

# Jerry M Mendel

## List of Publications by Citations

**Source:** <https://exaly.com/author-pdf/658956/jerry-m-mendel-publications-by-citations.pdf>

**Version:** 2024-04-29

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

118  
papers

7,511  
citations

34  
h-index

86  
g-index

125  
ext. papers

8,786  
ext. citations

6  
avg, IF

6.95  
L-index

#	Paper	IF	Citations
118	Interval Type-2 Fuzzy Logic Systems Made Simple. <i>IEEE Transactions on Fuzzy Systems</i> , <b>2006</b> , 14, 808-821	8.3	1328
117	Centroid of a type-2 fuzzy set. <i>Information Sciences</i> , <b>2001</b> , 132, 195-220	7.7	805
116	Type-2 fuzzy sets and systems: an overview. <i>IEEE Computational Intelligence Magazine</i> , <b>2007</b> , 2, 20-29	5.6	435
115	Advances in type-2 fuzzy sets and systems. <i>Information Sciences</i> , <b>2007</b> , 177, 84-110	7.7	412
114	<b>2010</b> ,		293
113	Uncertainty measures for interval type-2 fuzzy sets. <i>Information Sciences</i> , <b>2007</b> , 177, 5378-5393	7.7	247
112	Encoding Words Into Interval Type-2 Fuzzy Sets Using an Interval Approach. <i>IEEE Transactions on Fuzzy Systems</i> , <b>2008</b> , 16, 1503-1521	8.3	231
111	Uncertain Rule-Based Fuzzy Systems <b>2017</b> ,		219
110	Computing with words and its relationships with fuzzistics. <i>Information Sciences</i> , <b>2007</b> , 177, 988-1006	7.7	215
109	On the stability of interval type-2 TSK fuzzy logic control systems. <i>IEEE Transactions on Systems, Man, and Cybernetics</i> , <b>2010</b> , 40, 798-818		206
108	. <i>IEEE Transactions on Fuzzy Systems</i> , <b>2007</b> , 15, 1145-1161	8.3	201
107	Type-2 Fuzzistics for Symmetric Interval Type-2 Fuzzy Sets: Part 1, Forward Problems. <i>IEEE Transactions on Fuzzy Systems</i> , <b>2006</b> , 14, 781-792	8.3	149
106	Super-Exponential Convergence of the KarnikMendel Algorithms for Computing the Centroid of an Interval Type-2 Fuzzy Set. <i>IEEE Transactions on Fuzzy Systems</i> , <b>2007</b> , 15, 309-320	8.3	143
105	Simplified Interval Type-2 Fuzzy Logic Systems. <i>IEEE Transactions on Fuzzy Systems</i> , <b>2013</b> , 21, 1056-1069	8.3	138
104	. <i>IEEE Transactions on Fuzzy Systems</i> , <b>2013</b> , 21, 426-446	8.3	135
103	Computing With Words for Hierarchical Decision Making Applied to Evaluating a Weapon System. <i>IEEE Transactions on Fuzzy Systems</i> , <b>2010</b> , 18, 441-460	8.3	135
102	Enhanced Interval Approach for Encoding Words Into Interval Type-2 Fuzzy Sets and Its Convergence Analysis. <i>IEEE Transactions on Fuzzy Systems</i> , <b>2012</b> , 20, 499-513	8.3	131

