SenÃ©n Barro

List of Publications by Year
in descending order

91 papers	1,785 citations	257429 24 h-index	302107 39 g-index
94 all docs	94 docs citations	94 times ranked	1364 citing authors

#	Article	IF	Citations
1	Algorithmic sequential decision-making in the frequency domain for life threatening ventricular arrhythmias and imitative artefacts: a diagnostic system. Journal of Biomedical Engineering, 1989, 11, 320-328.	0.7	142
2	Fuzzy reasoning supported by Petri nets. IEEE Transactions on Fuzzy Systems, 1994, 2, 135-150.	9.8	130
3	A model and a language for the fuzzy representation and handling of time. Fuzzy Sets and Systems, 1994, 61, 153-175.	2.7	88
4	A new approach for TU complex characterization. IEEE Transactions on Biomedical Engineering, 2000, 47, 764-772.	4.2	83
5	Linguistic Descriptions for Automatic Generation of Textual Short-Term Weather Forecasts on Real Prediction Data. IEEE Transactions on Fuzzy Systems, 2015, 23, 44-57.	9.8	71
6	Design of a fuzzy controller in mobile robotics using genetic algorithms. Applied Soft Computing Journal, 2007, 7, 540-546.	7.2	65
7	On the role of linguistic descriptions of data in the building of natural language generation systems. Fuzzy Sets and Systems, 2016, 285, 31-51.	2.7	63
8	Automatic prediction of village-wise soil fertility for several nutrients in India using a wide range of regression methods. Computers and Electronics in Agriculture, 2018, 154, 120-133.	7.7	60
9	Intelligent telemonitoring of critical-care patients. IEEE Engineering in Medicine and Biology Magazine, 1999, 18, 80-88.	0.8	54
10	Direct Kernel Perceptron (DKP): Ultra-fast kernel ELM-based classification with non-iterative closed-form weight calculation. Neural Networks, 2014, 50, 60-71.	5.9	53
11	Rapid Method for Finding Faulty Elements in Antenna Arrays Using Far Field Pattern Samples. IEEE Transactions on Antennas and Propagation, 2009, 57, 1679-1683.	5.1	50
12	SUTIL: Intelligent ischemia monitoring system. International Journal of Medical Informatics, 1997, 47, 193-214.	3.3	44
13	A framework for fuzzy quantification models analysis. IEEE Transactions on Fuzzy Systems, 2003, 11, 89-99.	9.8	43
14	Characterization of Galician (N.W. Spain) quality brand potatoes: a comparison study of several pattern recognition techniques. Analyst, The, 2001, 126, 97-103.	3.5	42
15	Element failure detection in linear antenna arrays using case-based reasoning. IEEE Antennas and Propagation Magazine, 2008, 50, 198-204.	1.4	42
16	Particle filter robot localisation through robust fusion of laser, WiFi, compass, and a network of external cameras. Information Fusion, 2016, 27, 170-188.	19.1	40
17	Definition and classification of semi-fuzzy quantifiers for the evaluation of fuzzy quantified sentences. International Journal of Approximate Reasoning, 2003, 34, 49-88.	3.3	38
18	MART: a multichannel ART-based neural network. IEEE Transactions on Neural Networks, 1998, 9, 139-150.	4.2	32

#	Article	IF	Citations
19	Addressing the flaws of current critical alarms: a fuzzy constraint satisfaction approach. Artificial Intelligence in Medicine, 2009, 47, 219-238.	6.5	32
20	A Probabilistic Quantifier Fuzzification Mechanism: The Model and Its Evaluation for Information Retrieval. IEEE Transactions on Fuzzy Systems, 2005, 13, 688-700.	9.8	30
21	Voting-model based evaluation of fuzzy quantified sentences: a general framework. Fuzzy Sets and Systems, 2004, 146, 97-120.	2.7	29
22	Fuzzy K-nearest neighbor classifiers for ventricular arrhythmia detection. International Journal of Bio-medical Computing, 1991, 27, 77-93.	0.5	27
23	MODELING THE REPRESENTATION OF TIME FROM A FUZZY PERSPECTIVE. Cybernetics and Systems, 1994, 25, 217-231.	2.5	27
24	A fuzzy temporal rule-based velocity controller for mobile robotics. Fuzzy Sets and Systems, 2003, 134, 83-99.	2.7	25
25	Fast Array Thinning using Global Optimization Methods. Journal of Electromagnetic Waves and Applications, 2010, 24, 2259-2271.	1.6	25
26	Fuzzy modelling of the expert's knowledge in ECG-based ischaemia detection. Fuzzy Sets and Systems, 1996, 77, 63-75.	2.7	24
27	Landmark Detection in Mobile Robotics Using Fuzzy Temporal Rules. IEEE Transactions on Fuzzy Systems, 2004, 12, 423-435.	9.8	24
28	Fuzzy constraint networks for signal pattern recognition. Artificial Intelligence, 2003, 148, 103-140.	5.8	23
29	Autonomous and fast robot learning through motivation. Robotics and Autonomous Systems, 2007, 55, 735-740.	5.1	22
30	Fuzzy beat labeling for intelligent arrhythmia monitoring. Journal of Biomedical Informatics, 1990, 23, 240-258.	0.7	20
31	Fuzzy logic in a patient supervision system. Artificial Intelligence in Medicine, 2001, 21, 193-199.	6.5	19
32	Experiments on using fuzzy quantified sentences in adhoc retrieval. , 2004, , .		16
33	Evolutionary learning of a fuzzy controller for wall-following behavior in mobile robotics. Soft Computing, 2006, 10, 881-889.	3.6	16
34	Fuzzy sets across the natural language generation pipeline. Progress in Artificial Intelligence, 2016, 5, 261-276.	2.4	16
35	A comparison among several techniques for finding defective elements in antenna arrays. , 2007, , .		14
36	Concept drift detection and adaptation for federated and continual learning. Multimedia Tools and Applications, 2022, 81, 3397-3419.	3.9	14

