Vasile Palade

List of Publications by Year
in descending order

137 papers	4,811 citations	236925 25 h-index	110387 64 g-index
141 all docs	141 docs citations	141 times ranked	4832 citing authors

#	Article	IF	Citations
1	An insight into classification with imbalanced data: Empirical results and current trends on using data intrinsic characteristics. Information Sciences, 2013, 250, 113-141.	6.9	1,158
2	FSVM-CIL: Fuzzy Support Vector Machines for Class Imbalance Learning. IEEE Transactions on Fuzzy Systems, 2010, 18, 558-571.	9.8	325
3	Quantum-Behaved Particle Swarm Optimization: Analysis of Individual Particle Behavior and Parameter Selection. Evolutionary Computation, 2012, 20, 349-393.	3.0	283
4	microPred: effective classification of pre-miRNAs for human miRNA gene prediction. Bioinformatics, 2009, 25, 989-995.	4.1	227
5	Convergence analysis and improvements of quantum-behaved particle swarm optimization. Information Sciences, 2012, 193, 81-103.	6.9	172
6	Quantum-behaved particle swarm optimization with Gaussian distributed local attractor point. Applied Mathematics and Computation, 2011, 218, 3763-3775.	2.2	168
7	Solving the Power Economic Dispatch Problem With Generator Constraints by Random Drift Particle Swarm Optimization. IEEE Transactions on Industrial Informatics, 2014, 10, 222-232.	11.3	155
8	Interactive machine learning: experimental evidence for the human in the algorithmic loop. Applied Intelligence, 2019, 49, 2401-2414.	5.3	151
9	Multi-Classifier Systems: Review and a roadmap for developers. International Journal of Hybrid Intelligent Systems, 2006, 3, 35-61.	1.2	136
10	Edge Intelligence-Assisted Smoke Detection in Foggy Surveillance Environments. IEEE Transactions on Industrial Informatics, 2020, 16, 1067-1075.	11.3	87
11	Model-based fault detection and isolation of a steam generator using neuro-fuzzy networks. Neurocomputing, 2009, 72, 2939-2951.	5.9	84
12	Automatic screening and classification of diabetic retinopathy and maculopathy using fuzzy image processing. Brain Informatics, 2016, 3, 249-267.	3.0	78
13	Efficient activity recognition using lightweight CNN and DS-GRU network for surveillance applications. Applied Soft Computing Journal, 2021, 103, 107102.	7.2	72
14	Efficient resampling methods for training support vector machines with imbalanced datasets. , 2010, , .		67
15	Random drift particle swarm optimization algorithm: convergence analysis and parameter selection. Machine Learning, 2015, 101, 345-376.	5.4	64
16	DeepReS: A Deep Learning-Based Video Summarization Strategy for Resource-Constrained Industrial Surveillance Scenarios. IEEE Transactions on Industrial Informatics, 2020, 16, 5938-5947.	11.3	61
17	A neural network based multi-classifier system for gene identification in DNA sequences. Neural Computing and Applications, 2005, 14, 122-131.	5.6	60
18	Neuro-Fuzzy Ensemble Approach for Microarray Cancer Gene Expression Data Analysis. , 2006, , .		60

