José Ramón Villar

List of Publications by Year
in descending order

113 papers	**957** citations	623734 **14** h-index	526287 **27** g-index
121 all docs	**121** docs citations	**121** times ranked	**873** citing authors

#	Article	IF	Citations
1	Improving Fall Detection Using an On-Wrist Wearable Accelerometer. Sensors, 2018, 18, 1350.	3.8	107
2	A soft computing method for detecting lifetime building thermal insulation failures. Integrated Computer-Aided Engineering, 2010, 17, 103-115.	4.6	83
3	Improving Human Activity Recognition and its Application in Early Stroke Diagnosis. International Journal of Neural Systems, 2015, 25, 1450036.	5.2	59
4	Features and models for human activity recognition. Neurocomputing, 2015, 167, 52-60.	5.9	57
5	Mutual information-based feature selection and partition design in fuzzy rule-based classifiers from vague data. International Journal of Approximate Reasoning, 2008, 49, 607-622.	3.3	46
6	Generalized Models for the Classification of Abnormal Movements in Daily Life and its Applicability to Epilepsy Convulsion Recognition. International Journal of Neural Systems, 2016, 26, 1650037.	5.2	42
7	A fuzzy logic based efficient energy saving approach for domestic heating systems. Integrated Computer-Aided Engineering, 2009, 16, 151-163.	4.6	40
8	An IoT Platform for Epilepsy Monitoring and Supervising. Journal of Sensors, 2017, 2017, 1-18.	1.1	40
9	Obtaining transparent models of chaotic systems with multi-objective simulated annealing algorithms. Information Sciences, 2008, 178, 952-970.	6.9	25
10	High-Performance Analog Front-End (AFE) for EOG Systems. Electronics (Switzerland), 2020, 9, 970.	3.1	18
11	Towards effective detection of elderly falls with CNN-LSTM neural networks. Neurocomputing, 2022, 500, 231-240.	5.9	18
12	The application of a two-step AI model to an automated pneumatic drilling process. International Journal of Computer Mathematics, 2009, 86, 1769-1777.	1.8	17
13	An intelligent route management system for electric vehicle charging. Integrated Computer-Aided Engineering, 2013, 20, 321-333.	4.6	15
14	A hybrid intelligent recognition system for the early detection of strokes. Integrated Computer-Aided Engineering, 2015, 22, 215-227.	4.6	15
15	User-centered fall detection using supervised, on-line learning and transfer learning. Progress in Artificial Intelligence, 2019, 8, 453-474.	2.4	14
16	Impact of Individual Headache Types on the Work and Work Efficiency of Headache Sufferers. International Journal of Environmental Research and Public Health, 2020, 17, 6918.	2.6	14
17	A CLUSTER MERGING METHOD FOR TIME SERIES MICROARRAY WITH PRODUCTION VALUES. International Journal of Neural Systems, 2014, 24, 1450018.	5.2	13
18	A hybrid fuzzy clustering approach for diagnosing primary headache disorder. Logic Journal of the IGPL, 2021, 29, 220-235.	1.5	12

