Javier Montero

List of Publications by Year in descending order

189 papers	3,634 citations	159585 30 h-index	161849 54 g-index
205 all docs	205 docs citations	205 times ranked	1435 citing authors

#	Article	IF	Citations
1	A Historical Account of Types of Fuzzy Sets and Their Relationships. IEEE Transactions on Fuzzy Systems, 2016, 24, 179-194.	9.8	384
2	Overlap functions. Nonlinear Analysis: Theory, Methods & Applications, 2010, 72, 1488-1499.	1.1	262
3	A multi-criteria optimization model for humanitarian aid distribution. Journal of Global Optimization, 2011, 51, 189-208.	1.8	218
4	On the relevance of some families of fuzzy sets. Fuzzy Sets and Systems, 2007, 158, 2429-2442.	2.7	134
5	Fuzzy classification systems. European Journal of Operational Research, 2004, 156, 495-507.	5.7	102
6	n-Dimensional overlap functions. Fuzzy Sets and Systems, 2016, 287, 57-75.	2.7	99
7	Ignorance functions. An application to the calculation of the threshold in prostate ultrasound images. Fuzzy Sets and Systems, 2010, 161, 20-36.	2.7	92
8	Migrativity of aggregation functions. Fuzzy Sets and Systems, 2009, 160, 766-777.	2.7	86
9	Representation of consistent recursive rules. European Journal of Operational Research, 2001, 130, 29-53.	5.7	75
10	General overlap functions. Fuzzy Sets and Systems, 2019, 372, 81-96.	2.7	75
11	Recursive connective rules. International Journal of Intelligent Systems, 1999, 14, 3-20.	5.7	71
12	Fuzzy rationality measures. Fuzzy Sets and Systems, 1994, 62, 39-54.	2.7	67
13	A new modularity measure for Fuzzy Community detection problems based on overlap and grouping functions. International Journal of Approximate Reasoning, 2016, 74, 88-107.	3.3	67
14	A class of aggregation functions encompassing two-dimensional OWA operators. Information Sciences, 2010, 180, 1977-1989.	6.9	62
15	A generalization of the migrativity property of aggregation functions. Information Sciences, 2012, 191, 76-85.	6.9	59
16	A coloring fuzzy graph approach for image classification. Information Sciences, 2006, 176, 3645-3657.	6.9	54
17	Fuzzy image segmentation based upon hierarchical clustering. Knowledge-Based Systems, 2015, 87, 26-37.	7.1	50
18	CHALLENGES FOR IMPROVING CONSENSUS REACHING PROCESS IN COLLECTIVE DECISIONS. New Mathematics and Natural Computation, 2007, 03, 203-217.	0.7	47

#	Article	IF	Citations
19	Aggregation of fuzzy opinions in a non-homogeneous group. Fuzzy Sets and Systems, 1988, 25, 15-20.	2.7	44
20	Some problems on the definition of fuzzy preference relations. Fuzzy Sets and Systems, 1986, 20, 45-53.	2.7	42
21	A graph coloring approach for image segmentation. Omega, 2007, 35, 173-183.	5.9	42
22	A general model for deriving preference structures from data. European Journal of Operational Research, 1997, 98, 98-110.	5.7	41
23	Semiautoduality in a restricted family of aggregation operators. Fuzzy Sets and Systems, 2007, 158, 1360-1377.	2.7	41
24	Model, solution concept, and Kth-best algorithm for linear trilevel programming. Information Sciences, 2010, 180, 481-492.	6.9	39
25	Arrow's theorem under fuzzy rationality. Systems Research and Behavioral Science, 1987, 32, 267-273.	0.2	38
26	A general methodology for data-based rule building and its application to natural disaster management. Computers and Operations Research, 2012, 39, 863-873.	4.0	37
27	The Role of Fuzziness in Decision Making. , 2007, , 337-349.		36
28	A note on Fung-Fu's theorem. Fuzzy Sets and Systems, 1985, 17, 259-269.	2.7	35
29	A Divide-and-Link algorithm for hierarchical clustering in networks. Information Sciences, 2015, 316, 308-328.	6.9	35
30	Recognition of Partially Occluded and Rotated Images With a Network of Spiking Neurons. IEEE Transactions on Neural Networks, 2010, 21, 1697-1709.	4.2	32
31	Accuracy statistics for judging soft classification. International Journal of Remote Sensing, 2008, 29, 693-709.	2.9	31
32	Strictly stable families of aggregation operators. Fuzzy Sets and Systems, 2013, 228, 44-63.	2.7	31
33	A necessary and sufficient condition for the existence of Orlovsky's choice set. Fuzzy Sets and Systems, 1988, 26, 121-125.	2.7	30
34	Fuzzy Specification in Real Estate Market Decision Making. International Journal of Computational Intelligence Systems, 2010, 3, 8-20.	2.7	30
35	HIERARCHICAL AGGREGATION OF OWA OPERATORS: BASIC MEASURES AND RELATED COMPUTATIONAL PROBLEMS. International Journal of Uncertainty, Fuzziness and Knowlege-Based Systems, 1995, 03, 17-26.	1.9	29
36	Hierarchies of aggregation operators. International Journal of Intelligent Systems, 1994, 9, 1025-1045.	5.7	28