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19	A hybrid deep learning neural approach for emotion recognition from facial expressions for socially assistive robots. Neural Computing and Applications, 2018, 29, 359-373.	5.6	52
20	ADJUSTED GEOMETRIC-MEAN: A NOVEL PERFORMANCE MEASURE FOR IMBALANCED BIOINFORMATICS DATASETS LEARNING. Journal of Bioinformatics and Computational Biology, 2012, 10, 1250003.	0.8	46
21	Automatic detection of microaneurysms in colour fundus images for diabetic retinopathy screening. Neural Computing and Applications, 2016, 27, 1149-1164.	5.6	43
22	Selection of Significant On-Road Sensor Data for Short-Term Traffic Flow Forecasting Using the Taguchi Method. IEEE Transactions on Industrial Informatics, 2012, 8, 255-266.	11.3	38
23	Convolution neural networks for pothole detection of critical road infrastructure. Computers and Electrical Engineering, 2022, 99, 107725.	4.8	38
24	FAULT DIAGNOSIS OF AN INDUSTRIAL GAS TURBINE USING NEURO-FUZZY METHODS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2002, 35, 471-476.	0.4	37
25	Improving Sentiment Analysis in Arabic Using Word Representation. , 2018, , .		37
26	A New Performance Measure for Class Imbalance Learning. Application to Bioinformatics Problems. , 2009, , .		31
27	Brain Tumor Classification Using a Combination of Variational Autoencoders and Generative Adversarial Networks. Biomedicines, 2022, 10, 223.	3.2	31
28	Efficient residuals pre-processing for diagnosing multi-class faults in a doubly fed induction generator, under missing data scenarios. Expert Systems With Applications, 2014, 41, 6386-6399.	7.6	29
29	The Q-Norm Complexity Measure and the Minimum Gradient Method: A Novel Approach to the Machine Learning Structural Risk Minimization Problem. IEEE Transactions on Neural Networks, 2008, 19, 1415-1430.	4.2	28
30	Stacked deep convolutional auto-encoders for emotion recognition from facial expressions. , 2017, , .		28
31	Ensemble of Elman neural networks and support vector machines for reverse engineering of gene regulatory networks. Applied Soft Computing Journal, 2011, 11, 1718-1726.	7.2	26
32	Detection of Diabetic Retinopathy and Maculopathy in Eye Fundus Images Using Fuzzy Image Processing. Lecture Notes in Computer Science, 2015, , 379-388.	1.3	25
33	An all-pair quantum SVM approach for big data multiclass classification. Quantum Information Processing, 2018, 17, 1.	2.2	25
34	Biochemical systems identification by a random drift particle swarm optimization approach. BMC Bioinformatics, 2014, 15, S1.	2.6	23
35	Pedestrian and Vehicle Detection in Autonomous Vehicle Perception Systemsâ€"A Review. Sensors, 2021, 21, 7267.	3.8	23
36	Building interpretable fuzzy models for high dimensional data analysis in cancer diagnosis. BMC Genomics, 2011, 12, S5.	2.8	22

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37	Learning to Localise Automated Vehicles in Challenging Environments Using Inertial Navigation Systems (INS). Applied Sciences (Switzerland), 2021, 11, 1270.	2.5	22
38	Improving Skin Cancer Classification Using Heavy-Tailed Student T-Distribution in Generative Adversarial Networks (TED-GAN). Diagnostics, 2021, 11, 2147.	2.6	22
39	Optimal detection of new classes of faults by an Invasive Weed Optimization method. , 2014, , .		21
40	Multiple Sequence Alignment with Hidden Markov Models Learned by Random Drift Particle Swarm Optimization. IEEE/ACM Transactions on Computational Biology and Bioinformatics, 2014, 11, 243-257.	3.0	20
41	Emergency management using geographic information systems: application to the first Romanian traveling salesman problem instance. Knowledge and Information Systems, 2017, 50, 265-285.	3.2	18
42	Automatic Screening and Classification of Diabetic Retinopathy Fundus Images. Communications in Computer and Information Science, 2014, , 113-122.	0.5	18
43	Neural and Neuro-Fuzzy Integration in a Knowledge-Based System for Air Quality Prediction. Applied Intelligence, 2002, 17, 141-169.	5.3	17
44	A Knowledge Base for the maintenance of knowledge extracted from web data. Knowledge-Based Systems, 2007, 20, 238-248.	7.1	17
45	BUILDING A KNOWLEDGE BASE FOR IMPLEMENTING A WEB-BASED COMPUTERIZED RECOMMENDATION SYSTEM. International Journal on Artificial Intelligence Tools, 2007, 16, 793-828.	1.0	15
46	NEURO-FUZZY BASED FAULT DIAGNOSIS OF A STEAM GENERATOR. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 1180-1185.	0.4	15
47	Using structural information and citation evidence to detect significant plagiarism cases in scientific publications. Journal of the Association for Information Science and Technology, 2012, 63, 286-312.	2.6	15
48	Hierarchical Clustering Based Band Selection Algorithm for Hyperspectral Face Recognition. IEEE Access, 2019, 7, 24333-24342.	4.2	15
49	WhONet: Wheel Odometry neural Network for vehicular localisation in GNSS-deprived environments. Engineering Applications of Artificial Intelligence, 2021, 105, 104421.	8.1	15
50	NEURO-FUZZY BASED FAULT DIAGNOSIS APPLIED TO AN ELECTRO-PNEUMATIC VALVE. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2002, 35, 477-482.	0.4	14
51	Adaptive Web QoS controller based on online system identification using quantum-behaved particle swarm optimization. Soft Computing, 2015, 19, 1715-1725.	3.6	13
52	Big data classification with quantum multiclass SVM and quantum one-against-all approach. , 2016, , .		13
53	A Quaternion Gated Recurrent Unit Neural Network for Sensor Fusion. Information (Switzerland), 2021, 12, 117.	2.9	13
54	Predicting the Public Adoption of Connected and Autonomous Vehicles. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 1680-1688.	8.0	13