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19	Optimising operational costs using Soft Computing techniques. Integrated Computer-Aided Engineering, 2011, 18, 313-325.	4.6	11
20	A Feature Selection Method Using a Fuzzy Mutual Information Measure. Advances in Intelligent and Soft Computing, 2007, , 56-63.	0.2	10
21	Taximeter verification using imprecise data from GPS. Engineering Applications of Artificial Intelligence, 2009, 22, 250-260.	8.1	10
22	Meta-heuristic improvements applied for steel sheet incremental cold shaping. Memetic Computing, 2012, 4, 249-261.	4.0	10
23	Urban bicycles renting systems: Modelling and optimization using nature-inspired search methods. Neurocomputing, 2014, 135, 98-106.	5.9	10
24	Identification of abnormal movements with 3D accelerometer sensors for seizure recognition. Journal of Applied Logic, 2017, 24, 54-61.	1.1	10
25	Taximeter verification with GPS and soft computing techniques. Soft Computing, 2010, 14, 405-418.	3.6	9
26	Optimizing the operating conditions in a high precision industrial process using soft computing techniques. Expert Systems, 2012, 29, 276-299.	4.5	9
27	Transfer learning and information retrieval applied to fall detection. Expert Systems, 2020, 37, e12522.	4.5	9
28	Human Activity Recognition and Feature Selection for Stroke Early Diagnosis. Lecture Notes in Computer Science, 2013, , 659-668.	1.3	9
29	Key features for the characterization of Android malware families. Logic Journal of the IGPL, 2017, 25, 54-66.	1.5	8
30	Evaluation of a Wrist-Based Wearable Fall Detection Method. Lecture Notes in Computer Science, 2018, , 377-386.	1.3	8
31	Mixing user-centered and generalized models for Fall Detection. Neurocomputing, 2021, 452, 473-486.	5.9	8
32	Minimizing Energy Consumption in Heating Systems under Uncertainty. Lecture Notes in Computer Science, 2008, , 583-590.	1.3	8
33	Longest path estimation from inherently fuzzy data acquired with GPS using genetic algorithms. , 2006, , .		7
34	Some Results about Mutual Information-based Feature Selection and Fuzzy Discretization of Vague Data. IEEE International Conference on Fuzzy Systems, 2007, , .	0.0	7
35	A feature selection method using a fuzzy mutual information measure. International Journal of Reasoning-based Intelligent Systems, 2010, 2, 133.	0.1	7
36	An Application of a Hybrid Intelligent System for Diagnosing Primary Headaches. International Journal of Environmental Research and Public Health, 2021, 18, 1890.	2.6	7

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37	Autonomous on-wrist acceleration-based fall detection systems: unsolved challenges. Neurocomputing, 2021, 452, 404-413.	5.9	6
38	Improving Energy Efficiency in Buildings Using Machine Intelligence. Lecture Notes in Computer Science, 2009, , 773-782.	1.3	6
39	Virtual reality and machine learning in the automatic photoparoxysmal response detection. Neural Computing and Applications, 2023, 35, 5643-5659.	5.6	6
40	Fuzzy rule learning with ACO in epilepsy crisis identification. , 2015, , .		5
41	Gene clustering for time-series microarray with production outputs. Soft Computing, 2016, 20, 4301-4312.	3.6	5
42	A*-Based Co-Evolutionary Approach for Multi-Robot Path Planning with Collision Avoidance. Cybernetics and Systems, 2023, 54, 339-354.	2.5	5
43	A three-stage hybrid clustering system for diagnosing children with primary headache disorder. Logic Journal of the IGPL, 0, , .	1.5	5
44	Learning and training techniques in fuzzy control for energy efficiency in buildings. Logic Journal of the IGPL, 2012, 20, 757-769.	1.5	4
45	Emerging Technologies: IoT, Big Data, and CPS with Sensory Systems. Journal of Sensors, 2018, 2018, 1-3.	1.1	4
46	AI for Modelling the Laser Milling of Copper Components. Lecture Notes in Computer Science, 2008, , 498-507.	1.3	4
47	Unsupervised Feature Selection in High Dimensional Spaces and Uncertainty. Lecture Notes in Computer Science, 2009, , 565-572.	1.3	4
48	Scalability of a Methodology for Generating Technical Trading Rules with GAPs Based on Risk-Return Adjustment and Incremental Training. Lecture Notes in Computer Science, 2010, , 143-150.	1.3	4
49	Energy Saving by Means of Fuzzy Systems. Lecture Notes in Computer Science, 2007, , 155-167.	1.3	4
50	Analysing the Low Quality of the Data in Lighting Control Systems. Lecture Notes in Computer Science, 2010, , 421-428.	1.3	4
51	A Preliminary Study on Early Diagnosis of Illnesses Based on Activity Disturbances. Advances in Intelligent Systems and Computing, 2013, , 521-527.	0.6	4
52	Synthesized A* Multi-robot Path Planning in an Indoor Smart Lab Using Distributed Cloud Computing. Advances in Intelligent Systems and Computing, 2021, , 580-589.	0.6	4
53	Peak Detection Enhancement in Autonomous Wearable Fall Detection. Advances in Intelligent Systems and Computing, 2021, , 48-58.	0.6	4
54	Improving wearable-based fall detection with unsupervised learning. Logic Journal of the IGPL, 2022, 30, 314-325.	1.5	4

