Xiaodong Liu

List of Publications by Year
in descending order

127 papers	3,007 citations	186209 28 h-index	189801 50 g-index
127 all docs	127 docs citations	127 times ranked	2106 citing authors

#	Article	IF	Citations
1	AFS Graph: Multidimensional Axiomatic Fuzzy Set Knowledge Graph for Open-Domain Question Answering. IEEE Transactions on Neural Networks and Learning Systems, 2023, 34, 10904-10918.	7.2	4
2	Semisupervised Learning via Axiomatic Fuzzy Set Theory and SVM. IEEE Transactions on Cybernetics, 2022, 52, 4661-4674.	6.2	7
3	Hierarchical Axiomatic Fuzzy Set Granulation for Financial Time Series Clustering. IEEE Transactions on Fuzzy Systems, 2022, 30, 755-766.	6.5	7
4	Trend-Based Granular Representation of Time Series and its Application in Clustering. IEEE Transactions on Cybernetics, 2022, 52, 9101-9110.	6.2	5
5	Deep Fuzzy Rule-Based Classification System With Improved Wangâ€“Mendel Method. IEEE Transactions on Fuzzy Systems, 2022, 30, 2957-2970.	6.5	12
6	Top-Down Granulation Modeling Based on the Principle of Justifiable Granularity. IEEE Transactions on Fuzzy Systems, 2022, 30, 701-713.	6.5	9
7	Information granulation-based fuzzy partition in decision tree induction. Information Sciences, 2022, 608, 1651-1674.	4.0	6
8	Granular Description With Multigranularity for Multidimensional Data: A Cone-Shaped Fuzzy Set-Based Method. IEEE Transactions on Fuzzy Systems, 2021, 29, 1786-1801.	6.5	11
9	Information Granulation-Based Fuzzy Clustering of Time Series. IEEE Transactions on Cybernetics, 2021, 51, 6253-6261.	6.2	21
10	Granular Fuzzy Modeling Guided Through the Synergy of Granulating Output Space and Clustering Input Subspaces. IEEE Transactions on Cybernetics, 2021, 51, 2625-2638.	6.2	11
11	The Learning of Fuzzy Cognitive Maps With Noisy Data: A Rapid and Robust Learning Method With Maximum Entropy. IEEE Transactions on Cybernetics, 2021, 51, 2080-2092.	6.2	17
12	Futures Price Forecasting Based on the Feature Fusion LSTM Model Using Long-Term Price Patterns. , 2021, , .		1
13	Deep convolutional fuzzy systems of stock value prediction based on AFS theory. , 2021, , .		1
14	An Efficient Load Forecasting in Predictive Control Strategy Using Hybrid Neural Network. Journal of Circuits, Systems and Computers, 2020, 29, 2050010.	1.0	8
15	AFSSE: An Interpretable Classifier With Axiomatic Fuzzy Set and Semantic Entropy. IEEE Transactions on Fuzzy Systems, 2020, 28, 2825-2840.	6.5	7
16	Fast and Effective Learning for Fuzzy Cognitive Maps: A Method Based on Solving Constrained Convex Optimization Problems. IEEE Transactions on Fuzzy Systems, 2020, 28, 2958-2971.	6.5	12
17	Dynamic programming based fuzzy partition in fuzzy decision tree induction. Journal of Intelligent and Fuzzy Systems, 2020, 39, 6757-6772.	0.8	3
18	The trading strategy of inflection point futures analysis based on AFS theory. , 2020, , .		0