101	Computing with Words: Zadeh, Turing, Popper and Occam. <i>IEEE Computational Intelligence Magazine</i> , <b>2007</b> , 2, 10-17	5.6	122
100	A comparison of three approaches for estimating (synthesizing) an interval type-2 fuzzy set model of a linguistic term for computing with words. <i>Granular Computing</i> , <b>2016</b> , 1, 59-69	5.4	113
99	Design of Novel Interval Type-2 Fuzzy Controllers for Modular and Reconfigurable Robots: Theory and Experiments. <i>IEEE Transactions on Industrial Electronics</i> , <b>2011</b> , 58, 1371-1384	8.9	106
98	Aggregation Using the Fuzzy Weighted Average as Computed by the KarnikMendel Algorithms. <i>IEEE Transactions on Fuzzy Systems</i> , <b>2008</b> , 16, 1-12	8.3	100
97	On the Continuity of Type-1 and Interval Type-2 Fuzzy Logic Systems. <i>IEEE Transactions on Fuzzy Systems</i> , <b>2011</b> , 19, 179-192	8.3	86
96	Charles Ragin's Fuzzy Set Qualitative Comparative Analysis (fsQCA) used for linguistic summarizations. <i>Information Sciences</i> , <b>2012</b> , 202, 1-23	7.7	72
95	. <i>IEEE Transactions on Fuzzy Systems</i> , <b>2007</b> , 15, 56-72	8.3	69
94	<b>2014</b> ,		64
93	Type-2 Fuzzistics for Symmetric Interval Type-2 Fuzzy Sets: Part 2, Inverse Problems. <i>IEEE Transactions on Fuzzy Systems</i> , <b>2007</b> , 15, 301-308	8.3	64
92	Connect Karnik-Mendel Algorithms to Root-Finding for Computing the Centroid of an Interval Type-2 Fuzzy Set. <i>IEEE Transactions on Fuzzy Systems</i> , <b>2011</b> , 19, 652-665	8.3	60
91	Computing the centroid of a general type-2 fuzzy set by means of the centroid-flow algorithm. <i>IEEE Transactions on Fuzzy Systems</i> , <b>2011</b> , 19, 401-422	8.3	57
90	Type-2 Fuzzistics for Nonsymmetric Interval Type-2 Fuzzy Sets: Forward Problems. <i>IEEE Transactions on Fuzzy Systems</i> , <b>2007</b> , 15, 916-930	8.3	55
89	Maximum-Likelihood Seismic Deconvolution. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , <b>1983</b> , GE-21, 72-82	8.1	54
88	Recommendations on designing practical interval type-2 fuzzy systems. <i>Engineering Applications of Artificial Intelligence</i> , <b>2019</b> , 85, 182-193	7.2	53
87	Theoretical aspects of Fuzzy Set Qualitative Comparative Analysis (fsQCA). <i>Information Sciences</i> , <b>2013</b> , 237, 137-161	7.7	50
86	Comments on "\$\alpha\$ -Plane Representation for Type-2 Fuzzy Sets: Theory and Applications. <i>IEEE Transactions on Fuzzy Systems</i> , <b>2010</b> , 18, 229-230	8.3	48
85	A computationally fast approach to maximum-likelihood deconvolution. <i>Geophysics</i> , <b>1984</b> , 49, 550-565	3.1	44
84	On new quasi-type-2 fuzzy logic systems <b>2008</b> ,		33

