

Susana M Vieira

List of Publications by Year in descending order

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Version: 2024-02-01

122
papers

2,284
citations

393982

19
h-index

276539

41
g-index

128
all docs

128
docs citations

128
times ranked

2382
citing authors

#	ARTICLE	IF	CITATIONS
1	Modified binary PSO for feature selection using SVM applied to mortality prediction of septic patients. Applied Soft Computing Journal, 2013, 13, 3494-3504.	4.1	246
2	Clinical Decision Support Systems for Triage in the Emergency Department using Intelligent Systems: a Review. Artificial Intelligence in Medicine, 2020, 102, 101762.	3.8	130
3	Missing data in medical databases: Impute, delete or classify?. Artificial Intelligence in Medicine, 2013, 58, 63-72.	3.8	127
4	Solutions for detection of non-technical losses in the electricity grid: A review. Renewable and Sustainable Energy Reviews, 2017, 80, 1256-1268.	8.2	120
5	Cohen's kappa coefficient as a performance measure for feature selection. , 2010, ,		111
6	Classification of new electricity customers based on surveys and smart metering data. Energy, 2016, 107, 804-817.	4.5	103
7	Two cooperative ant colonies for feature selection using fuzzy models. Expert Systems With Applications, 2010, 37, 2714-2723.	4.4	89
8	Data mining using clinical physiology at discharge to predict ICU readmissions. Expert Systems With Applications, 2012, 39, 13158-13165.	4.4	85
9	Reducing unnecessary lab testing in the ICU with artificial intelligence. International Journal of Medical Informatics, 2013, 82, 345-358.	1.6	85
10	Fuzzy criteria for feature selection. Fuzzy Sets and Systems, 2012, 189, 1-18.	1.6	65
11	Clustering-based novelty detection for identification of non-technical losses. International Journal of Electrical Power and Energy Systems, 2018, 101, 301-310.	3.3	63
12	Decision tree search methods in fuzzy modeling and classification. International Journal of Approximate Reasoning, 2007, 44, 106-123.	1.9	62
13	Predicting Intensive Care Unit admission among patients presenting to the emergency department using machine learning and natural language processing. PLoS ONE, 2020, 15, e0229331.	1.1	38
14	Takagi Sugeno Fuzzy Modeling Using Mixed Fuzzy Clustering. IEEE Transactions on Fuzzy Systems, 2017, 25, 1417-1429.	6.5	36
15	A Middleware Platform for Intelligent Automation: An Industrial Prototype Implementation. Computers in Industry, 2020, 123, 103329.	5.7	36
16	Missing Data. , 2016, , 143-162.		36
17	Noise Versus Outliers. , 2016, , 163-183.		33
18	Fuzzy modelling strategies applied to a column flotation process. Minerals Engineering, 2005, 18, 725-729.	1.8	31

#	ARTICLE	IF	CITATIONS
19	Modelling the service life of rendered facades using fuzzy systems. Automation in Construction, 2015, 51, 1-7.	4.8	31
20	Pharmaceutical quality control laboratory digital twin – A novel governance model for resource planning and scheduling. International Journal of Production Research, 2020, 58, 6553-6567.	4.9	27
21	Risk of mortality and cardiopulmonary arrest in critical patients presenting to the emergency department using machine learning and natural language processing. PLoS ONE, 2020, 15, e0230876.	1.1	26
22	Assessment of energy efficiency measures using multi-objective optimization in Portuguese households. Sustainable Cities and Society, 2017, 35, 764-773.	5.1	24
23	Mortality prediction of septic shock patients using probabilistic fuzzy systems. Applied Soft Computing Journal, 2016, 42, 194-203.	4.1	23
24	Electricity demand profile prediction based on household characteristics. , 2015, , .		21
25	Multi-stage modeling using fuzzy multi-criteria feature selection to improve survival prediction of ICU septic shock patients. Expert Systems With Applications, 2012, 39, 12332-12339.	4.4	19
26	Disease-based Modeling to Predict Fluid Response in Intensive Care Units. Methods of Information in Medicine, 2013, 52, 494-502.	0.7	19
27	Multiobjective Optimization of a Shell-Like Induction Spherical Motor for a Power-Assisted Wheelchair. IEEE Transactions on Energy Conversion, 2018, 33, 660-669.	3.7	19
28	Ant Colony Optimization Applied to Feature Selection in Fuzzy Classifiers. Lecture Notes in Computer Science, 2007, , 778-788.	1.0	19
29	Ensemble fuzzy models in personalized medicine: Application to vasopressors administration. Engineering Applications of Artificial Intelligence, 2016, 49, 141-148.	4.3	18
30	A Novel Framework for Intelligent Automation. IFAC-PapersOnLine, 2019, 52, 1825-1830.	0.5	18
31	Artificial intelligence-based prediction of transfusion in the intensive care unit in patients with gastrointestinal bleeding. BMJ Health and Care Informatics, 2021, 28, e100245.	1.4	18
32	Predicting Outcomes of Septic Shock Patients Using Feature Selection Based on Soft Computing Techniques. Communications in Computer and Information Science, 2010, , 65-74.	0.4	18
33	Computational intelligence methods for processing misaligned, unevenly sampled time series containing missing data. , 2011, , .		17
34	Binary Fish School Search applied to feature selection: Application to ICU readmissions. , 2014, , .		17
35	Daily prediction of ICU readmissions using feature engineering and ensemble fuzzy modeling. Expert Systems With Applications, 2017, 79, 244-253.	4.4	16
36	Intelligent Sensors for Real-Time Decision-Making. Automation, 2021, 2, 62-82.	1.2	15