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19	An Integrated Scheme for Designing Ship Straight Track Controller Based on Sliding Mode and Neural Network. , 2020, , .		0
20	A Text-Granulation Clustering Approach With Semantics for E-Commerce Intelligent Storage Allocation. IEEE Access, 2020, 8, 164282-164291.	2.6	2
21	A new construction method of futures trading strategy construction based on AFS theory. , 2020, , .		0
22	Ensemble approach for short term load forecasting in wind energy system using hybrid algorithm. Journal of Ambient Intelligence and Humanized Computing, 2020, 11, 5297-5314.	3.3	25
23	iPseU-Layer: Identifying RNA Pseudouridine Sites Using Layered Ensemble Model. Interdisciplinary Sciences, Computational Life Sciences, 2020, 12, 193-203.	2.2	9
24	Optimal electrical load forecasting for hybrid renewable resources through a hybrid memetic cuckoo search approach. Soft Computing, 2020, 24, 13099-13114.	2.1	8
25	A parallel fuzzy rule-base based decision tree in the framework of map-reduce. Pattern Recognition, 2020, 103, 107326.	5.1	12
26	Study on the data filling model for the turning motion of the training boat with missing observations. , 2020, , .		1
27	Image retrieval based on effective feature extraction and diffusion process. Multimedia Tools and Applications, 2019, 78, 6163-6190.	2.6	28
28	Dynamic time alignment kernel-based fuzzy clustering of non-equal length vector time series. International Journal of Machine Learning and Cybernetics, 2019, 10, 3167-3179.	2.3	3
29	A parallel tree node splitting criterion for fuzzy decision trees. Concurrency Computation Practice and Experience, 2019, 31, e5268.	1.4	4
30	An interpretable classifier with linear discriminant analysis based on AFS theory. , 2019, , .		2
31	An optimization algorithm based on text clustering for warehouse storage location allocation. , 2019, , .		2
32	Further study on local analysis of continuousâ€time Tâ€S fuzzy models with bounded disturbances. IET Control Theory and Applications, 2019, 13, 403-410.	1.2	4
33	Granular Fuzzy Modeling for Multidimensional Numeric Data: A Layered Approach Based on Hyperbox. IEEE Transactions on Fuzzy Systems, 2019, 27, 775-789.	6.5	19
34	Fuzzy time series forecasting based on axiomatic fuzzy set theory. Neural Computing and Applications, 2019, 31, 3921-3932.	3.2	25
35	Hidden Markov Models Based Approaches to Long-Term Prediction for Granular Time Series. IEEE Transactions on Fuzzy Systems, 2018, 26, 2807-2817.	6.5	40
36	Estimation of wind speed probability distribution and wind energy potential using adaptive neuro-fuzzy methodology. Neurocomputing, 2018, 287, 58-67.	3.5	34

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37	A fast rank mutual information based decision tree and its implementation via Mapâ€Reduce. Concurrency Computation Practice and Experience, 2018, 30, e4387.	1.4	3
38	A Pearsonâ€™s correlation coefficient based decision tree and its parallel implementation. Information Sciences, 2018, 435, 40-58.	4.0	191
39	AFSNN: A Classification Algorithm Using Axiomatic Fuzzy Sets and Neural Networks. IEEE Transactions on Fuzzy Systems, 2018, 26, 3151-3163.	6.5	13
40	Adaptive neuro-fuzzy algorithm to estimate effective wind speed and optimal rotor speed for variable-speed wind turbine. Neurocomputing, 2018, 272, 495-504.	3.5	68
41	Further studies on Hâˆž observer design for continuous-time Takagiâ€“Sugeno fuzzy model. Information Sciences, 2018, 422, 396-407.	4.0	17
42	A spectral clustering method with semantic interpretation based on axiomatic fuzzy set theory. Applied Soft Computing Journal, 2018, 64, 59-74.	4.1	20
43	An approach to scene matching algorithm for UAV autonomous navigation. , 2018, , .		1
44	Knowledge discovery and semantic learning in the framework of axiomatic fuzzy set theory. Wiley Interdisciplinary Reviews: Data Mining and Knowledge Discovery, 2018, 8, e1268.	4.6	16
45	An extended approach to controller designÂof continuous-time Takagi-Sugeno fuzzy model. Journal of Intelligent and Fuzzy Systems, 2018, 34, 2235-2246.	0.8	3
46	A parallel C4.5 decision tree algorithm based on MapReduce. Concurrency Computation Practice and Experience, 2017, 29, e4015.	1.4	23
47	Estimation of wind turbine power coefficient by adaptive neuro-fuzzy methodology. Neurocomputing, 2017, 238, 227-233.	3.5	31
48	Possibility-Based ELECTRE II Method with Uncertain Linguistic Fuzzy Variables. International Journal of Pattern Recognition and Artificial Intelligence, 2017, 31, 1759016.	0.7	13
49	Relaxed stability and stabilisation conditions for continuousâ€time Takagiâ€“Sugeno fuzzy systems using multipleâ€parameterised approach. IET Control Theory and Applications, 2017, 11, 774-780.	1.2	3
50	Research on fuzzy rules extraction of futures trading based on MapReduce. , 2017, , .		0
51	A hybrid segmentation method for multivariate time series based on the dynamic factor model. Stochastic Environmental Research and Risk Assessment, 2017, 31, 1291-1304.	1.9	6
52	Observer-based tracking control usingÂunmeasurable premise variables forÂtime-delay switched fuzzy systems. Journal of Intelligent and Fuzzy Systems, 2017, 32, 3973-3985.	0.8	1
53	A novel model to determine the optimal number of servers in finite input source fuzzy queueing system. , 2017, , .		1
54	A Global Clustering Approach Using Hybrid Optimization for Incomplete Data Based on Interval Reconstruction of Missing Value. International Journal of Intelligent Systems, 2016, 31, 297-313.	3.3	9