83	Encoding Words Into Normal Interval Type-2 Fuzzy Sets: HM Approach. <i>IEEE Transactions on Fuzzy Systems</i> , <b>2016</b> , 24, 865-879	8.3	32
82	Similarity Measures for Closed General Type-2 Fuzzy Sets: Overview, Comparisons, and a Geometric Approach. <i>IEEE Transactions on Fuzzy Systems</i> , <b>2019</b> , 27, 515-526	8.3	31
81	A novel approach to seismic signal processing and modeling. <i>Geophysics</i> , <b>1981</b> , 46, 1398-1414	3.1	29
80	A new method for managing the uncertainties in evaluating multi-person multi-criteria location choices, using a perceptual computer. <i>Annals of Operations Research</i> , <b>2012</b> , 195, 277-309	3.2	28
79	Designing interval type-2 fuzzy logic systems using an SVD-QR method: Rule reduction. <i>International Journal of Intelligent Systems</i> , <b>2000</b> , 15, 939-957	8.4	28
78	A quantitative comparison of interval type-2 and type-1 fuzzy logic systems: First results <b>2010</b> ,		27
77	Parametric design of stable type-2 TSK fuzzy systems <b>2008</b> ,		26
76	. <i>IEEE Transactions on Fuzzy Systems</i> , <b>2019</b> , 27, 58-71	8.3	23
75	Fuzzy Opinion Networks: A Mathematical Framework for the Evolution of Opinions and Their Uncertainties Across Social Networks. <i>IEEE Transactions on Fuzzy Systems</i> , <b>2016</b> , 24, 880-905	8.3	22
74	An Interval Approach to Fuzzistics for Interval Type-2 Fuzzy Sets. <i>IEEE International Conference on Fuzzy Systems</i> , <b>2007</b> ,		22
73	Enhanced Interval Approach for encoding words into interval type-2 fuzzy sets and convergence of the word FOU's <b>2010</b> ,		21
72	Type-2 Fuzzy Sets and Systems: a Retrospective. <i>Informatik-Spektrum</i> , <b>2015</b> , 38, 523-532	0.3	20
71	. <i>IEEE Transactions on Fuzzy Systems</i> , <b>2018</b> , 26, 2362-2373	8.3	20
70	Foreword to the Special Section on Computing With Words. <i>IEEE Transactions on Fuzzy Systems</i> , <b>2010</b> , 18, 437-440	8.3	20
69	Type-2 Fuzzy Sets as Well as Computing with Words. <i>IEEE Computational Intelligence Magazine</i> , <b>2019</b> , 14, 82-95	5.6	19
68	Comments on Interval Type-2 Fuzzy Sets are Generalization of Interval-Valued Fuzzy Sets: Towards a Wide View on Their Relationship□ <i>IEEE Transactions on Fuzzy Systems</i> , <b>2016</b> , 24, 249-250	8.3	18
67	Centroid of a general type-2 fuzzy set computed by means of the centroid-flow algorithm <b>2010</b> ,		18
66	Historical reflections and new positions on perceptual computing. <i>Fuzzy Optimization and Decision Making</i> , <b>2009</b> , 8, 325-335	5.1	18

65	On Computing Normalized Interval Type-2 Fuzzy Sets. <i>IEEE Transactions on Fuzzy Systems</i> , <b>2014</b> , 22, 1335-1340	8.3	15
64	On Advanced Computing With Words Using the Generalized Extension Principle for Type-1 Fuzzy Sets. <i>IEEE Transactions on Fuzzy Systems</i> , <b>2014</b> , 22, 1245-1261	8.3	15
63	Social Judgment Advisor: An application of the Perceptual Computer <b>2010</b> ,		14
62	UNIVERSAL IMAGE NOISE REMOVAL FILTER BASED ON TYPE-2 FUZZY LOGIC SYSTEM AND QPSO. <i>International Journal of Uncertainty, Fuzziness and Knowledge-Based Systems</i> , <b>2012</b> , 20, 207-232	0.8	14
61	. <i>IEEE Transactions on Fuzzy Systems</i> , <b>2020</b> , 28, 783-794	8.3	14
60	New closed-form solutions for Karnik-Mendel algorithm+defuzzification of an interval type-2 fuzzy set <b>2012</b> ,		13
59	Comment on "Toward General Type-2 Fuzzy Logic Systems Based on zSlices" <i>IEEE Transactions on Fuzzy Systems</i> , <b>2012</b> , 20, 996-997	8.3	13
58	Solving Zadeh's Magnus challenge problem on linguistic probabilities via Linguistic Weighted Averages <b>2011</b> ,		13
57	Critique of "A New Look at Type-2 Fuzzy Sets and Type-2 Fuzzy Logic Systems" <i>IEEE Transactions on Fuzzy Systems</i> , <b>2017</b> , 25, 725-727	8.3	12
56	. <i>IEEE Transactions on Fuzzy Systems</i> , <b>2018</b> , 26, 2311-2323	8.3	12
55	A Vector Similarity Measure for Interval Type-2 Fuzzy Sets <b>2007</b> ,		11
54	A Comprehensive Study of the Efficiency of Type-Reduction Algorithms. <i>IEEE Transactions on Fuzzy Systems</i> , <b>2021</b> , 29, 1556-1566	8.3	11
53	A new method for calibrating the fuzzy sets used in fsQCA. <i>Information Sciences</i> , <b>2018</b> , 468, 155-171	7.7	10
52	A Comment on "A Direct Approach for Determining the Switch Points in the Karnik-Mendel Algorithm" <i>IEEE Transactions on Fuzzy Systems</i> , <b>2018</b> , 26, 3905-3907	8.3	10
51	Fuzzy set Qualitative Comparative Analysis (fsQCA): Challenges and applications <b>2012</b> ,		10
50	Advanced computing with words using syllogistic reasoning and arithmetic operations on linguistic belief structures <b>2013</b> ,		10
49	A Non-Singleton Interval Type-2 Fuzzy Logic System for universal image noise removal using Quantum-behaved Particle Swarm Optimization <b>2011</b> ,		10
48	A practical approach for design of PD and PI like Interval Type-2 TSK fuzzy controllers <b>2009</b> ,		10

