Jerry M Mendel

List of Publications by Year in Descending Order

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	On computing the similarity of trapezoidal fuzzy sets using an Automated Area Method. *Information Sciences*, **2022**, 589, 716-716	7.7	3
117	Fuzzy-System Kernel Machines: A Kernel Method Based on the Connections Between Fuzzy Inference Systems and Kernel Machines. *IEEE Transactions on Fuzzy Systems*, **2022**, 1-1	8.3	1
116	Non-singleton fuzzification made simpler. *Information Sciences*, **2021**, 559, 286-308	7.7	
115	A Comprehensive Study of the Efficiency of Type-Reduction Algorithms. *IEEE Transactions on Fuzzy Systems*, **2021**, 29, 1556-1566	8.3	11
114	Towards Systematic Design of General Type-2 Fuzzy Logic Controllers: Analysis, Interpretation, and Tuning. *IEEE Transactions on Fuzzy Systems*, **2021**, 29, 226-239	8.3	9
113	. *IEEE Transactions on Fuzzy Systems*, **2021**, 29, 199-202	8.3	
112	Critical Thinking About Explainable AI (XAI) for Rule-Based Fuzzy Systems. *IEEE Transactions on Fuzzy Systems*, **2021**, 1-1	8.3	6
111	. *IEEE Transactions on Fuzzy Systems*, **2020**, 28, 783-794	8.3	14
110	Person Footprint of Uncertainty-Based CWW Model for Power Optimization in Handheld Devices. *IEEE Transactions on Fuzzy Systems*, **2020**, 28, 558-568	8.3	5
109	. *IEEE Transactions on Fuzzy Systems*, **2020**, 28, 1996-2008	8.3	9
108	Comparing Performance Potentials of Classical and Intuitionistic Fuzzy Systems in Terms of Sculpting the State Space. *IEEE Transactions on Fuzzy Systems*, **2020**, 28, 2244-2254	8.3	4
107	Intuitionistic Fuzzy Hybrid Weighted Arithmetic Mean and Its Application in Decision Making. *International Journal of Uncertainty, Fuzziness and Knowlege-Based Systems*, **2019**, 27, 353-373	0.8	5
106	Adaptive variable-structure basis function expansions: Candidates for machine learning. *Information Sciences*, **2019**, 496, 124-149	7.7	4
105	Similarity Measures for Closed General Type-2 Fuzzy Sets: Overview, Comparisons, and a Geometric Approach. *IEEE Transactions on Fuzzy Systems*, **2019**, 27, 515-526	8.3	31
104	. *IEEE Transactions on Fuzzy Systems*, **2019**, 27, 58-71	8.3	23
103	Recommendations on designing practical interval type-2 fuzzy systems. *Engineering Applications of Artificial Intelligence*, **2019**, 85, 182-193	7.2	53
102	Type-2 Fuzzy Sets as Well as Computing with Words. *IEEE Computational Intelligence Magazine*, **2019**, 14, 82-95	5.6	19

101	Multicriteria decision making based on intuitionistic fuzzy prioritized arithmetic mean. *International Journal of Intelligent Systems*, **2018**, 33, 1412-1425	8.4	1
100	The Perceptual Computer: the Past, Up to the Present, and Into the Future. *Informatik-Spektrum*, **2018**, 41, 15-26	0.3	4
99	. *IEEE Transactions on Fuzzy Systems*, **2018**, 26, 2362-2373	8.3	20
98	A new method for calibrating the fuzzy sets used in fsQCA. *Information Sciences*, **2018**, 468, 155-171	7.7	10
97	. *IEEE Transactions on Fuzzy Systems*, **2018**, 26, 2311-2323	8.3	12
96	A Comment on A Direct Approach for Determining the Switch Points in the Karnik–Mendel Algorithm *IEEE Transactions on Fuzzy Systems*, **2018**, 26, 3905-3907	8.3	10
95	Critique of A New Look at Type-2 Fuzzy Sets and Type-2 Fuzzy Logic Systems *IEEE Transactions on Fuzzy Systems*, **2017**, 25, 725-727	8.3	12
94	Uncertain Rule-Based Fuzzy Systems **2017**,		219
93	Comments on Interval Type-2 Fuzzy Sets are Generalization of Interval-Valued Fuzzy Sets: Towards a Wide View on Their Relationship *IEEE Transactions on Fuzzy Systems*, **2016**, 24, 249-250	8.3	18
92	Fuzzy Opinion Networks: A Mathematical Framework for the Evolution of Opinions and Their Uncertainties Across Social Networks. *IEEE Transactions on Fuzzy Systems*, **2016**, 24, 880-905	8.3	22
91	A comparison of three approaches for estimating (synthesizing) an interval type-2 fuzzy set model of a linguistic term for computing with words. *Granular Computing*, **2016**, 1, 59-69	5.4	113
90	Encoding Words Into Normal Interval Type-2 Fuzzy Sets: HM Approach. *IEEE Transactions on Fuzzy Systems*, **2016**, 24, 865-879	8.3	32
89	On the justification to use a novel simplified interval type-2 fuzzy logic system. *Journal of Intelligent and Fuzzy Systems*, **2015**, 28, 1071-1079	1.6	2
88	Type-2 Fuzzy Sets and Systems: a Retrospective. *Informatik-Spektrum*, **2015**, 38, 523-532	0.3	20
87	Advanced Computing with Words: Status and Challenges. *Studies in Fuzziness and Soft Computing*, **2015**, 217-245	0.7	5
86	Determining interval type-2 fuzzy set models for words using data collected from one subject: Person FOUs **2014**,		8
85	Extension of set functions to Interval Type-2 Fuzzy Sets: Applications to evidential reasoning **2014**,		1
84	**2014**,		3