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55	Trend analysis of land surface temperatures using time series segmentation algorithm. Journal of Intelligent and Fuzzy Systems, 2016, 31, 1121-1131.	0.8	4
56	A method for constructing the Composite Indicator of business cycles based on information granulation and Dynamic Time Warping. Knowledge-Based Systems, 2016, 101, 135-141.	4.0	6
57	Dynamic programming-based optimization for segmentation and clustering of hydrometeorological time series. Stochastic Environmental Research and Risk Assessment, 2016, 30, 1875-1887.	1.9	5
58	From numeric data to information granules: A design through clustering and the principle of justifiable granularity. Knowledge-Based Systems, 2016, 101, 100-113.	4.0	41
59	The granular extension of Sugeno-type fuzzy models based on optimal allocation of information granularity and its application to forecasting of time series. Applied Soft Computing Journal, 2016, 42, 38-52.	4.1	20
60	Fuzzy C-Means clustering of incomplete data based on probabilistic information granules of missing values. Knowledge-Based Systems, 2016, 99, 51-70.	4.0	97
61	Multivariate time series prediction using a hybridization of VARMA models and Bayesian networks. Journal of Applied Statistics, 2016, 43, 2897-2909.	0.6	10
62	Further study on local stabilization of continuous-time nonlinear systems presented as Takagi-Sugeno fuzzy model. Journal of Intelligent and Fuzzy Systems, 2015, 29, 283-292.	0.8	5
63	A Human-Computer Cooperation Fuzzy c-Means Clustering with Interval-Valued Weights. International Journal of Intelligent Systems, 2015, 30, 81-98.	3.3	6
64	Ranking alternative strategies by SWOT analysis in the framework of the axiomatic fuzzy set theory and the ER approach. Journal of Intelligent and Fuzzy Systems, 2015, 28, 1775-1784.	0.8	6
65	Time series long-term forecasting model based on information granules and fuzzy clustering. Engineering Applications of Artificial Intelligence, 2015, 41, 17-24.	4.3	83
66	Dynamic programming approach for segmentation of multivariate time series. Stochastic Environmental Research and Risk Assessment, 2015, 29, 265-273.	1.9	13
67	Fuzzy forecasting based on automatic clustering and axiomatic fuzzy set classification. Information Sciences, 2015, 294, 78-94.	4.0	49
68	Using interval information granules to improve forecasting in fuzzy time series. International Journal of Approximate Reasoning, 2015, 57, 1-18.	1.9	109
69	Observer-based tracking control for a class of switched fuzzy systems with fast switching controller. Transactions of the Institute of Measurement and Control, 2015, 37, 230-241.	1.1	7
70	Fuzzy clustering with semantic interpretation. Applied Soft Computing Journal, 2015, 26, 21-30.	4.1	19
71	Fuzzy rule based decision trees. Pattern Recognition, 2015, 48, 50-59.	5.1	69
72	Determination of temporal information granules to improve forecasting in fuzzy time series. Expert Systems With Applications, 2014, 41, 3134-3142.	4.4	68