#	ARTICLE	IF	CITATIONS
37	Fuzzy clustering and prediction of electricity demand based on household characteristics. , 0, , .		15
38	Designing closed-loop supply chains with nonlinear dimensioning factors using ant colony optimization. Soft Computing, 2015, 19, 2245-2264.	2.1	14
39	Clustering-based novelty detection to uncover electricity theft. , 2017, , .		14
40	Multi-Criteria Ant Feature Selection Using Fuzzy Classifiers. Studies in Computational Intelligence, 2009, , 19-36.	0.7	14
41	Fuzzy Systems in the Service-Life Prediction of Exterior Natural Stone Claddings. Journal of Performance of Constructed Facilities, 2016, 30, .	1.0	12
42	Fuzzy Modeling to Predict Severely Depressed Left Ventricular Ejection Fraction following Admission to the Intensive Care Unit Using Clinical Physiology. Scientific World Journal, The, 2015, 2015, 1-9.	0.8	11
43	Mixed Fuzzy Clustering for Misaligned Time Series. IEEE Transactions on Fuzzy Systems, 2017, 25, 1777-1794.	6.5	11
44	Simulation Model of a Quality Control Laboratory in Pharmaceutical Industry * *This work is funded by Portuguese Funds through the FCT - Foundation for Science and Technology under the project (UID/EMS/50022/2013) and iDecision4Care (IF/00833/2014/CP1238/CT0002). S.M. Vieira acknowledges the support by Program Investigador FCT (IF/00833/2014) from FCT, co-funded by the European Social Fund (ESF) through the Operational Program Human Potential (POPH). The authors acknowledge the support of Hovione Farmaciãnc. IFAC-PapersOnLine, 2017, 50, 9014-9019.	0.5	11
45	Segmentation of Residential Gas Consumers Using Clustering Analysis. Energies, 2017, 10, 2047.	1.6	11
46	Power output optimization of electric vehicles smart charging hubs using deep reinforcement learning. Expert Systems With Applications, 2022, 201, 116995.	4.4	11
47	Predicting ICU readmissions based on bedside medical text notes. , 2016, , .		10
48	Circadian rhythm in critically ill patients: Insights from the eICU Database. Cardiovascular Digital Health Journal, 2021, 2, 118-125.	0.5	10
49	Clinical decision support tool for Co-management signalling. International Journal of Medical Informatics, 2018, 113, 56-62.	1.6	9
50	Electricity fraud detection using committee semi-supervised learning. , 2018, , .		9
51	Dual Resource Constrained Scheduling for Quality Control Laboratories. IFAC-PapersOnLine, 2019, 52, 1421-1426.	0.5	9
52	Fuzzy modeling to predict administration of vasopressors in intensive care unit patients. , 2011, , .		8
53	Fuzzy modeling based on Mixed Fuzzy Clustering for health care applications. , 2015, , .		8
54	Analysis of residential natural gas consumers using fuzzy c-means clustering. , 2016, , .		8

