

# Jose M Alonso

## List of Publications by Year in descending order

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Version: 2024-02-01

89  
papers

1,903  
citations

304743

22  
h-index

302126

39  
g-index

95  
all docs

95  
docs citations

95  
times ranked

1266  
citing authors

#	ARTICLE	IF	CITATIONS
1	A Survey of Contrastive and Counterfactual Explanation Generation Methods for Explainable Artificial Intelligence. IEEE Access, 2021, 9, 11974-12001.	4.2	141
2	Looking for a good fuzzy system interpretability index: An experimental approach. International Journal of Approximate Reasoning, 2009, 51, 115-134.	3.3	130
3	A multilayer multimodal detection and prediction model based on explainable artificial intelligence for Alzheimer's disease. Scientific Reports, 2021, 11, 2660.	3.3	125
4	A Survey of Fuzzy Systems Software: Taxonomy, Current Research Trends, and Prospects. IEEE Transactions on Fuzzy Systems, 2016, 24, 40-56.	9.8	91
5	HILK: A new methodology for designing highly interpretable linguistic knowledge bases using the fuzzy logic formalism. International Journal of Intelligent Systems, 2008, 23, 761-794.	5.7	87
6	HILK++: an interpretability-guided fuzzy modeling methodology for learning readable and comprehensible fuzzy rule-based classifiers. Soft Computing, 2011, 15, 1959-1980.	3.6	73
7	Interpretability of Fuzzy Systems: Current Research Trends and Prospects. , 2015, , 219-237.		71
8	Continuous Space Estimation: Increasing WiFi-Based Indoor Localization Resolution without Increasing the Site-Survey Effort. Sensors, 2017, 17, 147.	3.8	68
9	Robust hybrid deep learning models for Alzheimer's progression detection. Knowledge-Based Systems, 2021, 213, 106688.	7.1	65
10	An Ontology-Based Interpretable Fuzzy Decision Support System for Diabetes Diagnosis. IEEE Access, 2018, 6, 37371-37394.	4.2	58
11	FINGRAMS: Visual Representations of Fuzzy Rule-Based Inference for Expert Analysis of Comprehensibility. IEEE Transactions on Fuzzy Systems, 2013, 21, 1133-1149.	9.8	47
12	JFML: A Java Library to Design Fuzzy Logic Systems According to the IEEE Std 1855-2016. IEEE Access, 2018, 6, 54952-54964.	4.2	45
13	Generating Understandable and Accurate Fuzzy Rule-Based Systems in a Java Environment. Lecture Notes in Computer Science, 2011, , 212-219.	1.3	38
14	A Bibliometric Analysis of the Explainable Artificial Intelligence Research Field. Communications in Computer and Information Science, 2018, , 3-15.	0.5	38
15	Teaching Explainable Artificial Intelligence to High School Students. International Journal of Computational Intelligence Systems, 2020, 13, 974.	2.7	36
16	Human activity recognition in indoor environments by means of fusing information extracted from intensity of WiFi signal and accelerations. Information Sciences, 2013, 233, 162-182.	6.9	35
17	Toward automatic generation of linguistic advice for saving energy at home. Soft Computing, 2018, 22, 345-359.	3.6	33
18	Explainable Fuzzy Systems. Studies in Computational Intelligence, 2021, , .	0.9	33

