

# Witold Pedrycz

## List of Publications by Citations

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

700  
papers

18,065  
citations

61  
h-index

115  
g-index

812  
ext. papers

22,150  
ext. citations

5.7  
avg, IF

7.71  
L-index

#	Paper	IF	Citations
700	A fuzzy extension of Saaty's priority theory. <i>Fuzzy Sets and Systems</i> , <b>1983</b> , 11, 229-241	3.7	1571
699	Why triangular membership functions?. <i>Fuzzy Sets and Systems</i> , <b>1994</b> , 64, 21-30	3.7	534
698	An Introduction to Fuzzy Sets <b>1998</b> ,		503
697	A review of soft consensus models in a fuzzy environment. <i>Information Fusion</i> , <b>2014</b> , 17, 4-13	16.7	433
696	An identification algorithm in fuzzy relational systems. <i>Fuzzy Sets and Systems</i> , <b>1984</b> , 13, 153-167	3.7	403
695	Genetic learning of fuzzy cognitive maps. <i>Fuzzy Sets and Systems</i> , <b>2005</b> , 153, 371-401	3.7	337
694	Granular computing: perspectives and challenges. <i>IEEE Transactions on Cybernetics</i> , <b>2013</b> , 43, 1977-89	10.2	321
693	Granular Computing <b>2003</b> ,		269
692	<b>2005</b> ,		234
691	Kernel-based fuzzy clustering and fuzzy clustering: A comparative experimental study. <i>Fuzzy Sets and Systems</i> , <b>2010</b> , 161, 522-543	3.7	231
690	Fuzzy clustering with partial supervision. <i>IEEE Transactions on Systems, Man, and Cybernetics</i> , <b>1997</b> , 27, 787-95		214
689	Conditional Fuzzy C-Means. <i>Pattern Recognition Letters</i> , <b>1996</b> , 17, 625-631	4.7	214
688	A model of granular data: a design problem with the Tchebyshev FCM. <i>Soft Computing</i> , <b>2005</b> , 9, 155-163	3.5	212
687	Building the fundamentals of granular computing: A principle of justifiable granularity. <i>Applied Soft Computing Journal</i> , <b>2013</b> , 13, 4209-4218	7.5	208
686	Toward a Theory of Granular Computing for Human-Centered Information Processing. <i>IEEE Transactions on Fuzzy Systems</i> , <b>2008</b> , 16, 320-330	8.3	199
685	Granular Computing. <i>Industrial Electronics Series</i> , <b>2013</b> ,		199
684	. <i>IEEE Transactions on Fuzzy Systems</i> , <b>2015</b> , 23, 1638-1654	8.3	192