#	Article	IF	Citations
37	A disaster-severity assessment DSS comparative analysis. OR Spectrum, 2011, 33, 451-479.	3.4	25
38	Paired structures in knowledge representation. Knowledge-Based Systems, 2016, 100, 50-58.	7.1	25
39	Soft dimension theory. Fuzzy Sets and Systems, 2003, 137, 137-149.	2.7	24
40	Searching for the dimension of valued preference relations. International Journal of Approximate Reasoning, 2003, 33, 133-157.	3.3	24
41	Contrast of a fuzzy relation. Information Sciences, 2010, 180, 1326-1344.	6.9	24
42	A natural-disaster management DSS for Humanitarian Non-Governmental Organisations. Knowledge-Based Systems, 2010, 23, 17-22.	7.1	23
43	A fuzzy and bipolar approach to preference modeling with application to need and desire. Fuzzy Sets and Systems, 2013, 214, 20-34.	2.7	23
44	A characterization of rational amalgamation operations. International Journal of Approximate Reasoning, 1993, 8, 325-344.	3.3	22
45	A Poset Dimension Algorithm. Journal of Algorithms, 1999, 30, 185-208.	0.9	22
46	Classifying image analysis techniques from their output. International Journal of Computational Intelligence Systems, 2016, 9, 43.	2.7	22
47	Structure functions with fuzzy states. Fuzzy Sets and Systems, 1996, 83, 189-202.	2.7	21
48	Multifollower Trilevel Decision Making Models and System. IEEE Transactions on Industrial Informatics, 2012, 8, 974-985.	11.3	21
49	Structural properties of continuum systems. European Journal of Operational Research, 1990, 45, 231-240.	5.7	20
50	Consistency and stability in aggregation operators: An application to missing data problems. International Journal of Computational Intelligence Systems, 2014, 7, 595.	2.7	19
51	Rational aggregation rules. Fuzzy Sets and Systems, 1994, 62, 267-276.	2.7	18
52	The impact of fuzziness in social choice paradoxes. Soft Computing, 2007, 12, 177-182.	3.6	18
53	Recursive families of OWA operators. , 0, , .		17
54	Extensive fuzziness. Fuzzy Sets and Systems, 1987, 21, 201-209.	2.7	16