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55	A neuro-fuzzy approach for functional genomics data interpretation and analysis. Neural Computing and Applications, 2003, 12, 153-159.	5.6	12
56	Fuzzy-based Refinement of the Fault Diagnosis Task in Industrial Devices. Journal of Intelligent Manufacturing, 2005, 16, 599-614.	7.3	11
57	A Comprehensive Fuzzy-Based Framework for Cancer Microarray Data Gene Expression Analysis. , 2007, , .		11
58	Uncovering highly obfuscated plagiarism cases using fuzzy semantic-based similarity model. Journal of King Saud University - Computer and Information Sciences, 2015, 27, 248-268.	3.9	11
59	Automatic Detection of Microaneurysms for Diabetic Retinopathy Screening Using Fuzzy Image Processing. Communications in Computer and Information Science, 2015, , 69-79.	0.5	11
60	Detailed Identification of Fingerprints Using Convolutional Neural Networks. , 2018, , .		11
61	Deep Learning for Flood Forecasting and Monitoring in Urban Environments. , 2019, , .		11
62	Scenario Optimisation and Sensitivity Analysis for Safe Automated Driving Using Gaussian Processes. Applied Sciences (Switzerland), 2021, 11, 775.	2.5	11
63	A Hybrid Framework for Detecting and Eliminating Cyber-Attacks in Power Grids. Energies, 2021, 14, 5823.	3.1	11
64	Noise Reduction in a Non-Homogenous Ground Penetrating Radar Problem by Multiobjective Neural Networks. IEEE Transactions on Magnetics, 2009, 45, 1454-1457.	2.1	10
65	Training ANFIS Parameters with a Quantum-behaved Particle Swarm Optimization Algorithm. Lecture Notes in Computer Science, 2012, , 148-155.	1.3	10
66	Adaptive incremental ensemble of extreme learning machines for fault diagnosis in induction motors. , 2017, , .		10
67	Detection of Diabetic Retinopathy and Maculopathy in Eye Fundus Images Using Deep Learning and Image Augmentation. Lecture Notes in Computer Science, 2019, , 114-127.	1.3	10
68	Resilient Consensus Control Design for DC Microgrids against False Data Injection Attacks Using a Distributed Bank of Sliding Mode Observers. Sensors, 2022, 22, 2644.	3.8	10
69	iPlag: Intelligent Plagiarism Reasoner in scientific publications. , 2011, , .		9
70	Generation of Pedestrian Crossing Scenarios Using Ped-Cross Generative Adversarial Network. Applied Sciences (Switzerland), 2021, 11, 471.	2.5	9
71	DMO-QPSO: A Multi-Objective Quantum-Behaved Particle Swarm Optimization Algorithm Based on Decomposition with Diversity Control. Mathematics, 2021, 9, 1959.	2.2	9
72	Signal denoising in engineering problems through the minimum gradient method. Neurocomputing, 2009, 72, 2270-2275.	5.9	8