683	Collaborative fuzzy clustering. <i>Pattern Recognition Letters</i> , <b>2002</b> , 23, 1675-1686	4.7	190
682	A method based on PSO and granular computing of linguistic information to solve group decision making problems defined in heterogeneous contexts. <i>European Journal of Operational Research</i> , <b>2013</b> , 230, 624-633	5.6	189
681	. <i>IEEE Transactions on Fuzzy Systems</i> , <b>2011</b> , 19, 527-539	8.3	176
680	Gaussian kernel based fuzzy rough sets: Model, uncertainty measures and applications. <i>International Journal of Approximate Reasoning</i> , <b>2010</b> , 51, 453-471	3.6	163
679	Selecting discrete and continuous features based on neighborhood decision error minimization. <i>IEEE Transactions on Systems, Man, and Cybernetics</i> , <b>2010</b> , 40, 137-50		161
678	Building consensus in group decision making with an allocation of information granularity. <i>Fuzzy Sets and Systems</i> , <b>2014</b> , 255, 115-127	3.7	158
677	Fuzzy neural networks and neurocomputations. <i>Fuzzy Sets and Systems</i> , <b>1993</b> , 56, 1-28	3.7	149
676	Fuzzy clustering of time series data using dynamic time warping distance. <i>Engineering Applications of Artificial Intelligence</i> , <b>2015</b> , 39, 235-244	7.2	146
675	Allocation of information granularity in optimization and decision-making models: Towards building the foundations of Granular Computing. <i>European Journal of Operational Research</i> , <b>2014</b> , 232, 137-145	5.6	129
674	An optimization of allocation of information granularity in the interpretation of data structures: toward granular fuzzy clustering. <i>IEEE Transactions on Systems, Man, and Cybernetics</i> , <b>2012</b> , 42, 582-90		124
673	Fuzzy Monte Carlo Simulation and Risk Assessment in Construction. <i>Computer-Aided Civil and Infrastructure Engineering</i> , <b>2010</b> , 25, 238-252	8.4	123
672	Polynomial neural networks architecture: analysis and design. <i>Computers and Electrical Engineering</i> , <b>2003</b> , 29, 703-725	4.3	121
671	Numerical and Linguistic Prediction of Time Series With the Use of Fuzzy Cognitive Maps. <i>IEEE Transactions on Fuzzy Systems</i> , <b>2008</b> , 16, 61-72	8.3	120
670	The design of self-organizing Polynomial Neural Networks. <i>Information Sciences</i> , <b>2002</b> , 141, 237-258	7.7	117
669	A Novel Framework for Imputation of Missing Values in Databases. <i>IEEE Transactions on Systems, Man and Cybernetics, Part A: Systems and Humans</i> , <b>2007</b> , 37, 692-709		116
668	Granular clustering: a granular signature of data. <i>IEEE Transactions on Systems, Man, and Cybernetics</i> , <b>2002</b> , 32, 212-24		115
667	Kernelized Fuzzy Rough Sets and Their Applications. <i>IEEE Transactions on Knowledge and Data Engineering</i> , <b>2011</b> , 23, 1649-1667	4.2	114
666	From fuzzy sets to shadowed sets: Interpretation and computing. <i>International Journal of Intelligent Systems</i> , <b>2009</b> , 24, 48-61	8.4	109

665	A survey of defuzzification strategies. <i>International Journal of Intelligent Systems</i> , <b>2001</b> , 16, 679-695	8.4	107
664	Collaborative clustering with the use of Fuzzy C-Means and its quantification. <i>Fuzzy Sets and Systems</i> , <b>2008</b> , 159, 2399-2427	3.7	105
663	Granular neural networks. <i>Neurocomputing</i> , <b>2001</b> , 36, 205-224	5.4	102
662	Design of interval type-2 fuzzy models through optimal granularity allocation. <i>Applied Soft Computing Journal</i> , <b>2011</b> , 11, 5590-5601	7.5	99
661	Applications of fuzzy relational equations for methods of reasoning in presence of fuzzy data. <i>Fuzzy Sets and Systems</i> , <b>1985</b> , 16, 163-175	3.7	96
660	Granulating linguistic information in decision making under consensus and consistency. <i>Expert Systems With Applications</i> , <b>2018</b> , 99, 83-92	7.8	86
659	Fuzzy computing for data mining. <i>Proceedings of the IEEE</i> , <b>1999</b> , 87, 1575-1600	14.3	84
658	. <i>IEEE Transactions on Systems, Man and Cybernetics, Part A: Systems and Humans</i> , <b>2006</b> , 36, 727-745		82
657	Optimizing QoS routing in hierarchical ATM networks using computational intelligence techniques. <i>IEEE Transactions on Systems, Man and Cybernetics, Part C: Applications and Reviews</i> , <b>2003</b> , 33, 297-312		79
656	. <i>IEEE Transactions on Fuzzy Systems</i> , <b>2017</b> , 25, 1795-1807	8.3	78
655	A divide and conquer method for learning large Fuzzy Cognitive Maps. <i>Fuzzy Sets and Systems</i> , <b>2010</b> , 161, 2515-2532	3.7	78
654	Fuzzy C-Means clustering of incomplete data based on probabilistic information granules of missing values. <i>Knowledge-Based Systems</i> , <b>2016</b> , 99, 51-70	7.3	77
653	Multidirectional Prediction Approach for Dynamic Multiobjective Optimization Problems. <i>IEEE Transactions on Cybernetics</i> , <b>2019</b> , 49, 3362-3374	10.2	73
652	Clustering Spatiotemporal Data: An Augmented Fuzzy C-Means. <i>IEEE Transactions on Fuzzy Systems</i> , <b>2013</b> , 21, 855-868	8.3	73
651	. <i>IEEE Transactions on Fuzzy Systems</i> , <b>2018</b> , 26, 174-192	8.3	72
650	Data description: A general framework of information granules. <i>Knowledge-Based Systems</i> , <b>2015</b> , 80, 98-108	7.3	71
649	Large-Scale Multimodality Attribute Reduction With Multi-Kernel Fuzzy Rough Sets. <i>IEEE Transactions on Fuzzy Systems</i> , <b>2018</b> , 26, 226-238	8.3	71
648	The modeling of time series based on fuzzy information granules. <i>Expert Systems With Applications</i> , <b>2014</b> , 41, 3799-3808	7.8	71