#	Article	IF	Citations
55	CLASSIFYING PIXELS BY MEANS OF FUZZY RELATIONS. International Journal of General Systems, 2000, 29, 605-621.	2.5	16
56	Spectral fuzzy classification: an application. IEEE Transactions on Systems, Man and Cybernetics, Part C: Applications and Reviews, 2002, 32, 42-48.	2.9	16
57	Development of child's home environment indexes based on consistent families of aggregation operators with prioritized hierarchical information. Fuzzy Sets and Systems, 2014, 241, 41-60.	2.7	16
58	Intelligent Decision-Making Models for Disaster Management. Human and Ecological Risk Assessment (HERA), 2015, 21, 1341-1360.	3.4	16
59	Approaches to learning strictly-stable weights for data with missing values. Fuzzy Sets and Systems, 2017, 325, 97-113.	2.7	16
60	Computable aggregations. Information Sciences, 2018, 460-461, 439-449.	6.9	16
61	General Structure Functions. Kybernetes, 1994, 23, 10-19.	2.2	15
62	Fuzzy sets in remote sensing classification. Soft Computing, 2007, 12, 243-249.	3.6	15
63	Self-adapting weighted operators for multiscale gradient fusion. Information Fusion, 2018, 44, 136-146.	19.1	14
64	Determining the accuracy in image supervised classification problems. , 2011, , .		14
65	Fuzzy Logic and Science. Studies in Fuzziness and Soft Computing, 2009, , 67-77.	0.8	13
66	Improvements to Remote Sensing Using Fuzzy Classification, Graphs and Accuracy Statistics. Pure and Applied Geophysics, 2008, 165, 1555-1575.	1.9	12
67	An ordinal approach to computing with words and the preferenceâ€“aversion model. Information Sciences, 2014, 258, 239-248.	6.9	12
68	Equivalence and compositions of fuzzy rationality measures. Fuzzy Sets and Systems, 1997, 85, 31-43.	2.7	11
69	On the principles of fuzzy classification. , 0, , .		11
70	Hierarchies of intensity preference aggregations. International Journal of Approximate Reasoning, 1994, 10, 123-133.	3.3	10
71	Fuzzy multicriteria decision support for budget allocation in the transport sector. Top, 1995, 3, 47-68.	1.6	10
72	SPECIFICATION AND COMPUTING STATES IN FUZZY ALGORITHMS. International Journal of Uncertainty, Fuzziness and Knowlege-Based Systems, 2008, 16, 301-336.	1.9	10

#	Article	IF	Citations
73	Building the meaning of preference from logical paired structures. Knowledge-Based Systems, 2015, 83, 32-41.	7.1	10
74	Consistency in preference modelling. , 2006, , 87-97.		10
75	Another paraconsistent algebraic semantics for Lukasiewiczâ€“Pavelka logic. Fuzzy Sets and Systems, 2014, 242, 132-147.	2.7	9
76	On the Semantics of Bipolarity and Fuzziness. Advances in Intelligent and Soft Computing, 2011, , 193-205.	0.2	9
77	FORMAL SPECIFICATION AND IMPLEMENTATION OF COMPUTATIONAL AGGREGATION FUNCTIONS. , 2010, , .		8
78	Computational intelligence in decision making. International Journal of Computational Intelligence Systems, 2014, 7, 1-5.	2.7	8
79	A COLORING ALGORITHM FOR IMAGE CLASSIFICATION. , 2004, , .		8
80	An axiomatic approach to finite means. Information Sciences, 2018, 457-458, 12-28.	6.9	7
81	Stability in Aggregation Operators. Communications in Computer and Information Science, 2012, , 317-325.	0.5	7
82	GRAPH COLORING INCONSISTENCIES IN IMAGE SEGMENTATION. , 2008, , .		7
83	Fuzzy Specification in Real Estate Market Decision Making. International Journal of Computational Intelligence Systems, 2010, 3, 8.	2.7	7
84	Sequential aggregation of bags. Information Sciences, 2015, 294, 305-314.	6.9	6
85	Setâ€based extended aggregation functions. International Journal of Intelligent Systems, 2019, 34, 2039-2054.	5.7	6
86	Fuzzy Clustering Methods with RÃ©nyi Relative Entropy and Cluster Size. Mathematics, 2021, 9, 1423.	2.2	6
87	IMPROVING RELIABILITY AND PERFORMANCE IN COMPUTER SYSTEMS BY MEANS OF FUZZY SPECIFICATIONS. , 2009, , .		5
88	The Origin of Fuzzy Extensions. , 2015, , 89-112.		5
89	Aggregation tools for the evaluation of classifications. , 2017, , .		5
90	A novel edge detection algorithm based on a hierarchical graph-partition approach. Journal of Intelligent and Fuzzy Systems, 2018, 34, 1875-1892.	1.4	5