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55	Fall Detection Analysis Using a Real Fall Dataset. Advances in Intelligent Systems and Computing, 2019, , 334-343.	0.6	3
56	A Preliminary Study on Automatic Detection and Filtering of Artifacts from EEG Signals. , 2021, , .		3
57	An ensemble solution for multivariate time series clustering. Neurocomputing, 2021, 457, 182-192.	5.9	3
58	A Proof of Concept in Multivariate Time Series Clustering Using Recurrent Neural Networks and SP-Lines. Lecture Notes in Computer Science, 2019, , 346-357.	1.3	3
59	A Thermodynamical Model Study for an Energy Saving Algorithm. Lecture Notes in Computer Science, 2009, , 384-390.	1.3	3
60	A Soft Computing System to Perform Face Milling Operations. Lecture Notes in Computer Science, 2009, , 1282-1291.	1.3	3
61	A SMOTE Extension for Balancing Multivariate Epilepsy-Related Time Series Datasets. Advances in Intelligent Systems and Computing, 2018, , 439-448.	0.6	3
62	AN INTELLIGENT TUTORING SYSTEM BASED ON A DOMAIN ONTOLOGY FOR THE DESIGN OF LEAD-LAG CONTROLLERS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 105-110.	0.4	2
63	Energy Saving By Means Of Multiagent Systems And Fuzzy Systems. IEEE Latin America Transactions, 2008, 6, 517-523.	1.6	2
64	On the Selection of Key Features for Android Malware Characterization. Advances in Intelligent Systems and Computing, 2015, , 167-176.	0.6	2
65	Pre-Clinical Study on the Detection of Simulated Epileptic Seizures. International Journal of Uncertainty, Fuzziness and Knowlege-Based Systems, 2016, 24, 33-46.	1.9	2
66	Characterization of Android Malware Families by a Reduced Set of Static Features. Advances in Intelligent Systems and Computing, 2017, , 607-617.	0.6	2
67	Intelligent decision support to determine the best sensory guardrail locations. Neurocomputing, 2019, 354, 41-48.	5.9	2
68	A Preliminary Study on Multivariate Time Series Clustering. Advances in Intelligent Systems and Computing, 2020, , 473-480.	0.6	2
69	Hemicranial Cough-Induced Headache as a First Symptom of a Carotid-Cavernous Fistula-Case Report. Medicina (Lithuania), 2020, 56, 194.	2.0	2
70	A First Prototype of an Emotional Smart Speaker. Advances in Intelligent Systems and Computing, 2022, , 304-313.	0.6	2
71	A Hybrid Bio-inspired Clustering Approach for Diagnosing Children with Primary Headache Disorder. Lecture Notes in Computer Science, 2020, , 739-750.	1.3	2
72	Efficiency in Electrical Heating Systems: An MAS Real World Application. Advances in Intelligent and Soft Computing, 2009, , 460-469.	0.2	2

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73	Soft Computing Decision Support for a Steel Sheet Incremental Cold Shaping Process. Lecture Notes in Computer Science, 2011, , 482-489.	1.3	2
74	A hybrid evolutionary approach to the management of Bicycle Renting Systems. , 2011, , .		1
75	Evolutionary model support for Urban Bicycles Renting Systems. , 2011, , .		1
76	Multi-objective learning of white box models with low quality data. Neurocomputing, 2012, 75, 219-225.	5.9	1
77	Simple heuristics for enhancing GP learning. Logic Journal of the IGPL, 2015, 23, 472-484.	1.5	1
78	When cloud meets battery. , 2018, , .		1
79	Design issues in Time Series dataset balancing algorithms. Neural Computing and Applications, 2020, 32, 1287-1304.	5.6	1
80	Special issue SOCO 2017: AI and ML applied to Health Sciences (MLHS). Neural Computing and Applications, 2020, 32, 1217-1218.	5.6	1
81	VR-Photosense: A Virtual Reality Photic Stimulation Interface for the Study of Photosensitivity. Advances in Intelligent Systems and Computing, 2022, , 178-186.	0.6	1
82	Spanish Road Fork Traffic Analysis and Modelling. Lecture Notes in Computer Science, 2017, , 483-493.	1.3	1
83	Steel Sheet Incremental Cold Shaping Improvements Using Hybridized Genetic Algorithms with Support Vector Machines and Neural Networks. Studies in Computational Intelligence, 2011, , 323-332.	0.9	1
84	Modelling of Heat Flux in Building Using Soft-Computing Techniques. Lecture Notes in Computer Science, 2010, , 636-645.	1.3	1
85	Evaluating the Low Quality Measurements in Lighting Control Systems. Advances in Intelligent and Soft Computing, 2010, , 119-126.	0.2	1
86	An Study of the Tree Generation Algorithms in Equation Based Model Learning with Low Quality Data. Lecture Notes in Computer Science, 2011, , 84-91.	1.3	1
87	Tree Generation Methods Comparison in GAP Problems with Low Quality Data. Advances in Intelligent and Soft Computing, 2011, , 85-93.	0.2	1
88	Hybrid Systems for Analyzing the Movements during a Temporary Breath Inability Episode. Lecture Notes in Computer Science, 2014, , 549-560.	1.3	1
89	Comparing ACO Approaches in Epilepsy Seizures. Lecture Notes in Computer Science, 2016, , 261-272.	1.3	1
90	A Comparison of Multivariate Time Series Clustering Methods. Advances in Intelligent Systems and Computing, 2021, , 571-579.	0.6	1