647	Time series long-term forecasting model based on information granules and fuzzy clustering. <i>Engineering Applications of Artificial Intelligence</i> , <b>2015</b> , 41, 17-24	7.2	69
646	Granular computing for data analytics: a manifesto of human-centric computing. <i>IEEE/CAA Journal of Automatica Sinica</i> , <b>2018</b> , 5, 1025-1034	7	67
645	Cluster-Centric Fuzzy Modeling. <i>IEEE Transactions on Fuzzy Systems</i> , <b>2014</b> , 22, 1585-1597	8.3	67
644	. <i>IEEE Transactions on Fuzzy Systems</i> , <b>2012</b> , 20, 444-462	8.3	65
643	Online Feature Transformation Learning for Cross-Domain Object Category Recognition. <i>IEEE Transactions on Neural Networks and Learning Systems</i> , <b>2018</b> , 29, 2857-2871	10.3	64
642	Granular computing with shadowed sets. <i>International Journal of Intelligent Systems</i> , <b>2002</b> , 17, 173-197	8.4	64
641	A Development of Fuzzy Encoding and Decoding Through Fuzzy Clustering. <i>IEEE Transactions on Instrumentation and Measurement</i> , <b>2008</b> , 57, 829-837	5.2	62
640	Design of Fuzzy Cognitive Maps for Modeling Time Series. <i>IEEE Transactions on Fuzzy Systems</i> , <b>2016</b> , 24, 120-130	8.3	61
639	Solving Fuzzy Job-Shop Scheduling Problem Using DE Algorithm Improved by a Selection Mechanism. <i>IEEE Transactions on Fuzzy Systems</i> , <b>2020</b> , 28, 3265-3275	8.3	61
638	Uncertainty-Aware Online Scheduling for Real-Time Workflows in Cloud Service Environment. <i>IEEE Transactions on Services Computing</i> , <b>2019</b> , 1-1	4.8	61
637	Fuzzy polynomial neural networks: hybrid architectures of fuzzy modeling. <i>IEEE Transactions on Fuzzy Systems</i> , <b>2002</b> , 10, 607-621	8.3	61
636	Identification of fuzzy models using a successive tuning method with a variant identification ratio. <i>Fuzzy Sets and Systems</i> , <b>2008</b> , 159, 2873-2889	3.7	59
635	A multiple attribute interval type-2 fuzzy group decision making and its application to supplier selection with extended LINMAP method. <i>Soft Computing</i> , <b>2017</b> , 21, 3207-3226	3.5	58
634	Evolving Ensemble Fuzzy Classifier. <i>IEEE Transactions on Fuzzy Systems</i> , <b>2018</b> , 26, 2552-2567	8.3	57
633	Extraction of fuzzy rules from fuzzy decision trees: An axiomatic fuzzy sets (AFS) approach. <i>Data and Knowledge Engineering</i> , <b>2013</b> , 84, 1-25	1.5	57
632	P-FCM: a proximityBased fuzzy clustering. <i>Fuzzy Sets and Systems</i> , <b>2004</b> , 148, 21-41	3.7	56
631	Data-driven Nonlinear Hebbian Learning method for Fuzzy Cognitive Maps <b>2008</b> ,		55
630	The Development of Incremental Models. <i>IEEE Transactions on Fuzzy Systems</i> , <b>2007</b> , 15, 507-518	8.3	54