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73	Human-centric analysis and interpretation of time series: a perspective of granular computing. Soft Computing, 2014, 18, 2397-2411.	2.1	26
74	Shadow determination and compensation for face recognition. International Journal of Machine Learning and Cybernetics, 2014, 5, 599-605.	2.3	9
75	The modeling of time series based on fuzzy information granules. Expert Systems With Applications, 2014, 41, 3799-3808.	4.4	92
76	An improved PROMETHEE II method based on Axiomatic Fuzzy Sets. Neural Computing and Applications, 2014, 25, 1675-1683.	3.2	16
77	The modeling and prediction of time series based on synergy of high-order fuzzy cognitive map and fuzzy c-means clustering. Knowledge-Based Systems, 2014, 70, 242-255.	4.0	81
78	Adaptive reconfigurable control of systems with timeâ€varying delay against unknown actuator faults. International Journal of Adaptive Control and Signal Processing, 2014, 28, 1206-1226.	2.3	17
79	The use of axiomatic fuzzy set theory in AHP and TOPSIS methodology to determine strategies priorities by SWOT analysis. Quality and Quantity, 2013, 47, 2671-2685.	2.0	15
80	The Global k-Means Clustering Analysis Based on Multi-Granulations Nearness Neighborhood. Mathematics in Computer Science, 2013, 7, 113-124.	0.2	3
81	Local analysis of continuous-time Takagiâ€“Sugeno fuzzy system with disturbances bounded by magnitude or energy: A Lagrange multiplier method. Information Sciences, 2013, 248, 89-102.	4.0	29
82	The linguistic forecasting of time series based on fuzzy cognitive maps. , 2013, , .		9
83	Predicting freight with fuzzy granular computing and support vector machine model. , 2013, , .		0
84	H âˆž Filtering Design for 2-D Discrete-Time Linear Systems with Polytopic Uncertainty. Circuits, Systems, and Signal Processing, 2013, 32, 333-345.	1.2	13
85	Online banking performance evaluation using data envelopment analysis and axiomatic fuzzy set clustering. Quality and Quantity, 2013, 47, 1259-1273.	2.0	12
86	Extraction of fuzzy rules from fuzzy decision trees: An axiomatic fuzzy sets (AFS) approach. Data and Knowledge Engineering, 2013, 84, 1-25.	2.1	72
87	Observer-Based Robust Control of Uncertain Switched Fuzzy Systems with Combined Switching Controller. Mathematical Problems in Engineering, 2013, 2013, 1-13.	0.6	2
88	THE LINGUISTIC FORECASTING OF TIME SERIES USING IMPROVED FUZZY COGNITIVE MAP. International Journal of Computational Intelligence and Applications, 2013, 12, 1350014.	0.6	2
89	High-Order Fuzzy Time Series Model Based on Generalized Fuzzy Logical Relationship. Mathematical Problems in Engineering, 2013, 2013, 1-11.	0.6	5
90	Admissibility conditions of dynamic input-output economic model with multiple delays. , 2013, , .		1