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91	Fall Detection Based on Local Peaks andÂMachine Learning. Lecture Notes in Computer Science, 2020, , 631-643.	1.3	1
92	A low-power HAR method for Fall and High-Intensity ADLs identification using wrist-worn accelerometer devices. Logic Journal of the IGPL, 0, , .	1.5	1
93	Simulators and Testbeds for IIoT Development and Validation. , 2022, , .		1
94	A web-based multi-agent system approach to document engineering. International Journal of Web Engineering and Technology, 2004, 1, 437.	0.2	0
95	Conventional Methods and AI models for Solving an Industrial an Industrial Problem. , 2008, , .		0
96	Improving enterprise resource planning results using knowledge extraction and learning. , 2010, , .		0
97	Intelligent operating conditions design by means of bio-inspired models. , 2011, , .		0
98	A Hybrid Bio-Inspired Tabu Search Clustering Approach. Lecture Notes in Computer Science, 2021, , 436-447.	1.3	0
99	A Comparison of Blink Removal Techniques in EEG Signals. Lecture Notes in Computer Science, 2021, , 355-366.	1.3	0
100	Editorial: Special issue HAIS 2018. Logic Journal of the IGPL, 2021, 29, 121-123.	1.5	0
101	A New Information Infrastructure Approach for End-To-End Supply Chain Management. Advances in Intelligent Systems and Computing, 2022, , 314-323.	0.6	0
102	Low-Cost Deep Learning-Based Prototype for Automatic Identification of Traffic Signs in Vehicles. Advances in Intelligent Systems and Computing, 2022, , 91-100.	0.6	0
103	Low Quality Data Management for Optimising Energy Efficiency in Distributed Agents. Advances in Intelligent and Soft Computing, 2010, , 673-680.	0.2	0
104	Merge Method for Shape-Based Clustering in Time Series Microarray Analysis. Lecture Notes in Computer Science, 2012, , 834-841.	1.3	0
105	Comparison of Fuzzy Functions for Low Quality Data GAP Algorithms. Lecture Notes in Computer Science, 2012, , 339-349.	1.3	0
106	Data Analysis for Detecting a Temporary Breath Inability Episode. Lecture Notes in Computer Science, 2014, , 126-133.	1.3	0
107	Learning Fuzzy Models with a SAX-based Partitioning for Simulated Seizure Recognition. Advances in Intelligent Systems and Computing, 2017, , 20-30.	0.6	0
108	DTW as Alignment Function in the Context of Time Series Balancing. Advances in Intelligent Systems and Computing, 2020, , 209-218.	0.6	0

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109	REINFORCEMENT OF PYTHON LEARNING THROUGH A PROGRAMMING GYMKHANA. EDULEARN Proceedings, 2019, , .	0.0	0
110	FINEXT 2019: LOOKING ON THE BRIGHT SIDE BY UNCOVERING THE WEAKNESSES. , 2019, , .		0
111	Time Series Data Augmentation and Dropout Roles in Deep Learning Applied to Fall Detection. Advances in Intelligent Systems and Computing, 2021, , 563-570.	0.6	0
112	Stroke Rehabilitation: Detection of Finger Movements. Lecture Notes in Computer Science, 2020, , 729-738.	1.3	0
113	Early Detection of Flash Floods Using Case-Based Reasoning. , 0, , .		0