Erich Peter Klement

List of Publications by Year
in descending order

131 papers	5,526 citations	117453 34 h-index	82410 72 g-index
144 all docs	144 docs citations	144 times ranked	1776 citing authors

#	ARTICLE	IF	CITATIONS
1	Triangular Norms. Trends in Logic, 2000, , .	0.2	1,849
2	A Universal Integral as Common Frame for Choquet and Sugeno Integral. IEEE Transactions on Fuzzy Systems, 2010, 18, 178-187.	6.5	296
3	Triangular norms. Position paper I: basic analytical and algebraic properties. Fuzzy Sets and Systems, 2004, 143, 5-26.	1.6	268
4	Triangular Norm-Based Measures and Games with Fuzzy Coalitions. Theory and Decision Library Series C, Game Theory, Mathematical Programming and Operations Research, 1993, , .	0.2	161
5	ON THE RELATIONSHIP OF ASSOCIATIVE COMPENSATORY OPERATORS TO TRIANGULAR NORMS AND CONORMS. International Journal of Uncertainty, Fuzziness and Knowlege-Based Systems, 1996, 04, 129-144.	0.9	141
6	Triangular norms. Position paper II: general constructions and parameterized families. Fuzzy Sets and Systems, 2004, 145, 411-438.	1.6	120
7	Conjunctors and their Residual Implicators: Characterizations and Construction Methods. Mediterranean Journal of Mathematics, 2007, 4, 343-356.	0.4	120
8	Construction of Fuzzy Ïƒ-algebras using triangular norms. Journal of Mathematical Analysis and Applications, 1982, 85, 543-565.	0.5	115
9	Fuzzy Ïƒ-algebras and fuzzy measurable functions. Fuzzy Sets and Systems, 1980, 4, 83-93.	1.6	102
10	A survey on different triangular norm-based fuzzy logics. Fuzzy Sets and Systems, 1999, 101, 241-251.	1.6	98
11	Quasi- and pseudo-inverses of monotone functions, and the construction of t-norms. Fuzzy Sets and Systems, 1999, 104, 3-13.	1.6	86
12	Triangular norms. Position paper III: continuous t-norms. Fuzzy Sets and Systems, 2004, 145, 439-454.	1.6	80
13	Fuzzy probability measures. Fuzzy Sets and Systems, 1981, 5, 21-30.	1.6	75
14	Hybridization of multi-objective evolutionary algorithms and artificial neural networks for optimizing the performance of electrical drives. Engineering Applications of Artificial Intelligence, 2013, 26, 1781-1794.	4.3	74
15	Characterization of fuzzy measures constructed by means of triangular norms. Journal of Mathematical Analysis and Applications, 1982, 86, 345-358.	0.5	70
16	Fault detection in reciprocating compressor valves under varying load conditions. Mechanical Systems and Signal Processing, 2016, 70-71, 104-119.	4.4	67
17	Triangular norm-based measures and their Markov kernel representation. Journal of Mathematical Analysis and Applications, 1991, 162, 111-143.	0.5	66
18	ARE FUZZY SYSTEMS UNIVERSAL APPROXIMATORS?. International Journal of General Systems, 1999, 28, 259-282.	1.2	61

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19	On extensions of triangular norms on bounded lattices. Indagationes Mathematicae, 2008, 19, 135-150.	0.2	61
20	Integrals based on monotone set functions. Fuzzy Sets and Systems, 2015, 281, 88-102.	1.6	61
21	Generalized measures. Fuzzy Sets and Systems, 1991, 40, 375-394.	1.6	58
22	Measure-based aggregation operators. Fuzzy Sets and Systems, 2004, 142, 3-14.	1.6	57
23	Identifying static and dynamic prediction models for NOx emissions with evolving fuzzy systems. Applied Soft Computing Journal, 2011, 11, 2487-2500.	4.1	53
24	Universal integrals based on copulas. Fuzzy Optimization and Decision Making, 2014, 13, 273-286.	3.4	51
25	INTEGRATION WITH RESPECT TO DECOMPOSABLE MEASURES, BASED ON A CONDITIONALLY DISTRIBUTIVE SEMIRING ON THE UNIT INTERVAL. International Journal of Uncertainty, Fuzziness and Knowlege-Based Systems, 2000, 08, 701-717.	0.9	50
26	On triangular norm-based propositional fuzzy logics. Fuzzy Sets and Systems, 1995, 69, 241-255.	1.6	48
27	DECMO2: a robust hybrid and adaptive multi-objective evolutionary algorithm. Soft Computing, 2015, 19, 3551-3569.	2.1	48
28	Characterization of finite fuzzy measures using Markoff-kernels. Journal of Mathematical Analysis and Applications, 1980, 75, 330-339.	0.5	46
29	Convergence theorems for monotone measures. Fuzzy Sets and Systems, 2015, 281, 103-127.	1.6	45
30	DIC image reconstruction on large cell scans. Microscopy Research and Technique, 2005, 66, 312-320.	1.2	38
31	FS-FOIL: an inductive learning method for extracting interpretable fuzzy descriptions. International Journal of Approximate Reasoning, 2003, 32, 131-152.	1.9	37
32	Copulas Constructed from Horizontal Sections. Communications in Statistics - Theory and Methods, 2007, 36, 2901-2911.	0.6	37
33	Measures of non-exchangeability for bivariate random vectors. Statistical Papers, 2010, 51, 687-699.	0.7	37
34	Operations on fuzzy sets—an axiomatic approach. Information Sciences, 1982, 27, 221-232.	4.0	36
35	A characterization of the ordering of continuous t-norms. Fuzzy Sets and Systems, 1997, 86, 189-195.	1.6	36
36	Triangular norms as ordinal sums of semigroups in the sense of A. H. Clifford. Semigroup Forum, 2002, 65, 71-82.	0.3	36