629	Induction of Shadowed Sets Based on the Gradual Grade of Fuzziness. <i>IEEE Transactions on Fuzzy Systems</i> , <b>2013</b> , 21, 937-949	8.3	53
628	The development of granular rule-based systems: a study in structural model compression. <i>Granular Computing</i> , <b>2017</b> , 2, 1-12	5.4	53
627	Approximate Reasoning on a Basis of Z-Number-Valued If-Then Rules. <i>IEEE Transactions on Fuzzy Systems</i> , <b>2017</b> , 25, 1589-1600	8.3	53
626	Evolutionary fuzzy modeling. <i>IEEE Transactions on Fuzzy Systems</i> , <b>2003</b> , 11, 652-665	8.3	52
625	Coordinated Planning of Heterogeneous Earth Observation Resources. <i>IEEE Transactions on Systems, Man, and Cybernetics: Systems</i> , <b>2016</b> , 46, 109-125	7.3	51
624	Learning of fuzzy cognitive maps using density estimate. <i>IEEE Transactions on Systems, Man, and Cybernetics</i> , <b>2012</b> , 42, 900-12		51
623	A granular-oriented development of functional radial basis function neural networks. <i>Neurocomputing</i> , <b>2008</b> , 72, 420-435	5.4	50
622	The design of granular classifiers: A study in the synergy of interval calculus and fuzzy sets in pattern recognition. <i>Pattern Recognition</i> , <b>2008</b> , 41, 3720-3735	7.7	50
621	Recursive information granulation: aggregation and interpretation issues. <i>IEEE Transactions on Systems, Man, and Cybernetics</i> , <b>2003</b> , 33, 96-112		50
620	Hesitant Fuzzy Maclaurin Symmetric Mean Operators and Its Application to Multiple-Attribute Decision Making. <i>International Journal of Fuzzy Systems</i> , <b>2015</b> , 17, 509-520	3.6	48
619	Designing Fuzzy Sets With the Use of the Parametric Principle of Justifiable Granularity. <i>IEEE Transactions on Fuzzy Systems</i> , <b>2016</b> , 24, 489-496	8.3	48
618	. <i>IEEE Communications Surveys and Tutorials</i> , <b>2019</b> , 21, 586-618	37.1	48
617	Design of K-means clustering-based polynomial radial basis function neural networks (pRBF NNs) realized with the aid of particle swarm optimization and differential evolution. <i>Neurocomputing</i> , <b>2012</b> , 78, 121-132	5.4	47
616	Knowledge transfer in system modeling and its realization through an optimal allocation of information granularity. <i>Applied Soft Computing Journal</i> , <b>2012</b> , 12, 1985-1995	7.5	47
615	Fuzzy Polynomial Neuron-Based Self-Organizing Neural Networks. <i>International Journal of General Systems</i> , <b>2003</b> , 32, 237-250	2.1	47
614	Flexible Linguistic Expressions and Consensus Reaching With Accurate Constraints in Group Decision-Making. <i>IEEE Transactions on Cybernetics</i> , <b>2020</b> , 50, 2488-2501	10.2	47
613	. <i>IEEE Transactions on Fuzzy Systems</i> , <b>2018</b> , 26, 847-858	8.3	46
612	Granular mappings. <i>IEEE Transactions on Systems, Man and Cybernetics, Part A: Systems and Humans</i> , <b>2005</b> , 35, 292-297		46