#	ARTICLE	IF	CITATIONS
19	Quest for Interpretability-Accuracy Trade-off Supported by Fingrams into the Fuzzy Modeling Tool GUAJE. International Journal of Computational Intelligence Systems, 2013, 6, 46.	2.7	32
20	ExpliClas: Automatic Generation of Explanations in Natural Language for Weka Classifiers. , 2019, , .		30
21	Explainable Artificial Intelligence for Human-Centric Data Analysis in Virtual Learning Environments. Communications in Computer and Information Science, 2019, , 125-138.	0.5	29
22	Enhanced WiFi localization system based on Soft Computing techniques to deal with small-scale variations in wireless sensors. Applied Soft Computing Journal, 2011, 11, 4677-4691.	7.2	26
23	A multiclassifier approach for topology-based WiFi indoor localization. Soft Computing, 2013, 17, 1817-1831.	3.6	25
24	Fuzzy classifier ensembles for hierarchical WiFi-based semantic indoor localization. Expert Systems With Applications, 2017, 90, 394-404.	7.6	22
25	Embedding HILK in a three-objective evolutionary algorithm with the aim of modeling highly interpretable fuzzy rule-based classifiers. , 2010, , .		21
26	Knowledge-based Intelligent Diagnosis of Ground Robot Collision with Non Detectable Obstacles. Journal of Intelligent and Robotic Systems: Theory and Applications, 2007, 48, 539-566.	3.4	17
27	Human activity recognition applying computational intelligence techniques for fusing information related to WiFi positioning and body posture. , 2010, , .		17
28	An exploratory study on the benefits of using natural language for explaining fuzzy rule-based systems. , 2017, , .		17
29	Generation and evaluation of factual and counterfactual explanations for decision trees and fuzzy rule-based classifiers. , 2020, , .		17
30	Descriptive and Comparative Analysis of Human Perceptions expressed through Fuzzy Rating Scale-based Questionnaires. International Journal of Computational Intelligence Systems, 2016, 9, 450.	2.7	16
31	Paving the Way to Explainable Artificial Intelligence with Fuzzy Modeling. Lecture Notes in Computer Science, 2019, , 215-227.	1.3	15
32	Multi-objective design of highly interpretable fuzzy rule-based classifiers with semantic cointension. , 2011, , .		14
33	Generating automatic linguistic descriptions with big data. Information Sciences, 2017, 380, 12-30.	6.9	14
34	KBCT: a knowledge extraction and representation tool for fuzzy logic based systems. , 0, , .		13
35	New types of computational perceptions: Linguistic descriptions in deforestation analysis. Expert Systems With Applications, 2017, 85, 46-60.	7.6	13
36	WiFi-based indoor localization and tracking of a moving device. , 2014, , .		12

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37	Interpretable clinical time-series modeling with intelligent feature selection for early prediction of antimicrobial multidrug resistance. <i>Future Generation Computer Systems</i> , 2022, 133, 68-83.	7.5	12
38	Highly Interpretable Linguistic Knowledge Bases Optimization: Genetic Tuning versus Solis-Wetts. Looking for a good interpretability-accuracy trade-off. <i>IEEE International Conference on Fuzzy Systems</i> , 2007, , .	0.0	11
39	Py4JFML: A Python wrapper for using the IEEE Std 1855-2016 through JFML. , 2019, , .		11
40	Building Explanations for Fuzzy Decision Trees with the ExpliClas Software. , 2020, , .		11
41	Enhancing Fingrams to deal with precise fuzzy systems. <i>Fuzzy Sets and Systems</i> , 2016, 297, 1-25.	2.7	10
42	Interpretability Constraints and Criteria for Fuzzy Systems. <i>Studies in Computational Intelligence</i> , 2021, , 49-89.	0.9	10
43	A new fingram-based software tool for visual representation and analysis of fuzzy association rules. , 2013, , .		9
44	Special Issue on Software Tools for Soft Computing. <i>International Journal of Computational Intelligence Systems</i> , 2013, 6, 1.	2.7	9
45	An Overview of Fuzzy Systems. <i>Studies in Computational Intelligence</i> , 2021, , 25-47.	0.9	9
46	Social Network Analysis of Co-fired Fuzzy Rules. <i>Studies in Fuzziness and Soft Computing</i> , 2013, , 113-128.	0.8	9
47	WiFi Localization System Using Fuzzy Rule-Based Classification. <i>Lecture Notes in Computer Science</i> , 2009, , 383-390.	1.3	8
48	Modeling Interpretable Fuzzy Rule-Based Classifiers for Medical Decision Support. , 2013, , 1064-1081.		8
49	FCE: Feedback Based Counterfactual Explanations for Explainable AI. <i>IEEE Access</i> , 2022, 10, 72363-72372.	4.2	8
50	Combining user's preferences and quality criteria into a new index for guiding the design of fuzzy systems with a good interpretability-accuracy trade-off. , 2010, , .		7
51	Analyzing fuzzy association rules with Fingrams in KEEL. , 2014, , .		7
52	Natural Language Generation with Computational Intelligence [Guest Editorial]. <i>IEEE Computational Intelligence Magazine</i> , 2017, 12, 8-9.	3.2	7
53	Revisiting Indexes for Assessing Interpretability of Fuzzy Systems. <i>Studies in Computational Intelligence</i> , 2021, , 91-118.	0.9	7
54	Toward Explainable Artificial Intelligence Through Fuzzy Systems. <i>Studies in Computational Intelligence</i> , 2021, , 1-23.	0.9	7