83	**2014**,		64
82	On Computing Normalized Interval Type-2 Fuzzy Sets. *IEEE Transactions on Fuzzy Systems*, **2014**, 22, 1335-1340	8.3	15
81	Non-linear Variable Structure Regression (VSR) and its application in time-series forecasting **2014**,		5
80	On Advanced Computing With Words Using the Generalized Extension Principle for Type-1 Fuzzy Sets. *IEEE Transactions on Fuzzy Systems*, **2014**, 22, 1245-1261	8.3	15
79	Simplified Interval Type-2 Fuzzy Logic Systems. *IEEE Transactions on Fuzzy Systems*, **2013**, 21, 1056-1069	8.3	138
78	Theoretical aspects of Fuzzy Set Qualitative Comparative Analysis (fsQCA). *Information Sciences*, **2013**, 237, 137-161	7.7	50
77	Linguistic Weighted Standard Deviation **2013**,		3
76	Modeling linguistic probabilities and linguistic quantifiers using interval type-2 fuzzy sets **2013**,		7
75	. *IEEE Transactions on Fuzzy Systems*, **2013**, 21, 426-446	8.3	135
74	Advanced computing with words using syllogistic reasoning and arithmetic operations on linguistic belief structures **2013**,		10
73	Fuzzy Love Selection by means of Perceptual Computing **2013**,		8
72	Charles Ragin Fuzzy Set Qualitative Comparative Analysis (fsQCA) used for linguistic summarizations. *Information Sciences*, **2012**, 202, 1-23	7.7	72
71	Enhanced Interval Approach for Encoding Words Into Interval Type-2 Fuzzy Sets and Its Convergence Analysis. *IEEE Transactions on Fuzzy Systems*, **2012**, 20, 499-513	8.3	131
70	New closed-form solutions for Karnik-Mendel algorithm+defuzzification of an interval type-2 fuzzy set **2012**,		13
69	Lower and upper probability calculations using compatibility measures for solving Zadeh's challenge problems **2012**,		7
68	Perceptual Computer application in Learning Outcome evaluation **2012**,		4
67	Fast Fuzzy set Qualitative Comparative Analysis (Fast fsQCA) **2012**,		7
66	Solving Zadeh's Swedes and Italians challenge problem **2012**,		8