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37	Problems on triangular norms and related operators. Fuzzy Sets and Systems, 2004, 145, 471-479.	1.6	34
38	Fuzzy logics with an additional involutive negation. Fuzzy Sets and Systems, 2010, 161, 390-411.	1.6	32
39	Archimax copulas and invariance under transformations. Comptes Rendus Mathematique, 2005, 340, 755-758.	0.1	30
40	Intervals of 1-Lipschitz aggregation operators, quasi-copulas, and copulas with given affine section. Monatshefte Fur Mathematik, 2007, 152, 151-167.	0.5	30
41	Performance comparison of generational and steady-state asynchronous multi-objective evolutionary algorithms for computationally-intensive problems. Knowledge-Based Systems, 2015, 87, 47-60.	4.0	30
42	Triangular norms: Basic notions and properties. , 2005, , 17-60.		29
43	Ultramodular aggregation functions. Information Sciences, 2011, 181, 4101-4111.	4.0	29
44	Nonlinearity of the fuzzy integral. Fuzzy Sets and Systems, 1983, 11, 309-315.	1.6	27
45	Residuated logics based on strict triangular norms with an involutive negation. Mathematical Logic Quarterly, 2006, 52, 269-282.	0.2	23
46	Machine learning based analysis of gender differences in visual inspection decision making. Information Sciences, 2013, 224, 62-76.	4.0	22
47	Some mathematical aspects of fuzzy sets: Triangular norms, fuzzy logics, and generalized measures. Fuzzy Sets and Systems, 1997, 90, 133-140.	1.6	20
48	Uniform approximation of associative copulas by strict and non-strict copulas. Illinois Journal of Mathematics, 2001, 45, .	0.1	20
49	A characterization of tribes with respect to the Åukasiewicz t-norm. Czechoslovak Mathematical Journal, 1997, 47, 689-700.	0.3	18
50	Detecting cracks in reciprocating compressor valves using pattern recognition in the pV diagram. Pattern Analysis and Applications, 2015, 18, 461-472.	3.1	18
51	Fuzzy measures assuming their values in the set of fuzzy numbers. Journal of Mathematical Analysis and Applications, 1983, 93, 312-323.	0.5	17
52	Discrete Integrals and Axiomatically Defined Functionals. Axioms, 2012, 1, 9-20.	0.9	17
53	Cross-migrative triangular norms. International Journal of Intelligent Systems, 2012, 27, 411-428.	3.3	17
54	A Hybrid Soft Computing Approach for Optimizing Design Parameters of Electrical Drives. Advances in Intelligent Systems and Computing, 2013, , 347-358.	0.5	17