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55	Reinforcement Learning for Dual-Resource Constrained Scheduling. IFAC-PapersOnLine, 2020, 53, 10810-10815.	0.5	8
56	Heuristics for three-dimensional steel cutting with usable leftovers considering large time periods. European Journal of Industrial Engineering, 2016, 10, 431.	0.5	7
57	The impact of intelligent automation in internal supply chains. International Journal of Integrated Supply Management, 2021, 14, 1.	0.2	7
58	Assessing the impact of automation in pharmaceutical quality control labs using a digital twin. Journal of Manufacturing Systems, 2022, 62, 270-285.	7.6	7
59	Digital Twin of a Flexible Manufacturing System for Solutions Preparation. Automation, 2022, 3, 153-175.	1.2	7
60	Integration of industrial IoT architectures for dynamic scheduling. Computers and Industrial Engineering, 2022, 171, 108387.	3.4	7
61	Combination of fuzzy identification algorithms applied to a column flotation process. , 0, , .		6
62	Fuzzy classification in ant feature selection. , 2008, , .		6
63	Metaheuristics for feature selection: Application to sepsis outcome prediction. , 2012, , .		6
64	Predicting intensive care unit readmissions using probabilistic fuzzy systems. , 2013, , .		6
65	Analysing the segmentation of energy consumers using mixed fuzzy clustering. , 2015, , .		6
66	Fuzzy Decision Tree to Predict Readmissions in Intensive Care Unit. Lecture Notes in Electrical Engineering, 2015, , 365-373.	0.3	6
67	A Tabu Search Algorithm for the 3D Bin Packing Problem in the Steel Industry. Lecture Notes in Electrical Engineering, 2015, , 355-364.	0.3	6
68	Hybrid neural models for automatic handwritten digits recognition. , 2018, , .		6
69	Evolutionary process scheduling approach for energy cost minimization in a yeast production factory: design, simulation, and factory implementation. Energy Systems, 2019, 10, 113-139.	1.8	6
70	Evolving flocking in embodied agents based on local and global application of Reynolds's™ rules. PLoS ONE, 2019, 14, e0224376.	1.1	6
71	Ant Based Fuzzy Modeling Applied to Marble Classification. Lecture Notes in Computer Science, 2006, , 90-101.	1.0	6
72	Predicting septic shock outcomes in a database with missing data using fuzzy modeling: Influence of pre-processing techniques on real-world data-based classification. , 2011, , .		5

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73	A decision support system for ICU readmissions prevention. , 2013, , .		5
74	Multimodeling for the prediction of patient readmissions in Intensive Care Units. , 2014, , .		5
75	Prediction of events in the smart grid: Interruptions in distribution transformers. , 2016, , .		5
76	Concept and Evaluation of a Technology-independent Data Collection Architecture for Industrial Automation. , 2019, , .		5
77	Real-Time Fuzzy Predictive Control of a Column Flotation Process. IEEE International Conference on Fuzzy Systems, 2007, , .	0.0	4
78	Multi-Objective Performance Evaluation Using Fuzzy Criteria: Increasing Sensitivity Prediction for Outcome of Septic Shock Patients. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 14042-14047.	0.4	4
79	Metaheuristics for the 3D bin packing problem in the steel industry. , 2014, , .		4
80	Fuzzy Clustering for Incomplete Short Time Series Data. Lecture Notes in Computer Science, 2015, , 353-359.	1.0	4
81	Novel Governance Model for Planning in Pharmaceutical Quality Control Laboratories. IFAC-PapersOnLine, 2018, 51, 484-489.	0.5	4
82	Air pressure forecasting for the Mutriku oscillating water column wave power plant: Review and case study. IET Renewable Power Generation, 2021, 15, 3485-3503.	1.7	4
83	Internal Supply Chain Digital Twin of a Pharmaceutical Company. IFAC-PapersOnLine, 2020, 53, 10797-10802.	0.5	4
84	Preprocessing of Clinical Databases to improve classification accuracy of patient diagnosis*. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 14121-14126.	0.4	3
85	Ensemble fuzzy classifiers design using weighted aggregation criteria. , 2015, , .		3
86	Multistage modeling for the classification of numerical and categorical datasets. , 2017, , .		3
87	Mining Consumer Characteristics from Smart Metering Data through Fuzzy Modelling. Communications in Computer and Information Science, 2016, , 562-573.	0.4	3
88	Optimizing Agent Training with Deep Q-Learning on a Self-Driving Reinforcement Learning Environment. , 2020, , .		3
89	Artificial Bee Colony Algorithm Applied to Dynamic Flexible Job Shop Problems. Communications in Computer and Information Science, 2020, , 241-254.	0.4	3
90	Fault Accommodation Using Fuzzy Predictive Control. , 2006, , .		2