65	Comment on "Toward General Type-2 Fuzzy Logic Systems Based on zSlices" *IEEE Transactions on Fuzzy Systems*, **2012**, 20, 996-997	8.3	13
64	Fuzzy set Qualitative Comparative Analysis (fsQCA): Challenges and applications **2012**,		10
63	Validation of Fuzzy set Qualitative Comparative Analysis (fsQCA): Granular description of a function **2012**,		3
62	A new method for managing the uncertainties in evaluating multi-person multi-criteria location choices, using a perceptual computer. *Annals of Operations Research*, **2012**, 195, 277-309	3.2	28
61	UNIVERSAL IMAGE NOISE REMOVAL FILTER BASED ON TYPE-2 FUZZY LOGIC SYSTEM AND QPSO. *International Journal of Uncertainty, Fuzziness and Knowlege-Based Systems*, **2012**, 20, 207-232	0.8	14
60	Enhanced centroid-flow algorithm for general type-2 fuzzy sets **2011**,		3
59	On the Continuity of Type-1 and Interval Type-2 Fuzzy Logic Systems. *IEEE Transactions on Fuzzy Systems*, **2011**, 19, 179-192	8.3	86
58	Connect Karnik-Mendel Algorithms to Root-Finding for Computing the Centroid of an Interval Type-2 Fuzzy Set. *IEEE Transactions on Fuzzy Systems*, **2011**, 19, 652-665	8.3	60
57	Design of Novel Interval Type-2 Fuzzy Controllers for Modular and Reconfigurable Robots: Theory and Experiments. *IEEE Transactions on Industrial Electronics*, **2011**, 58, 1371-1384	8.9	106
56	Computing the centroid of a general type-2 fuzzy set by means of the centroid-flow algorithm. *IEEE Transactions on Fuzzy Systems*, **2011**, 19, 401-422	8.3	57
55	A Non-Singleton Interval Type-2 Fuzzy Logic System for universal image noise removal using Quantum-behaved Particle Swarm Optimization **2011**,		10
54	On the geometry of join and meet calculations for general type-2 fuzzy sets **2011**,		6
53	Some extensions of the karnik-mendel algorithms for computing an interval type-2 fuzzy set centroid **2011**,		5
52	Solving Zadeh's Magnus challenge problem on linguistic probabilities via Linguistic Weighted Averages **2011**,		13
51	A quantitative comparison of interval type-2 and type-1 fuzzy logic systems: First results **2010**,		27
50	Enhanced Interval Approach for encoding words into interval type-2 fuzzy sets and convergence of the word FOUs **2010**,		21
49	Robustness of interval type-2 fuzzy logic systems **2010**,		6
48	Evaluating location choices using Perceptual Computer approach **2010**,		5

47	Foreword to the Special Section on Computing With Words. *IEEE Transactions on Fuzzy Systems*, **2010**, 18, 437-440	8.3	20
46	Examining the continuity of type-1 and interval type-2 fuzzy logic systems **2010**,		3
45	Centroid of a general type-2 fuzzy set computed by means of the centroid-flow algorithm **2010**,		18
44	On the stability of interval type-2 TSK fuzzy logic control systems. *IEEE Transactions on Systems, Man, and Cybernetics*, **2010**, 40, 798-818		206
43	Comments on "$alpha$ -Plane Representation for Type-2 Fuzzy Sets: Theory and Applications. *IEEE Transactions on Fuzzy Systems*, **2010**, 18, 229-230	8.3	48
42	Computing With Words for Hierarchical Decision Making Applied to Evaluating a Weapon System. *IEEE Transactions on Fuzzy Systems*, **2010**, 18, 441-460	8.3	135
41	Ordered fuzzy weighted averages and ordered linguistic weighted averages **2010**,		5
40	Efficient algorithms for computing a class of subsethood and similarity measures for interval type-2 fuzzy sets **2010**,		4
39	Social Judgment Advisor: An application of the Perceptual Computer **2010**,		14
38	**2010**,		293
37	Historical reflections and new positions on perceptual computing. *Fuzzy Optimization and Decision Making*, **2009**, 8, 325-335	5.1	18
36	Uncertainty measures for general type-2 fuzzy sets **2009**,		2
35	Obtaining an FOU for a word from a single subject by an individual interval approach **2009**,		3
34	A practical approach for design of PD and PI like Interval Type-2 TSK fuzzy controllers **2009**,		10
33	Parametric design of stable type-2 TSK fuzzy systems **2008**,		26
32	On new quasi-type-2 fuzzy logic systems **2008**,		33
31	Tutorial on the uses of the interval type-2 fuzzy set Wavy Slice Representation Theorem **2008**,		1
30	Aggregation Using the Fuzzy Weighted Average as Computed by the Karnik Mendel Algorithms. *IEEE Transactions on Fuzzy Systems*, **2008**, 16, 1-12	8.3	100