#	Article	IF	Citations
37	Reasoning with truth values on compacted fuzzy chained rules. IEEE Transactions on Systems, Man, and Cybernetics, 1998, 28, 34-46.	5.0	13
38	A structural knowledge-based proposal for the identification and characterization of apnoea episodes. Applied Soft Computing Journal, 2012, 12, 516-526.	7.2	13
39	Grammatic representation of beat sequences for fuzzy arrhythmia diagnosis. International Journal of Bio-medical Computing, 1991, 27, 245-259.	0.5	12
40	Comparison of a massive and diverse collection of ensembles and other classifiers for oil spill detection in SAR satellite images. Neural Computing and Applications, 2017, 28, 1101-1117.	5.6	12
41	Walking Recognition in Mobile Devices. Sensors, 2020, 20, 1189.	3.8	12
42	Authentication of Galician (N.W. Spain) quality brand potatoes using metal analysis. Classical pattern recognition techniques versus a new vector quantization-based classification procedure. Analyst, The, 2001, 126, 2186-2193.	3.5	11
43	Towards Textual Reporting in Learning Analytics Dashboards. , 2015, , .		11
44	Evaluation of a Data-To-Text System for Verbalizing a Learning Analytics Dashboard. International Journal of Intelligent Systems, 2017, 32, 177-193.	5.7	10
45	Fuzzy Temporal Rules: A Rule-based Approach for Fuzzy Temporal Knowledge Representation and Reasoning. Studies in Fuzziness and Soft Computing, 2002, , 237-250.	0.8	9
46	Multimicroprocessor system for online monitoring in a CCU. Medical and Biological Engineering and Computing, 1990, 28, 339-349.	2.8	8
47	LINGUISTIC REPRESENTATION OF FUZZY TEMPORAL PROFILES. International Journal of Uncertainty, Fuzziness and Knowlege-Based Systems, 1999, 07, 243-256.	1.9	8
48	A Call for a Stronger Role for Fuzzy Logic in Medicine. Studies in Fuzziness and Soft Computing, 2002, , 1-17.	0.8	7
49	TRACE, a graphical tool for the acquisition and detection of signal patterns. Expert Systems With Applications, 2009, 36, 343-357.	7.6	7
50	Semantic Linking of a Learning Object Repository to DBpedia. , 2011, , .		7
51	Enhanced fuzzy temporal rules and their projection onto fuzzy Petri nets. International Journal of Intelligent Systems, 1999, 14, 775-804.	5.7	6
52	Detection of abnormality in the electrocardiogram without prior knowledge by using the quantisation error of a self-organising map, tested on the European ischaemia database. Medical and Biological Engineering and Computing, 2001, 39, 330-337.	2.8	6
53	New Trends in Patient Monitoring. Disease Management and Health Outcomes, 2002, 10, 291-306.	0.4	6
54	Polynomial Kernel Discriminant Analysis for 2D visualization of classification problems. Neural Computing and Applications, 2019, 31, 3515-3531.	5.6	6