#	Article	IF	Citations
91	Information Aggregation: Ethical and Computational Issues. International Series in Intelligent Technologies, 1995, , 175-200.	0.1	5
92	On Partial Comparability and Fuzzy Preference-Aversion Models. Advances in Intelligent and Soft Computing, 2011, , 307-316.	0.2	5
93	Multivalued continuum systems. European Journal of Operational Research, 1993, 69, 55-64.	5.7	4
94	Observable Structure Functions. Kybernetes, 1993, 22, 31-39.	2.2	4
95	Fuzzy Logic Applications to Fire Control Systems. , 2006, , .		4
96	Computing a T-transitive lower approximation or opening of a proximity relation. Fuzzy Sets and Systems, 2009, 160, 2097-2105.	2.7	4
97	Upgrading ideas about the concept of Soft Computing. International Journal of Computational Intelligence Systems, 2010, 3, 144-147.	2.7	4
98	A computational definition of aggregation rules. , 2010, , .		4
99	Information measures over intuitionistic four valued fuzzy preferences. , 2010, , .		4
100	Rule-based classification by means of bipolar criteria. , 2011, , .		4
101	A NEW CONCEPT OF FUZZY IMAGE SEGMENTATION. , 2014, , .		4
102	Learning preferences from paired opposite-based semantics. International Journal of Approximate Reasoning, 2017, 86, 80-91.	3.3	4
103	A bipolar knowledge representation model to improve supervised fuzzy classification algorithms. Soft Computing, 2018, 22, 5121-5146.	3.6	4
104	CLASSIFIERS AND DECISION MAKERS. , 2004, , .		4
105	A FUNCTIONAL TOOL FOR FUZZY FIRST ORDER LOGIC EVALUATION. , 2006, , .		4
106	QUALITY ASSESSMENT OF FUZZY CLASSIFICATION: AN APPLICATION TO SOLVENCY ANALYSIS. Fuzzy Economic Review, 2017, 22, 2274.	0.4	4
107	Associativeness versus recursiveness. , 0, , .		3
108	Binary operators and connective rules. , 0, , .		3

#	Article	IF	Citations
109	Spectral fuzzy classification system for target recognition. , 0, , .		3
110	Crisp dimension theory and valued preference relations. International Journal of General Systems, 2004, 33, 115-131.	2.5	3
111	Atanassovâ€™s Intuitionistic Fuzzy Sets as a Classification Model. Lecture Notes in Computer Science, 2007, , 69-75.	1.3	3
112	Automatic Detection of Thistle-Weeds in Cereal Crops from Aerial RGB Images. Communications in Computer and Information Science, 2018, , 441-452.	0.5	3
113	Types of Recursive Computable Aggregations. , 2019, , .		3
114	A DECISION SUPPORT TOOL FOR HUMANITARIAN OPERATIONS IN NATURAL DISASTER RELIEF. , 2008, , .		3
115	Analysing monotonicity in non-deterministic computable aggregations: The probabilistic case. Information Sciences, 2022, 583, 288-305.	6.9	3
116	Barlow-wu continuum systems: A discussion on the model. Top, 1993, 1, 117-125.	1.6	2
117	Laws for conjunctions and disjunctions in interval type 2 fuzzy sets. , 2008, , .		2
118	A divisive hierarchical k-means based algorithm for image segmentation. , 2010, , .		2
119	Organizing information by fuzzy preference structures fuzzy preference semantics. , 2010, , .		2
120	A divide-link algorithm based on fuzzy similarity for clustering networks. , 2011, , .		2
121	Relevance of Classes in a Fuzzy Partition. A Study from a Group of Aggregation Operators. Communications in Computer and Information Science, 2018, , 96-107.	0.5	2
122	A novel ordered weighted averaging weight determination based on ordinal dispersion. International Journal of Intelligent Systems, 2019, 34, 2291-2315.	5.7	2
123	An Algebraic Approach to DC Railway Electrification Verification. Mathematics in Computer Science, 2019, 13, 449-457.	0.4	2
124	A New Approach to Color Edge Detection by Means of Transforming RGB Images into an 8-Dimension Color Space. , 2019, , .		2
125	A generalization of stability for families of aggregation operators. Fuzzy Sets and Systems, 2020, 378, 68-78.	2.7	2
126	Paired Structures, Imprecision Types and Two-Level Knowledge Representation by Means of Opposites. Advances in Intelligent Systems and Computing, 2016, , 3-15.	0.6	2

