, 2014, 42, 681-709.	1.1	29
76	Data Parallel density–based genetic clustering on CUDA Architecture. Concurrency Computation Practice and Experience, 2014, 26, 1097-1112.	1.4	5
77	An Improved Prediction Approach for Progression of Ocular Hypertension to Primary Open Angle Glaucoma. Advances in Intelligent Systems and Computing, 2014, , 405-412.	0.5	3
78	Genetic algorithm for sampling from scale-free data and networks. , 2014, , .		8
79	Automatic Power System Identification Using Genetic Algorithms. , 2014, , .		2
80	Local representativeness in vector data. , 2014, , .		3
81	Representativeness in Unweighted Networks Based on Local Dependency. , 2014, , .		1
82	Classification of EEG Signals Using Vector Quantization. Lecture Notes in Computer Science, 2014, , 107-118.	1.0	2
83	Evolutionary Weighted Ensemble for EEG Signal Recognition. Advances in Intelligent Systems and Computing, 2014, , 201-210.	0.5	1
84	New Genetic Algorithm for the p-Median Problem. Advances in Intelligent Systems and Computing, 2014, , 35-44.	0.5	1
85	Text Similarity Based on Data Compression in Arabic. Lecture Notes in Electrical Engineering, 2014, , 211-220.	0.3	10
86	Deterministic Data Sampling Based on Neighborhood Analysis. Advances in Intelligent Systems and Computing, 2014, , 47-56.	0.5	0
87	An Intelligent Multi-agent Recommender System. Advances in Intelligent Systems and Computing, 2014, , 201-213.	0.5	1
88	Improvement of Text Compression Using Subset of Words. Advanced Science Letters, 2014, 20, 312-316.	0.2	0
89	Evolutionary Techniques for Image Segmentation. Advances in Intelligent Systems and Computing, 2014, , 291-300.	0.5	1
90	Towards new directions of data mining by evolutionary fuzzy rules and symbolic regression. Computers and Mathematics With Applications, 2013, 66, 190-200.	1.4	16

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91	Visualization of Large Graphs Using GPU Computing. , 2013, , .		6
92	Parallel Differential Evolution in Unified Parallel C. , 2013, , .		3
93	Prediction of Multi-class Industrial Data. , 2013, , .		2
94	A brief survey of advances in Particle Swarm Optimization on Graphic Processing Units. , 2013, , .		7
95	Compression-based similarity in EEG signals. , 2013, , .		3
96	Scalable differential evolution for many-core and clusters in Unified Parallel C. , 2013, , .		3
97	Mining multi-class industrial data with evolutionary fuzzy rules. , 2013, , .		4
98	Mining traffic accident features by evolutionary fuzzy rules. , 2013, , .		3
99	SPAM DETECTION USING DATA COMPRESSION AND SIGNATURES. Cybernetics and Systems, 2013, 44, 533-549.	1.6	8
100	Many-Threaded Differential Evolution on the GPU. Natural Computing Series, 2013, , 121-147.	2.2	3
101	Implementing Artificial Immune Systems for the Linear Ordering Problem. Advances in Intelligent Systems and Computing, 2013, , 53-62.	0.5	2
102	Improving block sorting compression using Simulated Annealing. , 2013, , .		0
103	A brief survey of differential evolution on Graphic Processing Units. , 2013, , .		5
104	SUPERVISED LEARNING OF PHOTOVOLTAIC POWER PLANT OUTPUT PREDICTION MODELS. Neural Network World, 2013, 23, 321-338.	0.5	16
105	Automatic Localization and Boundary Detection of Retina in Images Using Basic Image Processing Filters. Advances in Intelligent Systems and Computing, 2013, , 169-182.	0.5	0
106	Detecting Defects of Steel Slabs Using Symbolic Regression. Advances in Intelligent Systems and Computing, 2013, , 369-377.	0.5	0
107	Data Mining by Symbolic Fuzzy Classifiers and Genetic Programming. Advances in Intelligent Systems and Computing, 2013, , 273-282.	0.5	0
108	GPU Accelerated Genetic Clustering. Lecture Notes in Computer Science, 2012, , 410-419.	1.0	0