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55	Enhancing the fuzzy modeling tool GUAJE with a new module for fingrams-based analysis of fuzzy rule bases. , 2012, , .		6
56	From Zadehâ€™s Computing with Words Towards eXplainable Artificial Intelligence. Lecture Notes in Computer Science, 2019, , 244-248.	1.3	6
57	Designing Interpretable Fuzzy Systems. Studies in Computational Intelligence, 2021, , 119-168.	0.9	6
58	Factual and Counterfactual Explanation of Fuzzy Information Granules. Studies in Computational Intelligence, 2021, , 153-185.	0.9	6
59	Interpretability analysis of fuzzy association rules supported by fingrams. , 2013, , .		6
60	Experimental Study on Generating Multi-modal Explanations of Black-box Classifiers in terms of Gray-box Classifiers. , 2020, , .		5
61	A Framework for Analyzing Fairness, Accountability, Transparency and Ethics: A Use-case in Banking Services. , 2021, , .		5
62	Modeling Interpretable Fuzzy Rule-Based Classifiers for Medical Decision Support. Advances in Medical Technologies and Clinical Practice Book Series, 2012, , 255-272.	0.3	5
63	An Interpretability-Guided Modeling Process for Learning Comprehensible Fuzzy Rule-Based Classifiers. , 2009, , .		4
64	Topology-based indoor localization by means of WiFi fingerprinting with a computational intelligent classifier. , 2011, , .		4
65	An empirical approach for modeling fuzzy geographical descriptors. , 2017, , .		4
66	rLDCP: R package for text generation from data. , 2017, , .		4
67	Interactive Natural Language Technology for Explainable Artificial Intelligence. Lecture Notes in Computer Science, 2021, , 63-70.	1.3	4
68	Mealttime Blood Glucose Classifier Based on Fuzzy Logic for the DIABTel Telemedicine System. Lecture Notes in Computer Science, 2009, , 295-304.	1.3	4
69	WiFi localization system based on Fuzzy Logic to deal with signal variations. , 2009, , .		3
70	Design and Validation of an Explainable Fuzzy Beer Style Classifier. Studies in Computational Intelligence, 2021, , 169-217.	0.9	3
71	Modelling of the adsorption of urea herbicides by tropical soils with an Adaptiveâ€™Neuralâ€™based Fuzzy Inference System. Journal of Chemometrics, 2021, 35, e3335.	1.3	3
72	Automatic linguistic reporting of customer activity patterns in open malls. Multimedia Tools and Applications, 0, , 1.	3.9	3

#	ARTICLE	IF	CITATIONS
73	Explainable Artificial Intelligence for Kids. , 0, , .		3
74	Interpretable fuzzy system allowing to be framed in a profile photo through linguistic expressions. , 2013, , .		3
75	Paving the way towards counterfactual generation in argumentative conversational agents. , 2019, , .		3
76	Remarks and Prospects on Explainable Fuzzy Systems. Studies in Computational Intelligence, 2021, , 219-225.	0.9	2
77	Customization of Products Assisted by Kansei Engineering, Sensory Analysis and Soft Computing. Communications in Computer and Information Science, 2014, , 616-625.	0.5	2
78	Using Fuzzy Sets in a Data-to-Text System for Business Service Intelligence. Advances in Intelligent Systems and Computing, 2018, , 220-231.	0.6	2
79	Special Issue on Computational Intelligence Software Guest Editorial. IEEE Computational Intelligence Magazine, 2016, 11, 13-14.	3.2	1
80	Looking for a real-world-semantics-based approach to the interpretability of fuzzy systems. , 2017, , .		1
81	Impact of Signal Representations on the Performance of Hierarchical WiFi Localization Systems. Lecture Notes in Computer Science, 2013, , 17-24.	1.3	1
82	QUALE Â®: A new Toolbox for Quantitative and Qualitative Analysis of Human Perceptions. , 0, , .		1
83	Applying Random Linear Oracles with Fuzzy Classifier Ensembles on WiFi Indoor Localization Problem. Studies in Fuzziness and Soft Computing, 2015, , 277-287.	0.8	1
84	Introduction to the soft computing and intelligent data analysis minitrack. , 2015, , .		0
85	Introduction to the Soft Computing and Intelligent Data Analysis Minitrack. , 2016, , .		0
86	Wifigrams: Design of Hierarchical Wi-Fi Indoor Localization Systems Guided by Social Network Analysis. Lecture Notes in Computer Science, 2013, , 9-16.	1.3	0
87	Understanding the Inference Mechanism of FURIA by means of Fingrams. , 0, , .		0
88	Linguistic Aggregation Functions using the MapReduce Paradigm. , 0, , .		0
89	Fuzzy-Based Language Grounding of Geographical References: From Writers to Readers. International Journal of Computational Intelligence Systems, 0, , .	2.7	0