#	ARTICLE	IF	CITATIONS
91	Predicting laboratory testing in intensive care using fuzzy and neural modeling. , 2011, , .		2
92	Optimization of Fuzzy Models using a Novel PSO Algorithm: Application to Medical Databases. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 9023-9028.	0.4	2
93	Probabilistic fuzzy prediction of mortality in intensive care units. , 2012, , .		2
94	Data mining and modeling to predict the necessity of vasopressors for ICU patients. , 2013, , .		2
95	Fuzzy modeling to predict short and long-term mortality among patients with Acute Kidney Injury. , 2016, , .		2
96	Selecting sustainable electric bus powertrains using multipreference evolutionary algorithms. International Journal of Sustainable Transportation, 2018, 12, 592-612.	2.1	2
97	Mixed Fuzzy Clustering for Deriving Predictive Models in Intensive Care Units. Profiles in Operations Research, 2018, , 81-99.	0.3	2
98	Fuzzy Modeling for Predicting Patient Survival Rate in ICU with AKI. , 2018, , .		2
99	Seasonal Clustering of Residential Natural Gas Consumers. Communications in Computer and Information Science, 2016, , 723-734.	0.4	2
100	Modified Sequential Forward Selection Applied to Predicting Septic Shock Outcome in the Intensive Care Unit. Advances in Intelligent Systems and Computing, 2013, , 469-477.	0.5	2
101	Comparison of Multi-objective Algorithms Applied to Feature Selection. Studies in Fuzziness and Soft Computing, 2013, , 359-375.	0.6	2
102	Ant Feature Selection Using Fuzzy Decision Functions. Studies in Fuzziness and Soft Computing, 2010, , 343-364.	0.6	1
103	ANN validation system for ICU neonatal data. , 2012, , .		1
104	Electricity Usage Efficiency in Large Buildings: DSM Measures and Preliminary Simulations of DR Programs in a Public Library. Communications in Computer and Information Science, 2015, , 249-259.	0.4	1
105	Optimizing probabilistic fuzzy systems for classification using metaheuristics. , 2016, , .		1
106	Foreword. International Journal of Medical Informatics, 2018, 113, 96-97.	1.6	1
107	Short-term prediction in an Oscillating Water Column using Artificial Neural Networks. , 2018, , .		1
108	Fuzzy Classification of Bariatric Post-surgery Effectiveness. , 2018, , .		1

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109	A Multivariable Prediction Model to Select Colorectal Surgical Patients for Co-Management. Acta Medica Portuguesa, 2021, 34, 118-127.	0.2	1
110	Fuzzy Modeling Based on Mixed Fuzzy Clustering for Multivariate Time Series of Unequal Lengths. Communications in Computer and Information Science, 2016, , 741-751.	0.4	1
111	Image Based Classification Platform. , 2013, , 595-613.		1
112	Multi-Objective Binary Fish School Search. Advances in Computational Intelligence and Robotics Book Series, 2018, , 53-72.	0.4	1
113	128: MODELING TO INDIVIDUALIZE MEAN ARTERIAL PRESSURE THRESHOLD TO PREVENT ACUTE KIDNEY INJURY IN THE ICU. Critical Care Medicine, 2016, 44, 109-109.	0.4	0
114	Short-term prediction of low kidney function in ICU patients. , 2017, , .		0
115	Fuzzy Modeling of Survival Associated to Insulin Therapy in the ICU. , 2019, , .		0
116	128. Critical Care Medicine, 2019, 47, 47.	0.4	0
117	An Architecture Based on Fuzzy Systems for Personalized Medicine in ICUs. , 2019, , .		0
118	Multi-agent system for dynamic scheduling. , 2020, , .		0
119	The Impact of Intelligent Automation in Internal Supply Chains. International Journal of Integrated Supply Management, 2021, 1, 1.	0.2	0
120	Challenges and Opportunities of Soft Computing Tools in Health Care Delivery. , 2013, , 321-340.		0
121	Relating Aircraft Altitude with Pilot's Physiological Variables: Towards Increasing Safety in Light-sport Aviation. , 2017, , .		0
122	Solving Dynamic Delivery Services Using Ant Colony Optimization. Communications in Computer and Information Science, 2020, , 327-341.	0.4	0