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55	Correspondence between fuzzy measures and classical measures. Fuzzy Sets and Systems, 1982, 7, 57-70.	1.6	16
56	On the redundancy of fuzzy partitions. Fuzzy Sets and Systems, 1997, 85, 195-201.	1.6	15
57	Bounds for Trivariate Copulas with Given Bivariate Marginals. Journal of Inequalities and Applications, 2008, 2008, 161537.	0.5	15
58	Ultramodularity and copulas. Rocky Mountain Journal of Mathematics, 2014, 44, .	0.2	15
59	On the Performance of Master-Slave Parallelization Methods for Multi-Objective Evolutionary Algorithms. Lecture Notes in Computer Science, 2013, , 122-134.	1.0	15
60	Some remarks on a paper by R. R. Yager. Information Sciences, 1982, 27, 211-220.	4.0	13
61	Archimedean components of triangular norms. Journal of the Australian Mathematical Society, 2005, 78, 239-255.	0.3	13
62	L-Fuzzy Sets and Isomorphic Lattices: Are All the â€œNewâ€•Results Really New? â€. Mathematics, 2018, 6, 146.	1.1	13
63	Two Approaches to Data-Driven Design of Evolving Fuzzy Systems: eTS and FLEXFIS. , 0, , .		12
64	Convex combinations in terms of triangular norms: A characterization of idempotent, bisymmetrical and self-dual compensatory operators. Fuzzy Sets and Systems, 1999, 104, 97-108.	1.6	11
65	Microarray Analysis at Single-Molecule Resolution. IEEE Transactions on Nanobioscience, 2010, 9, 51-58.	2.2	11
66	On the axiomatization of some classes of discrete universal integrals. Knowledge-Based Systems, 2012, 28, 13-18.	4.0	11
67	Detecting broken reciprocating compressor valves in the pV diagram. , 2013, , .		11
68	LIPSCHITZ CONTINUITY OF DISCRETE UNIVERSAL INTEGRALS BASED ON COPULAS. International Journal of Uncertainty, Fuzziness and Knowlege-Based Systems, 2010, 18, 39-52.	0.9	10
69	A generalization of universal integrals by means of level dependent capacities. Knowledge-Based Systems, 2013, 38, 14-18.	4.0	10
70	Propositional Fuzzy Logics Based on Frank T-Norms: A Comparison. Applied Logic Series, 1999, , 17-38.	0.3	10
71	DIFFERENT TYPES OF CONTINUITY OF TRIANGULAR NORMS REVISITED. New Mathematics and Natural Computation, 2005, 01, 195-211.	0.4	9
72	Evaluation of structural change and local strain distribution in polymers comparatively imaged by FFSA and OCT techniques. EXPRESS Polymer Letters, 2012, 6, 249-256.	1.1	9

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73	The impact on the properties of the EFGM copulas when extending this family. Fuzzy Sets and Systems, 2021, 415, 1-26.	1.6	9
74	An integral representation for decomposable measures of measurable functions. Aequationes Mathematicae, 1994, 47, 255-262.	0.4	8
75	Separated Antecedent and Consequent Learning for Takagi-Sugeno Fuzzy Systems. , 2006, , .		8
76	On the Expected Value of Fuzzy Events. International Journal of Uncertainty, Fuzziness and Knowlege-Based Systems, 2015, 23, 57-74.	0.9	8
77	Efficient Multi-Objective Optimization Using 2-Population Cooperative Coevolution. Lecture Notes in Computer Science, 2013, , 251-258.	1.0	8
78	On the role of ultramodularity and Schur concavity in the construction of binary copulas. Journal of Mathematical Inequalities, 2017, , 361-381.	0.5	8
79	Picture fuzzy sets and 3-fuzzy sets. , 2018, , .		7
80	The key role of convexity in some copula constructions. European Journal of Mathematics, 2020, 6, 533-560.	0.2	7
81	1-Lipschitz Aggregation Operators, Quasi-Copulas and Copulas with Given Diagonals. , 2004, , 205-211.		7
82	Plausibility Measures â€" A General Framework for Possibility and Fuzzy Probability Measures. , 1984, , 31-50.		7
83	Semigroups and triangular norms. , 2005, , 63-93.		7
84	Triangular Norm-Based Measures. , 2002, , 947-1010.		6
85	On the order of triangular normsâ€"comments on â€œA triangular norm hierarchyâ€•by E. Cretu. Fuzzy Sets and Systems, 2002, 131, 409-413.	1.6	6
86	Extremal Lipschitz continuous aggregation functions with a given diagonal section. Fuzzy Sets and Systems, 2018, 346, 147-167.	1.6	6
87	Polynomial bivariate copulas of degree five: characterization and some particular inequalities. Dependence Modeling, 2021, 9, 13-42.	0.2	6
88	A Comparison of Variable Selection Methods with the Main Focus on Orthogonalization. , 2004, , 479-486.		6
89	Ordinal sums of binary conjunctive operations based on the product. Publicationes Mathematicae, 2017, 91, 63-80.	0.1	6
90	Sufficient triangular norms in many-valued logics with standard negation. Archive for Mathematical Logic, 2005, 44, 829-849.	0.2	5