47	A TIME-DOMAIN APPROACH TO THE NORMAL-INCIDENCE INVERSE PROBLEM*. <i>Geophysical Prospecting</i> , <b>1981</b> , 29, 742-757	1.9	9
46	. <i>IEEE Transactions on Fuzzy Systems</i> , <b>2020</b> , 28, 1996-2008	8.3	9
45	Towards Systematic Design of General Type-2 Fuzzy Logic Controllers: Analysis, Interpretation, and Tuning. <i>IEEE Transactions on Fuzzy Systems</i> , <b>2021</b> , 29, 226-239	8.3	9
44	Determining interval type-2 fuzzy set models for words using data collected from one subject: Person FOU's <b>2014</b> ,		8
43	Solving Zadeh's Swedes and Italians challenge problem <b>2012</b> ,		8
42	Fuzzy Love Selection by means of Perceptual Computing <b>2013</b> ,		8
41	Modeling linguistic probabilities and linguistic quantifiers using interval type-2 fuzzy sets <b>2013</b> ,		7
40	Lower and upper probability calculations using compatibility measures for solving Zadeh's challenge problems <b>2012</b> ,		7
39	Fast Fuzzy set Qualitative Comparative Analysis (Fast fsQCA) <b>2012</b> ,		7
38	Cardinality, Fuzziness, Variance and Skewness of Interval Type-2 Fuzzy Sets <b>2007</b> ,		7
37	Robustness of interval type-2 fuzzy logic systems <b>2010</b> ,		6
36	On the geometry of join and meet calculations for general type-2 fuzzy sets <b>2011</b> ,		6
35	Normal incidence layered system state-space models which include absorption effects. <i>Geophysics</i> , <b>1983</b> , 48, 259-271	3.1	6
34	Critical Thinking About Explainable AI (XAI) for Rule-Based Fuzzy Systems. <i>IEEE Transactions on Fuzzy Systems</i> , <b>2021</b> , 1-1	8.3	6
33	Intuitionistic Fuzzy Hybrid Weighted Arithmetic Mean and Its Application in Decision Making. <i>International Journal of Uncertainty, Fuzziness and Knowledge-Based Systems</i> , <b>2019</b> , 27, 353-373	0.8	5
32	Advanced Computing with Words: Status and Challenges. <i>Studies in Fuzziness and Soft Computing</i> , <b>2015</b> , 217-245	0.7	5
31	Non-linear Variable Structure Regression (VSR) and its application in time-series forecasting <b>2014</b> ,		5
30	Evaluating location choices using Perceptual Computer approach <b>2010</b> ,		5