611	Data Clustering with Partial Supervision. <i>Data Mining and Knowledge Discovery</i> , <b>2006</b> , 12, 47-78	5.6	46
610	From Fuzzy Cognitive Maps to Granular Cognitive Maps. <i>IEEE Transactions on Fuzzy Systems</i> , <b>2014</b> , 22, 859-869	8.3	44
609	Particle Competition and Cooperation in Networks for Semi-Supervised Learning. <i>IEEE Transactions on Knowledge and Data Engineering</i> , <b>2012</b> , 24, 1686-1698	4.2	44
608	C-fuzzy decision trees. <i>IEEE Transactions on Systems, Man and Cybernetics, Part C: Applications and Reviews</i> , <b>2005</b> , 35, 498-511		44
607	Granular Data Description: Designing Ellipsoidal Information Granules. <i>IEEE Transactions on Cybernetics</i> , <b>2017</b> , 47, 4475-4484	10.2	43
606	Limited Rationality and Its Quantification Through the Interval Number Judgments With Permutations. <i>IEEE Transactions on Cybernetics</i> , <b>2017</b> , 47, 4025-4037	10.2	43
605	The design of fuzzy information granules: Tradeoffs between specificity and experimental evidence. <i>Applied Soft Computing Journal</i> , <b>2009</b> , 9, 264-273	7.5	43
604	Fuzzy Grey Choquet Integral for Evaluation of Multicriteria Decision Making Problems With Interactive and Qualitative Indices. <i>IEEE Transactions on Systems, Man, and Cybernetics: Systems</i> , <b>2020</b> , 1-14	7.3	43
603	Description and prediction of time series: A general framework of Granular Computing. <i>Expert Systems With Applications</i> , <b>2015</b> , 42, 4830-4839	7.8	42
602	. <i>IEEE Transactions on Fuzzy Systems</i> , <b>2015</b> , 23, 850-860	8.3	42
601	Granular Fuzzy Rule-Based Models: A Study in a Comprehensive Evaluation and Construction of Fuzzy Models. <i>IEEE Transactions on Fuzzy Systems</i> , <b>2017</b> , 25, 1342-1355	8.3	42
600	Abstraction and specialization of information granules. <i>IEEE Transactions on Systems, Man, and Cybernetics</i> , <b>2001</b> , 31, 106-11		42
599	Intuitionistic Multiplicative Group Analytic Hierarchy Process and Its Use in Multicriteria Group Decision-Making. <i>IEEE Transactions on Cybernetics</i> , <b>2018</b> , 48, 1950-1962	10.2	41
598	Fuzzy Wavelet Polynomial Neural Networks: Analysis and Design. <i>IEEE Transactions on Fuzzy Systems</i> , <b>2017</b> , 25, 1329-1341	8.3	41
597	The design of free structure granular mappings: the use of the principle of justifiable granularity. <i>IEEE Transactions on Cybernetics</i> , <b>2013</b> , 43, 2105-13	10.2	41
596	Logic-oriented neural networks for fuzzy neurocomputing. <i>Neurocomputing</i> , <b>2009</b> , 73, 10-23	5.4	41
595	Reggranulation: A granular algorithm enabling communication between granular worlds. <i>Information Sciences</i> , <b>2007</b> , 177, 408-435	7.7	41
594	Granular Model of Long-Term Prediction for Energy System in Steel Industry. <i>IEEE Transactions on Cybernetics</i> , <b>2016</b> , 46, 388-400	10.2	40