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73	Darwin, Lamarck, or Baldwin: Applying Evolutionary Algorithms to Machine Learning Techniques. , 2014, , .		8
74	Invasive weed classification. Neural Computing and Applications, 2015, 26, 525-539.	5.6	8
75	Deep Learning for Illumination Invariant Facial Expression Recognition. , 2018, , .		8
76	Adversarial Learning on Incomplete and Imbalanced Medical Data for Robust Survival Prediction of Liver Transplant Patients. IEEE Access, 2021, 9, 73641-73650.	4.2	8
77	An improved Gaussian distribution based quantum-behaved particle swarm optimization algorithm for engineering shape design problems. Engineering Optimization, 0, , 1-27.	2.6	8
78	IO-VNBD: Inertial and Odometry benchmark dataset for ground vehicle positioning. Data in Brief, 2021, 35, 106885.	1.0	8
79	Automatic fuzzy rule base generation for on-line handwritten alphanumeric character recognition. International Journal of Knowledge-Based and Intelligent Engineering Systems, 2005, 9, 327-339.	1.0	7
80	Towards Integrative Machine Learning and Knowledge Extraction. Lecture Notes in Computer Science, 2017, , 1-12.	1.3	7
81	Design of a Cost-Effective Deep Convolutional Neural Networkâ€“Based Scheme for Diagnosing Faults in Smart Grids. , 2019, , .		7
82	Computational Intelligence Methodologies in Fault Diagnosis: Review and State of the Art. , 2006, , 1-36.		7
83	Vehicular Localisation at High and Low Estimation Rates During GNSS Outages: A Deep Learning Approach. Advances in Intelligent Systems and Computing, 2021, , 229-248.	0.6	7
84	Generative Adversarial Networks: AÂSurvey onÂTraining, Variants, andÂApplications. Intelligent Systems Reference Library, 2022, , 7-29.	1.2	7
85	Human-like fault diagnosis using a neural network implementation of plausibility and relevance. Neural Computing and Applications, 2005, 14, 149-165.	5.6	6
86	A Hybrid Ensemble Scheme for Diagnosing New Class Defects under Non-stationary and Class Imbalance Conditions. , 2017, , .		6
87	Neural network approach for solving nonlocal boundary value problems. Neural Computing and Applications, 2020, 32, 14153-14171.	5.6	6
88	An investigation on support vector clustering for big data in quantum paradigm. Quantum Information Processing, 2020, 19, 1.	2.2	6
89	Generative Adversarial Network-Based Scheme for Diagnosing Faults in Cyber-Physical Power Systems. Sensors, 2021, 21, 5173.	3.8	6
90	Image Processing and Machine Learning Techniques for Diabetic Retinopathy Detection: A Review. Lecture Notes in Computer Science, 2020, , 136-154.	1.3	6

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91	A Constrained Fuzzy Knowledge-Based System for the Management of Container Yard Operations. International Journal of Fuzzy Systems, 2018, 20, 1205-1223.	4.0	5
92	Word Representation With Salient Features. IEEE Access, 2019, 7, 30157-30173.	4.2	5
93	Diversity-guided Lamarckian random drift particle swarm optimization for flexible ligand docking. BMC Bioinformatics, 2020, 21, 286.	2.6	5
94	Centralised and Decentralised Sensor Fusion-Based Emergency Brake Assist. Sensors, 2021, 21, 5422.	3.8	5
95	An agent-based optimisation approach for vehicle routing problem with unique vehicle location and depot. Expert Systems With Applications, 2022, 192, 116370.	7.6	5
96	An improved non-comparative classification method for human microRNA gene prediction. , 2008, , .		4
97	Machine Learning and Genetic Regulatory Networks: A Review and a Roadmap. Studies in Computational Intelligence, 2009, , 3-34.	0.9	4
98	A CUSTOMIZABLE FUZZY SYSTEM FOR OFFLINE HANDWRITTEN CHARACTER RECOGNITION. International Journal on Artificial Intelligence Tools, 2011, 20, 425-455.	1.0	4
99	New Trends in Web User Behaviour Analysis. Studies in Computational Intelligence, 2013, , 1-10.	0.9	4
100	Gaussian kernel in quantum learning. International Journal of Quantum Information, 2020, 18, 2050006.	1.1	4
101	Constrained Generative Adversarial Learning for Dimensionality Reduction. IEEE Transactions on Knowledge and Data Engineering, 2021, , 1-1.	5.7	4
102	Testing Online Navigation Recommendations in a Web Site. Lecture Notes in Computer Science, 2006, , 487-496.	1.3	3
103	DENSE STRUCTURAL EXPECTATION MAXIMISATION WITH PARALLELISATION FOR EFFICIENT LARGE-NETWORK STRUCTURAL INFERENCE. International Journal on Artificial Intelligence Tools, 2013, 22, 1350011.	1.0	3
104	Robust Structured Low-Rank Representation for Image Segmentation. International Journal on Artificial Intelligence Tools, 2018, 27, 1850020.	1.0	3
105	A stacked deep autoencoder model for biomedical figure classification. , 2018, , .		3
106	An Effective Swarm Intelligence Optimization Algorithm for Flexible Ligand Docking. IEEE/ACM Transactions on Computational Biology and Bioinformatics, 2022, 19, 2672-2684.	3.0	3
107	MSLDOCK: Multi-Swarm Optimization for Flexible Ligand Docking and Virtual Screening. Journal of Chemical Information and Modeling, 2021, 61, 1500-1515.	5.4	3
108	Optimizing the Performance of a Refrigeration System Using an Invasive Weed Optimization Algorithm. Smart Innovation, Systems and Technologies, 2013, , 79-93.	0.6	3