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109	Evolutionary prediction of photovoltaic power plant energy production. , 2012, , .		2
110	An ACO inspired weighting approach for the spectral partitioning of co-authorship networks. , 2012, , .		2
111	Social and swarm aspects of co-authorship network. Logic Journal of the IGPL, 2012, 20, 634-643.	1.3	26
112	Genetic algorithm for clustering accelerated by the CUDA platform. , 2012, , .		5
113	Learning the Classification of Traffic Accident Types. , 2012, , .		12
114	Artificially evolved soft computing models for photovoltaic power plant output estimation. , 2012, , .		5
115	Practical results of artificial immune Systems for combinatorial optimization problems. , 2012, , .		1
116	A PSO-based document classification algorithm accelerated by the CUDA Platform. , 2012, , .		12
117	Searching similar images &#x2014; Vector quantization with S-tree. , 2012, , .		4
118	Searching for optimal alphabet for data compression using simulated annealing. , 2012, , .		1
119	Improving Compression Using Words. , 2012, , .		1
120	Spam detection using compression and PSO. , 2012, , .		4
121	Independent Task Scheduling by Artificial Immune Systems, Differential Evolution, and Genetic Algorithms. , 2012, , .		2
122	Fast decoding algorithms for variable-lengths codes. Information Sciences, 2012, 183, 66-91.	4.0	20
123	Improving Evolved Alphabet Using Tabu Set. Lecture Notes in Computer Science, 2012, , 655-666.	1.0	3
124	On Spectral Partitioning of Co-authorship Networks. Lecture Notes in Computer Science, 2012, , 302-313.	1.0	1
125	Neural PCA and Maximum Likelihood Hebbian Learning on the GPU. Lecture Notes in Computer Science, 2012, , 132-139.	1.0	4
126	Differential evolution for the linear ordering problem implemented on CUDA. , 2011, , .		10

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127	Optimizing alphabet using genetic algorithms. , 2011, , .		5
128	Tension prediction by using ANN and SOM in heavy facilities. , 2011, , .		0
129	Evolving alphabet using genetic algorithms. , 2011, , .		4
130	Genetically Evolved Fuzzy Predictor for Photovoltaic Power Output Estimation. , 2011, , .		17
131	Genetic search for quasigroups with heterogeneous power sequences. , 2011, , .		2
132	A comparison of many-threaded differential evolution and genetic algorithms on CUDA. , 2011, , .		5
133	Fuzzy classification by evolutionary algorithms. , 2011, , .		49
134	Many-threaded implementation of differential evolution for the CUDA platform. , 2011, , .		31
135	Heavy facilities tension prediction using Flexible Neural Trees. , 2011, , .		0
136	Towards the analysis of co-authorship networks by iterative spectral partitioning. , 2011, , .		0
137	Tension estimation by fuzzy predictors in heavy facilities. , 2011, , .		0
138	Learning Patterns from Data by an Evolutionary-Fuzzy Approach. Advances in Intelligent and Soft Computing, 2011, , 127-135.	0.2	5
139	Reducing Alphabet Using Genetic Algorithms. Communications in Computer and Information Science, 2011, , 82-92.	0.4	5
140	Large data real-time classification with Non-negative Matrix Factorization and Self-Organizing Maps on GPU. , 2010, , .		2
141	Data mining using NMF and generalized matrix inverse. , 2010, , .		0
142	Fast intrusion detection system based on Flexible Neural Tree. , 2010, , .		2
143	Iris recognition on GPU with the usage of Non-Negative Matrix Factorization. , 2010, , .		6
144	Interleaver optimization by population based metaheuristics. , 2010, , .		6