29	Ordered fuzzy weighted averages and ordered linguistic weighted averages <b>2010</b> ,		5
28	Some extensions of the karnik-mendel algorithms for computing an interval type-2 fuzzy set centroid <b>2011</b> ,		5
27	Person Footprint of Uncertainty-Based CWW Model for Power Optimization in Handheld Devices. <i>IEEE Transactions on Fuzzy Systems</i> , <b>2020</b> , 28, 558-568	8.3	5
26	Adaptive variable-structure basis function expansions: Candidates for machine learning. <i>Information Sciences</i> , <b>2019</b> , 496, 124-149	7.7	4
25	The Perceptual Computer: the Past, Up to the Present, and Into the Future. <i>Informatik-Spektrum</i> , <b>2018</b> , 41, 15-26	0.3	4
24	Perceptual Computer application in Learning Outcome evaluation <b>2012</b> ,		4
23	Efficient algorithms for computing a class of subsethood and similarity measures for interval type-2 fuzzy sets <b>2010</b> ,		4
22	Simultaneous Spherical Divergence Correction and Optima Deconvolution. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , <b>1980</b> , GE-18, 273-280	8.1	4
21	Comparing Performance Potentials of Classical and Intuitionistic Fuzzy Systems in Terms of Sculpting the State Space. <i>IEEE Transactions on Fuzzy Systems</i> , <b>2020</b> , 28, 2244-2254	8.3	4
20	<b>2014</b> ,		3
19	Linguistic Weighted Standard Deviation <b>2013</b> ,		3
18	Validation of Fuzzy set Qualitative Comparative Analysis (fsQCA): Granular description of a function <b>2012</b> ,		3
17	Enhanced centroid-flow algorithm for general type-2 fuzzy sets <b>2011</b> ,		3
16	Examining the continuity of type-1 and interval type-2 fuzzy logic systems <b>2010</b> ,		3
15	Obtaining an FOU for a word from a single subject by an individual interval approach <b>2009</b> ,		3
14	On computing the similarity of trapezoidal fuzzy sets using an Automated Area Method. <i>Information Sciences</i> , <b>2022</b> , 589, 716-716	7.7	3
13	On the justification to use a novel simplified interval type-2 fuzzy logic system. <i>Journal of Intelligent and Fuzzy Systems</i> , <b>2015</b> , 28, 1071-1079	1.6	2
12	Uncertainty measures for general type-2 fuzzy sets <b>2009</b> ,		2

11	Two-Pass Orthogonal Least-Squares Algorithm to Train and Reduce the Complexity of Fuzzy Logic Systems. <i>Journal of Intelligent and Fuzzy Systems</i> , <b>1996</b> , 4, 295-308	1.6	2
10	HISTORICAL REFLECTIONS ON PERCEPTUAL COMPUTING <b>2008</b> ,		2
9	Multicriteria decision making based on intuitionistic fuzzy prioritized arithmetic mean. <i>International Journal of Intelligent Systems</i> , <b>2018</b> , 33, 1412-1425	8.4	1
8	Extension of set functions to Interval Type-2 Fuzzy Sets: Applications to evidential reasoning <b>2014</b> ,		1
7	Tutorial on the uses of the interval type-2 fuzzy set Wavy Slice Representation Theorem <b>2008</b> ,		1
6	Lattice algorithms for recursive instrumental variable methods. <i>International Journal of Adaptive Control and Signal Processing</i> , <b>1996</b> , 10, 177-212	2.8	1
5	Fuzzy-System Kernel Machines: A Kernel Method Based on the Connections Between Fuzzy Inference Systems and Kernel Machines. <i>IEEE Transactions on Fuzzy Systems</i> , <b>2022</b> , 1-1	8.3	1
4	Inverse problems in two-dimensional acoustic media: A linear imaging model. <i>Journal of the Acoustical Society of America</i> , <b>1987</b> , 81, 1471-1485	2.2	
3	Correction to New fast optimal white-noise estimators for deconvolution <i>IEEE Transactions on Geoscience Electronics</i> , <b>1977</b> , 15, 183-183		
2	Non-singleton fuzzification made simpler. <i>Information Sciences</i> , <b>2021</b> , 559, 286-308	7.7	
1	. <i>IEEE Transactions on Fuzzy Systems</i> , <b>2021</b> , 29, 199-202	8.3	