593	Granular neural networks: concepts and development schemes. <i>IEEE Transactions on Neural Networks and Learning Systems</i> , <b>2013</b> , 24, 542-53	10.3	40
592	Design of hybrid radial basis function neural networks (HRBFNNs) realized with the aid of hybridization of fuzzy clustering method (FCM) and polynomial neural networks (PNNs). <i>Neural Networks</i> , <b>2014</b> , 60, 166-81	9.1	39
591	Anomaly detection in time series data using a fuzzy c-means clustering <b>2013</b> ,		39
590	An Empirical Exploration of the Distributions of the Chidamber and Kemerer Object-Oriented Metrics Suite. <i>Empirical Software Engineering</i> , <b>2005</b> , 10, 81-104	3.3	39
589	Granular worlds: Representation and communication problems. <i>International Journal of Intelligent Systems</i> , <b>2000</b> , 15, 1015-1026	8.4	39
588	Vehicle license plate detection using region-based convolutional neural networks. <i>Soft Computing</i> , <b>2018</b> , 22, 6429-6440	3.5	38
587	Granular fuzzy models: a study in knowledge management in fuzzy modeling. <i>International Journal of Approximate Reasoning</i> , <b>2012</b> , 53, 1061-1079	3.6	38
586	Hierarchical Granular Clustering: An Emergence of Information Granules of Higher Type and Higher Order. <i>IEEE Transactions on Fuzzy Systems</i> , <b>2015</b> , 23, 2270-2283	8.3	37
585	An Adaptive Resource Allocation Strategy for Objective Space Partition-Based Multiobjective Optimization. <i>IEEE Transactions on Systems, Man, and Cybernetics: Systems</i> , <b>2019</b> , 1-16	7.3	36
584	Hyperplane Assisted Evolutionary Algorithm for Many-Objective Optimization Problems. <i>IEEE Transactions on Cybernetics</i> , <b>2020</b> , 50, 3367-3380	10.2	36
583	An approach to measure the robustness of fuzzy reasoning. <i>International Journal of Intelligent Systems</i> , <b>2005</b> , 20, 393-413	8.4	35
582	Models of Mathematical Programming for Intuitionistic Multiplicative Preference Relations. <i>IEEE Transactions on Fuzzy Systems</i> , <b>2017</b> , 25, 945-957	8.3	34
581	Design of face recognition algorithm using PCA -LDA combined for hybrid data pre-processing and polynomial-based RBF neural networks : Design and its application. <i>Expert Systems With Applications</i> , <b>2013</b> , 40, 1451-1466	7.8	34
580	Granular neural networks and their development through context-based clustering and adjustable dimensionality of receptive fields. <i>IEEE Transactions on Neural Networks</i> , <b>2009</b> , 20, 1604-16		34
579	Heterogeneous fuzzy logic networks: fundamentals and development studies. <i>IEEE Transactions on Neural Networks</i> , <b>2004</b> , 15, 1466-81		34
578	Relational and directional aspects in the construction of information granules. <i>IEEE Transactions on Systems, Man and Cybernetics, Part A: Systems and Humans</i> , <b>2002</b> , 32, 605-614		34
577	Design of Reinforced Interval Type-2 Fuzzy C-Means-Based Fuzzy Classifier. <i>IEEE Transactions on Fuzzy Systems</i> , <b>2018</b> , 26, 3054-3068	8.3	33
576	Towards hybrid clustering approach to data classification: Multiple kernels based interval-valued Fuzzy C-Means algorithms. <i>Fuzzy Sets and Systems</i> , <b>2015</b> , 279, 17-39	3.7	33



575	Satellite observation scheduling with a novel adaptive simulated annealing algorithm and a dynamic task clustering strategy. <i>Computers and Industrial Engineering</i> , <b>2017</b> , 113, 576-588	6.4	32
574	Axiomatic Fuzzy Set Theory and Its Applications. <i>Studies in Fuzziness and Soft Computing</i> , <b>2009</b> ,	0.7	32
573	Granular computing: an introduction		32
572	Time-series clustering based on linear fuzzy information granules. <i>Applied Soft Computing Journal</i> , <b>2018</b> , 73, 1053-1067	7.5	32
571	An axiomatic approach to approximation-consistency of triangular fuzzy reciprocal preference relations. <i>Fuzzy Sets and Systems</i> , <b>2017</b> , 322, 1-18	3.7	31
570	Fuzzy classifiers with information granules in feature space and logic-based computing. <i>Pattern Recognition</i> , <b>2018</b> , 80, 156-167	7.7	31
569	. <i>IEEE Transactions on Fuzzy Systems</i> , <b>2017</b> , 25, 1115-1126	8.3	31
568	From numeric data to information granules: A design through clustering and the principle of justifiable granularity. <i>Knowledge-Based Systems</i> , <b>2016</b> , 101, 100-113	7.3	30
567	Fuzzy clustering with nonlinearly transformed data. <i>Applied Soft Computing Journal</i> , <b>2017</b> , 61, 364-376	7.5	30
566	Design of fuzzy radial basis function-based polynomial neural networks. <i>Fuzzy Sets and Systems</i> , <b>2011</b> , 185, 15-37	3.7	30
565	Self-organizing polynomial neural networks based on polynomial and fuzzy polynomial neurons: analysis and design. <i>Fuzzy Sets and Systems</i> , <b>2004</b> , 142, 163-198	3.7	30
564	Granular data imputation: A framework of Granular Computing. <i>Applied Soft Computing Journal</i> , <b>2016</b> , 46, 307-316	7.5	30
563	A Multimodel Prediction Method for Dynamic Multiobjective Evolutionary Optimization. <i>IEEE Transactions on Evolutionary Computation</i> , <b>2020</b> , 24, 290-304	15.6	30
562	Wavelet Frame-Based Fuzzy C-Means Clustering for Segmenting Images on Graphs. <i>IEEE Transactions on Cybernetics</i> , <b>2020</b> , 50, 3938-3949	10.2	30
561	Determining Three-Way Decisions With Decision-Theoretic Rough Sets Using a Relative Value Approach. <i>IEEE Transactions on Systems, Man, and Cybernetics: Systems</i> , <b>2017</b> , 47, 1785-1799	7.3	29
560	Robust Ultra-High Resolution Microwave Planar Sensor Using Fuzzy Neural Network Approach. <i>IEEE Sensors Journal</i> , <b>2017</b> , 17, 323-332	4	29
559	Parallel Learning of Large Fuzzy Cognitive Maps. <i>Neural Networks (IJCNN), International Joint Conference on</i> , <b>2007</b> ,		29
558	. <i>IEEE Transactions on Intelligent Transportation Systems</i> , <b>2021</b> , 1-10	6.1	28