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109	Practical applications of neural networks. Neural Computing and Applications, 2005, 14, 95-96.	5.6	2
110	Genetic Algorithm Approach to Construction of Specialized Multi-Classifier Systems: Application to DNA Analysis. , 2007, , .		2
111	GreenSim: A Network Simulator for Comprehensively Validating and Evaluating New Machine Learning Techniques for Network Structural Inference. , 2010, , .		2
112	Web Ad-Slot Offline Scheduling Using an Ant Colony Algorithm. , 2011, , .		2
113	Quantum Supervised Clustering Algorithm for Big Data. , 2018, , .		2
114	Winds of Change: How Up-To-Date Forecasting Methods Could Help Change Brazilian Wind Energy Policy and Save Billions of US$. Energies, 2018, 11, 2952.	3.1	2
115	Deep Q-Learning for Illumination and Rotation Invariant Face Detection. , 2019, , .		2
116	Generation of Pedestrian Pose Structures using Generative Adversarial Networks. , 2019, , .		2
117	Guest Editorial: Special Issue on Deep Representation and Transfer Learning for Smart and Connected Health. IEEE Transactions on Neural Networks and Learning Systems, 2021, 32, 464-465.	11.3	2
118	Fuzzy Image Processing and Deep Learning for Microaneurysms Detection. Lecture Notes in Computer Science, 2020, , 321-339.	1.3	2
119	An integrated framework for diagnosing process faults with incomplete features. Knowledge and Information Systems, 2022, 64, 75-93.	3.2	2
120	Word representation using refined contexts. Applied Intelligence, 2022, 52, 12347-12368.	5.3	2
121	RDPSOVina: the random drift particle swarm optimization for proteinâ€“ligand docking. Journal of Computer-Aided Molecular Design, 2022, 36, 415-425.	2.9	2
122	Multi-objective evolutionary algorithms based Interpretable Fuzzy models for microarray gene expression data analysis. , 2010, , .		1
123	Special Issue ofQuantitative Financeon â€˜Financial Data Analyticsâ€™. Quantitative Finance, 2015, 15, 1617-1617.	1.7	1
124	Diversity collaboratively guided random drift particle swarm optimization. International Journal of Machine Learning and Cybernetics, 2021, 12, 2617-2638.	3.6	1
125	A Neuro-Genetic Framework for Multi-Classifier Design: An Application to Promoter Recognition in DNA Sequences. Studies in Computational Intelligence, 2007, , 71-94.	0.9	1
126	Tracking Multiple Optima in Dynamic Environments by Quantum-Behavior Particle Swarm Using Speciation. International Journal of Swarm Intelligence Research, 2012, 3, 55-76.	0.7	1

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127	The Minimum Gradient Complexity Control Applied to Sensitivity Extraction of Electromagnetic Devices. IEEE Transactions on Magnetics, 2008, 44, 1114-1117.	2.1	0
128	Filtering Noise in Regression Problems Using a Multiobjective Leaning Algorithm. , 2008, , .		0
129	On a Multiobjective Training Algorithm for RBF Networks Using Particle Swarm Optimization. , 2010, , .		0
130	Study on the compression-expansion coefficient in drift particle swarm optimization. , 2012, , .		0
131	Graph Regularized Low-Rank Representation for Semi-Supervised Learning. , 2018, , .		0
132	Collaborative diversity control strategy for random drift particle swarm optimization. , 2019, , .		0
133	A Leap from Randomized to Quantum Clustering with Support Vector Machine - A Computation Complexity Analysis. , 2020, , .		0
134	Hybrid Approach of Genetic Programming and Quantum-Behaved Particle Swarm Optimization for Modeling and Optimization of Fermentation Processes. Smart Innovation, Systems and Technologies, 2013, , 117-136.	0.6	0
135	MultiNNProm: A Multi-Classifier System for Finding Genes. , 2006, , 451-463.		0
136	Using Generative Adversarial Networks and Non-Roadside Video Data to Generate Pedestrian Crossing Scenarios. , 2021, , .		0
137	Parallel multi-swarm cooperative particle swarm optimization for proteinâ€“ligand docking and virtual screening. BMC Bioinformatics, 2022, 23, .	2.6	0