#	Article	IF	Citations
127	FUZZY LOGIC IN REAL ESTATE VALUATION. , 2008, , .		2
128	THE COMPUTATIONAL PROBLEM OF USING OWA OPERATORS. Advances in Fuzzy Systems, 1995, , 166-172.	8.7	2
129	An Extension of the Axioms of Utility Theory Based on Fuzzy Rationality Measures. Studies in Fuzziness and Soft Computing, 2000, , 33-50.	0.8	2
130	Aggregation Rules in Committee Procedures. , 1997, , 219-237.		2
131	Aggregation Operators to Evaluate the Relevance of Classes in a Fuzzy Partition. Advances in Intelligent Systems and Computing, 2019, , 13-21.	0.6	2
132	Fuzzy multicriteria techniques: An application to transport planning. , 1990, , 509-519.		1
133	Nondeterministic aggregation operators and systems. International Journal of Intelligent Systems, 1998, 13, 181-192.	5.7	1
134	Painting algorithms for fuzzy classification. , 0, , .		1
135	Unsupervised Perceptual Model for Color Image's Segmentation. , 0, , .		1
136	AN ALGORITHMIC APPROACH TO PREFERENCE REPRESENTATION. International Journal of Uncertainty, Fuzziness and Knowlege-Based Systems, 2008, 16, 1-18.	1.9	1
137	Modelling bipolar multicriteria decision making. , 2009, , .		1
138	A hierarchical segmentation for image processing. , 2010, , .		1
139	Network clustering by graph coloring: An application to astronomical images. , 2011, , .		1
140	Paired fuzzy sets and other opposite-based models. , 2016, , .		1
141	Letter from the President of IFSA. Fuzzy Sets and Systems, 2018, 331, 12-13.	2.7	1
142	Editorial to image processing with soft computing techniques. Soft Computing, 2019, 23, 1777-1778.	3.6	1
143	Conditioned Monotonicity for Generalized Pre-Aggregations and Aggregations. , 2020, , .		1
144	Evaluation of the quality and relevance of a fuzzy partition. Journal of Intelligent and Fuzzy Systems, 2020, 39, 4211-4226.	1.4	1

#	Article	IF	Citations
145	Population Monotonicity of Non-deterministic Computable Aggregations. , 2021, , .		1
146	A characterization of reciprocal fuzzy preference structures and its compatibility with standard fuzzy preference structures. Fuzzy Sets and Systems, 2021, 422, 48-67.	2.7	1
147	Rectification of Preferences in a Fuzzy Environment. Communications in Computer and Information Science, 2010, , 168-178.	0.5	1
148	Fuzzy Dissimilarity-Based Classification for Disaster Initial Assessment. , 2013, , .		1
149	Consistency and Stability in Aggregation Operators: An Application to Missing Data Problems. Advances in Intelligent Systems and Computing, 2013, , 507-518.	0.6	1
150	Relevance in Preference Structures. Advances in Intelligent Systems and Computing, 2014, , 117-125.	0.6	1
151	Paired Structures in Logical and Semiotic Models of Natural Language. Communications in Computer and Information Science, 2014, , 566-575.	0.5	1
152	Analyzing Non-deterministic Computable Aggregations. Communications in Computer and Information Science, 2020, , 551-564.	0.5	1
153	Improving Fuzzy Classification by Means of a Segmentation Algorithm. , 2008, , 453-471.		1
154	Cooperative fuzzy expert systemsâ€"Their design and applications in intelligent recognition. European Journal of Operational Research, 1989, 42, 342.	5.7	0
155	Reliability Bounds for Multicriteria Systems. Journal of the Operational Research Society, 1993, 44, 1025-1034.	3.4	0
156	Non deterministic fuzzy classification systems. , 0, , .		0
157	Fuzzy rationality and utility theory axioms. , 0, , .		0
158	A Spatial Classification Model for Multicriteria Analysis. , 2007, , .		0
159	Decomposing Preference Relations. IEEE International Conference on Fuzzy Systems, 2007, , .	0.0	0
160	Improvements to Remote Sensing Using Fuzzy Classification, Graphs and Accuracy Statistics. , 2008, , 1555-1575.		0
161	REV: Valuation and price adjustment in a fuzzy logic framework. , 2008, , .		0
162	Soft sciences versus crisp sciences: A look into the future of science. , 2008, , .		0