557	Goal Programming Approaches to Managing Consistency and Consensus for Intuitionistic Multiplicative Preference Relations in Group Decision Making. <i>IEEE Transactions on Fuzzy Systems</i> , <b>2018</b> , 26, 3261-3275	8.3	27
556	A multifaceted perspective at data analysis: a study in collaborative intelligent agents. <i>IEEE Transactions on Systems, Man, and Cybernetics</i> , <b>2008</b> , 38, 1062-72		27
555	Clustering Homogeneous Granular Data: Formation and Evaluation. <i>IEEE Transactions on Cybernetics</i> , <b>2019</b> , 49, 1391-1402	10.2	27
554	Hidden Markov Models Based Approaches to Long-Term Prediction for Granular Time Series. <i>IEEE Transactions on Fuzzy Systems</i> , <b>2018</b> , 26, 2807-2817	8.3	26
553	A Design of Granular Takagi-Sugeno Fuzzy Model Through the Synergy of Fuzzy Subspace Clustering and Optimal Allocation of Information Granularity. <i>IEEE Transactions on Fuzzy Systems</i> , <b>2018</b> , 26, 2499-2509	8.3	26
552	Genetic interval neural networks for granular data regression. <i>Information Sciences</i> , <b>2014</b> , 257, 313-330	7.7	26
551	A study in facial features saliency in face recognition: an analytic hierarchy process approach. <i>Soft Computing</i> , <b>2017</b> , 21, 7503-7517	3.5	26
550	A study in facial regions saliency: a fuzzy measure approach. <i>Soft Computing</i> , <b>2014</b> , 18, 379-391	3.5	26
549	Estimating incomplete information in group decision making: A framework of granular computing. <i>Applied Soft Computing Journal</i> , <b>2020</b> , 86, 105930	7.5	26
548	Fuzzy rule-based models with interactive rules and their granular generalization. <i>Fuzzy Sets and Systems</i> , <b>2017</b> , 307, 1-28	3.7	25
547	Fuzzy granular classification based on the principle of justifiable granularity. <i>Knowledge-Based Systems</i> , <b>2019</b> , 170, 89-101	7.3	25
546	. <i>IEEE Transactions on Industrial Informatics</i> , <b>2019</b> , 15, 1588-1597	11.9	25
545	Designing granular fuzzy models: A hierarchical approach to fuzzy modeling. <i>Knowledge-Based Systems</i> , <b>2015</b> , 76, 42-52	7.3	25
544	Evolvable fuzzy systems: some insights and challenges. <i>Evolving Systems</i> , <b>2010</b> , 1, 73-82	2.1	25
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