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91	Data-Driven Design of Takagi-Sugeno Fuzzy Systems for Predicting NOx Emissions. Communications in Computer and Information Science, 2010, , 1-10.	0.4	5
92	An Effective Ensemble-Based Method for Creating On-the-Fly Surrogate Fitness Functions for Multi-objective Evolutionary Algorithms. , 2013, , .		5
93	Ordinal sums: From triangular norms to bi- and multivariate copulas. Fuzzy Sets and Systems, 2022, 451, 28-64.	1.6	5
94	A Radon-Nikodyn theorem for fuzzy-valued measures. Fuzzy Sets and Systems, 1988, 27, 45-51.	1.6	4
95	Core, value and equilibria for market games: On a problem of Aumann and Shapley. International Journal of Game Theory, 1996, 25, 149-160.	0.5	4
96	Interpolation and Approximation of Real Input-Output Functions Using Fuzzy Rule Bases. , 1994, , 245-254.		4
97	A concept of universal integral based on measures of level sets. , 2009, , .		3
98	Characterizations of bivariate conic, extreme value, and Archimax copulas. Dependence Modeling, 2017, 5, 45-58.	0.2	3
99	On the role of ultramodularity and Schur concavity in the construction of binary copulas. Journal of Mathematical Inequalities, 2017, , 361-381.	0.5	3
100	New results on perturbation-based copulas. Dependence Modeling, 2021, 9, 347-373.	0.2	3
101	Categorical foundations, fuzzy topology, fuzzy measures, and mathematical applications of fuzzy sets. Fuzzy Sets and Systems, 1991, 42, 1-2.	1.6	2
102	Fault Detection in Engine Measurement Systems by a Model-Based Approach. , 2004, , .		2
103	Premise parameter estimation and adaptation in fuzzy systems with open-loop clustering methods. , 0, , .		2
104	Logical Connectives for Granular Computing. , 0, , 205-224.		2
105	Detecting Broken Reciprocating Compressor Valves in pV Diagrams of Different Valve Types. , 2013, , .		2
106	Transformations of Copulas and Quasi-Copulas. , 2004, , 181-188.		2
107	Open letter to the readers of FFS. Fuzzy Sets and Systems, 1989, 29, 394-395.	1.6	1
108	Quantitative analysis of microarray images. , 2005, , .		1

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109	Classifier-based analysis of visual inspection: Gender differences in decision-making. , 2010, , .		1
110	A concept of universal fuzzy integrals. , 2012, , .		1
111	Detecting Cracks in Reciprocating Compressor Valves Using Pattern Recognition in Frequency Space. , 2012, , .		1
112	On the robustness of fault detection in reciprocating compressor valves. , 2014, , .		1
113	A note on a generalized Frank functional equation. Fuzzy Sets and Systems, 2018, 335, 48-54.	1.6	1
114	Generalizing expected values to the case of L*-fuzzy events. International Journal of General Systems, 2021, 50, 36-62.	1.2	1
115	Triangular Norms and Some Applications to Measure and Game Theory. , 1992, , 89-105.		1
116	Tenth international seminar on fuzzy set theory. Fuzzy Sets and Systems, 1988, 27, 252.	1.6	0
117	WAI'96: II Workshop on Computer Arithmetic, Interval and Symbolic Computation. Reliable Computing, 1996, 2, 391-401.	0.8	0
118	<title>New approach for motion coordination of a mobile manipulator using fuzzy behavioral algorithms</title>. , 1998, , .		0
119	Tracking fluorescent spots in wide-field microscopy images. , 2006, , .		0
120	Selected papers from FSTA 2008, the Ninth International Conference on Fuzzy Setsâ€"Theory and Applications. Fuzzy Sets and Systems, 2010, 161, 147-148.	1.6	0
121	A Nonlinear Integral Which Generalizes Both the Choquet and the Sugeno Integral. Advances in Intelligent and Soft Computing, 2010, , 39-52.	0.2	0
122	Decision theory: Qualitative and quantitative approaches. Fuzzy Sets and Systems, 2013, 216, 1-2.	1.6	0
123	Copula-based universal integrals. , 2013, , .		0
124	Siegfried Gottwald (1943â€"2015) Obituary. Fuzzy Sets and Systems, 2016, 298, 251-253.	1.6	0
125	Aggregation of Fuzzy Relations and Preservation of Transitivity. Lecture Notes in Computer Science, 2006, , 185-206.	1.0	0
126	Data-Driven and Knowledge-Based Modeling. , 2010, , 237-279.		0

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127	Decision Tree-based Analysis Suggests Structural Gender Differences in Visual Inspection. , 2011, , .		0
128	Integral-Based Modifications of OWA-Operators. Advances in Intelligent and Soft Computing, 2011, , 325-331.	0.2	0
129	Copula-Based Integration of Vector-Valued Functions. Communications in Computer and Information Science, 2012, , 559-564.	0.4	0
130	Defects and transformations of quasi-copulas. Kybernetika, 0, , 848-865.	0.0	0
131	Intervals and More: Aggregation Functions for Picture Fuzzy Sets. Studies in Computational Intelligence, 2020, , 179-194.	0.7	0