#	Article	IF	Citations
55	A computational model of cuneothalamic projection neurons. Network: Computation in Neural Systems, 2003, 14, 211-231.	3.6	6
56	Trend detection based on a fuzzy temporal profile model. Advanced Engineering Informatics, 1999, 13, 341-349.	0.5	5
57	SOAN: Self organizing with adaptive neighborhood neural network. Lecture Notes in Computer Science, 1999, , 591-600.	1.3	5
58	A computational model of cuneothalamic projection neurons. Network: Computation in Neural Systems, 2003, 14, 211-231.	3.6	5
59	Cortical modulation of dorsal column nuclei: A computational study. Journal of Computational Neuroscience, 2006, 21, 21-33.	1.0	5
60	A model to perform knowledge-based temporal abstraction over multiple signals. , 0, , .		4
61	Interactive Natural Language Technology for Explainable Artificial Intelligence. Lecture Notes in Computer Science, 2021, , 63-70.	1.3	4
62	A problem-solving method for 'unprotocolised' therapy administration task in medicine. Artificial Intelligence in Medicine, 1999, 17, 157-180.	6.5	3
63	A multi-tiered agent-based architecture for a cooperative learning environment. , 2003, , .		3
64	Workflow-based information system for furniture budgeting. , 0, , .		3
65	A fuzzy constraint satisfaction approach for signal abstraction. International Journal of Approximate Reasoning, 2009, 50, 324-340.	3.3	3
66	Automatic Generation of Air Quality Index Textual Forecasts Using a Data-To-Text Approach. Lecture Notes in Computer Science, 2015, , 164-174.	1.3	3
67	Patient management in CCUs: Need for an intelligent interpretation of signals. Expert Systems With Applications, 1993, 6, 421-432.	7.6	2
68	DESIGN OF A THERAPEUTIC SPECIALIST FOR ACUTE MYOCARDIAL INFARCT. Cybernetics and Systems, 1999, 30, 227-248.	2.5	2
69	A fuzzy model for the representation and recognition of linguistically described trends. Intelligent Data Analysis, 2001, 5, 503-529.	0.9	2
70	A Fuzzy Model for Pattern Recognition in the Evolution of Patients. Studies in Fuzziness and Soft Computing, 2002, , 236-258.	0.8	2
71	Ubiquitous environment for processes monitoring in power stations. , 0, , .		2
72	Fast weight calculation for kernel-based perceptron in two-class classification problems. , 2010, , .		2

#	Article	IF	Citations
73	A model based on computational perceptions for the generation of linguistic descriptions of data. , 2015, , .		2
74	Probabilistic and Count Methods in Map Building for Autonomous Mobile Robots. Lecture Notes in Computer Science, 2000, , 120-137.	1.3	2
75	Systolic implementation of hopfield networks of arbitrary size. , 1991, , 268-276.		1
76	Fuzzy Control Architectures. Journal of Intelligent and Fuzzy Systems, 1994, 2, 125-146.	1.4	1
77	A comparison of several neural networks to predict the execution times in injection molding production for automotive industry. Neural Computing and Applications, 2010, 19, 741-754.	5.6	1
78	Time Estimation in Injection Molding Production for Automotive Industry Based on SVR and RBF. Lecture Notes in Computer Science, 2009, , 509-518.	1.3	1
79	Random Set-Based Approaches for Modelling Fuzzy Operators. Lecture Notes in Computer Science, 2003, , 1-25.	1.3	1
80	Representing and executing Units of Learning on the basis of a Learning Design Ontology. Inteligencia Artificial, 2007, 11, .	0.8	1
81	A computational model of cuneothalamic projection neurons. Network: Computation in Neural Systems, 2003, 14, 211-31.	3.6	1
82	A DBT-based VLSI systolic architecture for hard squared error clustering. Microprocessing and Microprogramming, 1989, 27, 299-305.	0.2	0
83	Database integration and remote accessibility in a distributed vision-based surveillance system. , 2003, , .		0
84	A Parallel Perceptron network for classification with direct calculation of the weights optimizing error and margin. , 2010, , .		0
85	A Cuneate-Based Network and Its Application as a Spatio-Temporal Filter in Mobile Robotics. Lecture Notes in Computer Science, 2001, , 418-425.	1.3	0
86	Modelling Fuzzy Quantified Statements under a Voting Model Interpretation of Fuzzy Sets. Lecture Notes in Computer Science, 2003, , 151-158.	1.3	0
87	Sleep and wakefulness in the cuneate nucleus: a computational study. Lecture Notes in Computer Science, 2003, , 70-77.	1.3	0
88	Internal Categories with Irregular Geometry and Overlapping in ART Networks. Lecture Notes in Computer Science, 2006, , 291-300.	1.3	0
89	Intelligent Patient Monitoring: From Hardware to Learnware. Lecture Notes in Computer Science, 2009, , 38-45.	1.3	0
90	Enric Trillas: Master, Scientist and Humanist. Studies in Fuzziness and Soft Computing, 2015, , 233-250.	0.8	0

#	Article	IF	Citations
91	Claudio Moraga and the University of Santiago de Compostela: Many Years of Collaboration. Studies in Fuzziness and Soft Computing, 2017, , 265-273.	0.8	0