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91	Development of Near Sets Within the Framework of Axiomatic Fuzzy Sets. Fundamenta Informaticae, 2012, 118, 291-304.	0.3	2
92	An integrated multiple criteria decision making model applying axiomatic fuzzy set theory. Applied Mathematical Modelling, 2012, 36, 5046-5058.	2.2	45
93	Supplier selection using axiomatic fuzzy set and TOPSIS methodology in supply chain management. Fuzzy Optimization and Decision Making, 2012, 11, 147-176.	3.4	40
94	Nearness approximation space based on axiomatic fuzzy sets. International Journal of Approximate Reasoning, 2012, 53, 200-211.	1.9	14
95	Mining axiomatic fuzzy set association rules for classification problems. European Journal of Operational Research, 2012, 218, 202-210.	3.5	28
96	Forecasting shanghai composite index based on fuzzy time series and improved C-fuzzy decision trees. Expert Systems With Applications, 2012, 39, 7680-7689.	4.4	29
97	Improved Gathâ€“Geva clustering for fuzzy segmentation of hydrometeorological time series. Stochastic Environmental Research and Risk Assessment, 2012, 26, 139-155.	1.9	24
98	A parsimony fuzzy rule-based classifier using axiomatic fuzzy set theory and support vector machines. Information Sciences, 2011, 181, 5180-5193.	4.0	23
99	Gain Scheduled State Feedback Control for Discrete-Time-Varying Polytopic Systems Subject to Input Saturation. Circuits, Systems, and Signal Processing, 2011, 30, 1165-1182.	1.2	11
100	Selection of logistics center location using Axiomatic Fuzzy Set and TOPSIS methodology in logistics management. Expert Systems With Applications, 2011, 38, 7901-7908.	4.4	115
101	A generalized method for forecasting based on fuzzy time series. Expert Systems With Applications, 2011, 38, 10446-10453.	4.4	79
102	Parameter-varying state feedback control for discrete-time polytopic systems. International Journal of Systems Science, 2011, 42, 997-1005.	3.7	9
103	Novel artificial intelligent techniques via AFS theory: Feature selection, concept categorization and characteristic description. Applied Soft Computing Journal, 2010, 10, 793-805.	4.1	20
104	A new algebraic structure for formal concept analysis. Information Sciences, 2010, 180, 4865-4876.	4.0	19
105	Robust reliable control for a class of uncertain switched fuzzy systems based on observers switching. , 2010, , .		1
106	Robust control for a class of uncertain time-delay switched fuzzy systems. , 2009, , .		3
107	Relaxed stability and stabilization conditions for a class of switched fuzzy discrete systems. , 2009, , .		0
108	Applications of axiomatic fuzzy set clustering method on management strategic analysis. European Journal of Operational Research, 2009, 198, 297-304.	3.5	19

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109	Stability analysis for discreteâ€time fuzzy system by utilizing homogeneous polynomial matrix function. Asian Journal of Control, 2009, 11, 700-706.	1.9	8
110	Axiomatic Fuzzy Set Theory and Its Applications. Studies in Fuzziness and Soft Computing, 2009, , .	0.6	51
111	The Development of Fuzzy Rough Sets with the Use of Structures and Algebras of Axiomatic Fuzzy Sets. IEEE Transactions on Knowledge and Data Engineering, 2009, 21, 443-462.	4.0	50
112	Concept analysis via rough set and AFS algebra. Information Sciences, 2008, 178, 4125-4137.	4.0	95
113	The framework of axiomatics fuzzy sets based fuzzy classifiers. Journal of Industrial and Management Optimization, 2008, 4, 581-609.	0.8	12
114	Approaches to the representations and logic operations of fuzzy concepts in the framework of axiomatic fuzzy set theory I. Information Sciences, 2007, 177, 1007-1026.	4.0	63
115	Approaches to the representations and logic operations of fuzzy concepts in the framework of axiomatic fuzzy set theory II. Information Sciences, 2007, 177, 1027-1045.	4.0	22
116	The development of fuzzy decision trees in the framework of Axiomatic Fuzzy Set logic. Applied Soft Computing Journal, 2007, 7, 325-342.	4.1	73
117	Fuzzy Clustering Approaches Based on AFS Fuzzy Logic I. , 2006, , .		1
118	A New Approach to H<inf>∞</inf>Control Design for T-S Fuzzy Time-delay Systems. , 2006, , .		0
119	The Fuzzy Clustering Algorithm Based on AFS Topology. Lecture Notes in Computer Science, 2006, , 89-98.	1.0	6
120	The Fuzzy Clustering Analysis Based on AFS Structure and the Topology of EI Algebra. , 2006, , .		0
121	The Fuzzy Clustering Analysis Based on AFS Theory. IEEE Transactions on Systems, Man, and Cybernetics, 2005, 35, 1013-1027.	5.5	78
122	Credit Rating Analysis with AFS Fuzzy Logic. Lecture Notes in Computer Science, 2005, , 1198-1204.	1.0	15
123	Approaches to quadratic stability conditions and H//subâˆž/ control designs for T-S fuzzy systems. IEEE Transactions on Fuzzy Systems, 2003, 11, 830-839.	6.5	213
124	H/sub /spl infin// control and parametric controllers for descriptor systems. , 2002, , .		1
125	A new fuzzy model of pattern recognition and hitch diagnoses of complex systems. Fuzzy Sets and Systems, 1999, 104, 289-296.	1.6	27
126	Axiomatics fuzzy sets logic. , 0, , .		10

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127	Reliable descriptor systems design using redundant controllers. , 0, , .		1