29	Encoding Words Into Interval Type-2 Fuzzy Sets Using an Interval Approach. *IEEE Transactions on Fuzzy Systems*, **2008**, 16, 1503-1521	8.3	231
28	HISTORICAL REFLECTIONS ON PERCEPTUAL COMPUTING **2008**,		2
27	Type-2 Fuzzistics for Nonsymmetric Interval Type-2 Fuzzy Sets: Forward Problems. *IEEE Transactions on Fuzzy Systems*, **2007**, 15, 916-930	8.3	55
26	Cardinality, Fuzziness, Variance and Skewness of Interval Type-2 Fuzzy Sets **2007**,		7
25	A Vector Similarity Measure for Interval Type-2 Fuzzy Sets **2007**,		11
24	Advances in type-2 fuzzy sets and systems. *Information Sciences*, **2007**, 177, 84-110	7.7	412
23	Computing with words and its relationships with fuzzistics. *Information Sciences*, **2007**, 177, 988-1006	7.7	215
22	Uncertainty measures for interval type-2 fuzzy sets. *Information Sciences*, **2007**, 177, 5378-5393	7.7	247
21	Type-2 fuzzy sets and systems: an overview. *IEEE Computational Intelligence Magazine*, **2007**, 2, 20-29	5.6	435
20	Computing with Words: Zadeh, Turing, Popper and Occam. *IEEE Computational Intelligence Magazine*, **2007**, 2, 10-17	5.6	122
19	Type-2 Fuzzistics for Symmetric Interval Type-2 Fuzzy Sets: Part 2, Inverse Problems. *IEEE Transactions on Fuzzy Systems*, **2007**, 15, 301-308	8.3	64
18	Super-Exponential Convergence of the Karnik–Mendel Algorithms for Computing the Centroid of an Interval Type-2 Fuzzy Set. *IEEE Transactions on Fuzzy Systems*, **2007**, 15, 309-320	8.3	143
17	An Interval Approach to Fuzzistics for Interval Type-2 Fuzzy Sets. *IEEE International Conference on Fuzzy Systems*, **2007**,		22
16	. *IEEE Transactions on Fuzzy Systems*, **2007**, 15, 1145-1161	8.3	201
15	. *IEEE Transactions on Fuzzy Systems*, **2007**, 15, 56-72	8.3	69
14	Interval Type-2 Fuzzy Logic Systems Made Simple. *IEEE Transactions on Fuzzy Systems*, **2006**, 14, 808-821	8.3	1328
13	Type-2 Fuzzistics for Symmetric Interval Type-2 Fuzzy Sets: Part 1, Forward Problems. *IEEE Transactions on Fuzzy Systems*, **2006**, 14, 781-792	8.3	149
12	Centroid of a type-2 fuzzy set. *Information Sciences*, **2001**, 132, 195-220	7.7	805

11	Designing interval type-2 fuzzy logic systems using an SVD-QR method: Rule reduction. *International Journal of Intelligent Systems*, **2000**, 15, 939-957	8.4	28
10	Two-Pass Orthogonal Least-Squares Algorithm to Train and Reduce the Complexity of Fuzzy Logic Systems. *Journal of Intelligent and Fuzzy Systems*, **1996**, 4, 295-308	1.6	2
9	Lattice algorithms for recursive instrumental variable methods. *International Journal of Adaptive Control and Signal Processing*, **1996**, 10, 177-212	2.8	1
8	Inverse problems in two-dimensional acoustic media: A linear imaging model. *Journal of the Acoustical Society of America*, **1987**, 81, 1471-1485	2.2	
7	A computationally fast approach to maximum-likelihood deconvolution. *Geophysics*, **1984**, 49, 550-565	3.1	44
6	Maximum-Likelihood Seismic Deconvolution. *IEEE Transactions on Geoscience and Remote Sensing*, **1983**, GE-21, 72-82	8.1	54
5	Normal incidence layered system state-space models which include absorption effects. *Geophysics*, **1983**, 48, 259-271	3.1	6
4	A novel approach to seismic signal processing and modeling. *Geophysics*, **1981**, 46, 1398-1414	3.1	29
3	A TIME-DOMAIN APPROACH TO THE NORMAL-INCIDENCE INVERSE PROBLEM*. *Geophysical Prospecting*, **1981**, 29, 742-757	1.9	9
2	Simultaneous Spherical Divergence Correction and Optima Deconvolution. *IEEE Transactions on Geoscience and Remote Sensing*, **1980**, GE-18, 273-280	8.1	4
1	Correction to New fast optimal white-noise estimators for deconvolution *IEEE Transactions on Geoscience Electronics*, **1977**, 15, 183-183		