#	Article	IF	Citations
163	COMPUTING A T-TRANSITIVE OPENING OF A PROXIMITY. , 2008, , .		0
164	A Structural Approach to Image Segmentation. , 2009, , .		0
165	Soft information analysis. International Journal of General Systems, 2010, 39, 215-216.	2.5	0
166	An algebraic method for managing reliability in propositional logics. , 2010, , .		0
167	Consistency and stability in aggregation operators with data structure. , 2013, , .		0
168	Expansible Computable Aggregation Rules. , 2015, , .		0
169	Paired fuzzy sets: A unifying model for early knowledged acquisition. , 2015, , .		0
170	A NEW VIEW ON THE RELATIONSHIPS BETWEEN INTERVAL VALUED AND INTUITIONISTIC FUZZY SETS. , 2016, , .		0
171	Social index construction method based on consistent aggregation operator families. , 2018, , .		0
172	Additive Recursive Rules. Studies in Fuzziness and Soft Computing, 2000, , 75-88.	0.8	0
173	UNDERLYING CRITERIA IN VALUED PREFERENCE RELATIONS. , 2002, , .		0
174	DETERMINING THE ACCURACY IN SUPERVISED FUZZY CLASSIFICATION PROBLEMS. , 2008, , .		0
175	CONSENSUS MEASURES FOR SYMBOLIC DATA. , 2010, , .		0
176	An Improved Iterative Binary Coloring Procedure for Color Image Segmentation. Advances in Intelligent and Soft Computing, 2011, , 635-640.	0.2	0
177	Relational structures for measures of ignorance. , 2011, , .		0
178	TYPES OF BIPOLARITY AND BIPOLAR STRUCTURES. , 2012, , .		0
179	DISSIMILARITY-BASED BIPOLAR SUPERVISED CLASSIFICATION. World Scientific Proceedings Series on Computer Engingeering and Information Science, 2012, , 894-899.	0.1	0
180	Neutrality in Bipolar Structures. Advances in Intelligent Systems and Computing, 2014, , 11-17.	0.6	0

#	Article	IF	Citations
181	Aggregation Operators for Fuzzy Rationality Measures. Studies in Fuzziness and Soft Computing, 1998, , 98-105.	0.8	0
182	BIPOLARITY IN SOCIAL SCIENCES AND MATHEMATICS. , 2014, , .		0
183	From Trillasâ€™ Negations and Antonyms to a Set Representation of Contradiction Within Bipolar and Other Extensions of Fuzzy Sets. Studies in Fuzziness and Soft Computing, 2015, , 159-177.	0.8	0
184	Logic, Mathematics and Consistency in Literature: Searching for Don Quixoteâ€™s Place. Advances in Dynamics, Patterns, Cognition, 2017, , 221-245.	0.3	0
185	Construction of Capacities from Overlap Indexes. Studies in Computational Intelligence, 2017, , 323-335.	0.9	0
186	On Stability of Families for Improper Aggregation Operators. Advances in Intelligent Systems and Computing, 2018, , 172-180.	0.6	0
187	Graph Approach in Image Segmentation. Advances in Intelligent Systems and Computing, 2018, , 200-212.	0.6	0
188	Ambiguity Measures for Preference-Based Decision Viewpoints. Lecture Notes in Computer Science, 2019, , 38-49.	1.3	0
189	Degree of Global Covering and Global Overlapping in Solvency Fuzzy Classification. Advances in Intelligent Systems and Computing, 2021, , 21-32.	0.6	0