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145	Towards intrusion detection by information retrieval and genetic programming. , 2010, , .		4
146	Scaling IDS construction based on Non-negative Matrix factorization using GPU computing. , 2010, , .		7
147	Search personalization in hyperlinked environments by relevance propagation and ant colony optimization. , 2010, , .		0
148	Evolutionary improvement of search queries and its parameters. , 2010, , .		1
149	User Profiles Modeling in Information Retrieval Systems. Advanced Information and Knowledge Processing, 2010, , 169-198.	0.2	8
150	Differential Evolution for Scheduling Independent Tasks on Heterogeneous Distributed Environments. Advances in Intelligent and Soft Computing, 2010, , 127-134.	0.2	7
151	Genetic Algorithms Evolving Quasigroups with Good Pseudorandom Properties. Lecture Notes in Computer Science, 2010, , 472-482.	1.0	4
152	Non-negative Matrix Factorization on GPU. Communications in Computer and Information Science, 2010, , 21-30.	0.4	11
153	Evolving Fuzzy Classifier for Data Mining - an Information Retrieval Approach. Advances in Intelligent and Soft Computing, 2010, , 25-32.	0.2	3
154	The Evolution of Fuzzy Classifier for Data Mining with Applications. Lecture Notes in Computer Science, 2010, , 349-358.	1.0	17
155	Fast Dimension Reduction Based on NMF. Lecture Notes in Computer Science, 2010, , 424-433.	1.0	0
156	Using Wavelet and Multi-wavelet Transforms for Web Information Retrieval of Czech Language. Advances in Intelligent and Soft Computing, 2010, , 43-52.	0.2	0
157	Floreon+ system: Web applications with 3D visualization support. , 2009, , .		1
158	Modeling Permutations for Genetic Algorithms. , 2009, , .		7
159	On turbo code interleavers optimized by bit error rate evolution and free distance evolution. , 2009, , .		0
160	Detecting Insider Attacks Using Non-negative Matrix Factorization. , 2009, , .		4
161	Optimization of Turbo Codes by Differential Evolution and Genetic Algorithms. , 2009, , .		1
162	Scheduling Independent Tasks on Heterogeneous Distributed Environments by Differential Evolution. , 2009, , .		5

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163	Searching for quasigroups for hash functions with genetic algorithms. , 2009, , .		9
164	Hash Functions Based on Large Quasigroups. Lecture Notes in Computer Science, 2009, , 521-529.	1.0	14
165	Differential Evolution and Genetic Algorithms for the Linear Ordering Problem. Lecture Notes in Computer Science, 2009, , 139-146.	1.0	7
166	Designing Light Weight Intrusion Detection Systems. , 2009, , 216-229.		1
167	Genetic Algorithms for the Use in Combinatorial Problems. Studies in Computational Intelligence, 2009, , 3-22.	0.7	0
168	Compression of small text files. Advanced Engineering Informatics, 2008, 22, 410-417.	4.0	22
169	Implementing Boolean Matrix Factorization. Lecture Notes in Computer Science, 2008, , 543-552.	1.0	4
170	On the Implementation of Boolean Matrix Factorization. , 2008, , .		7
171	Tensor Decomposition for 3D Bars Problem. , 2008, , .		0
172	Using clustering to improve WLZ77 compression. , 2008, , .		2
173	Matrix Factorization Approach for Feature Deduction and Design of Intrusion Detection Systems. , 2008, , .		10
174	A study on performance of MOGA and HLCGA for the Linear Ordering Problem. , 2008, , .		0
175	Investigating Query Similarity Measures for Collaborative Web Search. , 2008, , .		1
176	Implicit User Modelling Using Hybrid Meta-Heuristics. , 2008, , .		3
177	Evolutionary Approaches to Linear Ordering Problem. , 2008, , .		5
178	Genetic Algorithms for Better Turbo Codes. , 2008, , .		0
179	Genetic Algorithms Searching for Turbo Code Interleaver and Solving Linear Ordering Problem. , 2008, , .		3
180	Comparing Query Similarity Measures for Collaborative Web Search. , 2008, , .		0

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181	On Genetic Algorithms for Boolean Matrix Factorization. , 2008, , .		10
182	Evolving feasible linear ordering problem solutions. , 2008, , .		2
183	Implicit User Modelling for Query Optimization. , 2007, , .		1
184	Implicit User Modelling for Web Search Improvement. , 2007, , .		0
185	Implicit User Modelling for Web Search Improvement. , 2007, , .		1
186	Optimizing Interleaver for Turbo Codes by Genetic Algorithms. , 2007, , .		0
187	Implicit User Modelling for Query Optimization. Database and Expert Systems Applications (DEXA), Proceedings of the International Workshop on, 2007, , .	0.0	0
188	Document Compression Improvements Based on Data Clustering. , 0, , .		0