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## Three-way decisions with probabilistic rough sets

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935	Multiple-Category Classification with Decision-Theoretic Rough Sets. <b>2010</b> , 703-710		14
934	Logical AND model of variable precision lower approximation operator and grade upper approximation operator. <b>2010,</b>		0
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929	Logical OR Model of Grade Approximation Operators. <b>2010,</b>		
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713	Constructing shadowed sets and three-way approximations of fuzzy sets. <i>Information Sciences</i> , <b>2017</b> , 412-413, 132-153	7-7	82
712	On a novel uncertain soft set model: Z-soft fuzzy rough set model and corresponding decision making methods. <b>2017</b> , 56, 446-457		150
711	Minimal decision cost reduct in fuzzy decision-theoretic rough set model. <b>2017</b> , 126, 104-112		37
710	Enhancing Binary Classification by Modeling Uncertain Boundary in Three-Way Decisions. <b>2017</b> , 29, 1438-1451		49
709	Rough cognitive ensembles. <b>2017</b> , 85, 79-96		17
708	A multi-granulation decision-theoretic rough set method for distributed fc -decision information systems: An application in medical diagnosis. <b>2017</b> , 56, 233-244		38
707	Attribute reduction for sequential three-way decisions under dynamic granulation. <b>2017</b> , 85, 196-216		53
706	On two novel types of three-way decisions in three-way decision spaces. <b>2017</b> , 82, 285-306		35
705	Local multigranulation decision-theoretic rough sets. <b>2017</b> , 82, 119-137		87

704	Three-way decisions based on semi-three-way decision spaces. <i>Information Sciences</i> , <b>2017</b> , 382-383, 415-440	27
703	A Group Incremental Reduction Algorithm with Varying Data Values. <b>2017</b> , 32, 900-925	12
702	Three-way decisions in ordered decision system. <b>2017</b> , 137, 182-195	53
701	A supervised gradient-based learning algorithm for optimized entity resolution. <b>2017</b> , 112, 106-129	12
700	Three-way decisions for composed set-valued decision tables. <b>2017</b> , 33, 937-946	2
699	Three-way decision model with two types of classification errors. <i>Information Sciences</i> , <b>2017</b> , 420, 431-453	30
698	A unified model of sequential three-way decisions and multilevel incremental processing. <b>2017</b> , 134, 172-188	80
697	Generalized matroids based on three-way decision models. <b>2017</b> , 90, 192-207	21
696	A unified framework of dynamic three-way probabilistic rough sets. <i>Information Sciences</i> , <b>2017</b> , 420, 126-147	55
695	Structured probabilistic rough set approximations. <b>2017</b> , 90, 319-332	11
694	A new study on soft rough fuzzy lattices (ideals, filters) over lattices. <b>2017</b> , 33, 2391-2402	1
693	Three-way linguistic group decisions model based on cloud for medical care product investment. <b>2017</b> , 33, 3405-3417	6
692	Generalization of Pawlak's Approximations in Hypermodules by Set-Valued Homomorphisms. <b>2017</b> , 42, 59-81	1
691	Optimal scale selection in dynamic multi-scale decision tables based on sequential three-way decisions. <i>Information Sciences</i> , <b>2017</b> , 415-416, 213-232	7-7 66
690	Dynamic probabilistic rough sets with incomplete data. <i>Information Sciences</i> , <b>2017</b> , 417, 39-54	7-7 34
689	Feature selection and approximate reasoning of large-scale set-valued decision tables based on dominance-based quantitative rough sets. <i>Information Sciences</i> , <b>2017</b> , 378, 328-347	7-7 31
688	Three-way group decision making based on multigranulation fuzzy decision-theoretic rough set over two universes. <b>2017</b> , 81, 87-102	117
687	Double-quantitative rough fuzzy set based decisions: A logical operations method. <i>Information Sciences</i> , <b>2017</b> , 378, 264-281	7-7 30

686	Three-way fuzzy concept lattice representation using neutrosophic set. <b>2017</b> , 8, 69-79		90
685	Three-way decisions model based on tolerance rough fuzzy set. <b>2017</b> , 8, 35-43		22
684	A cost sensitive decision tree algorithm based on weighted class distribution with batch deleting attribute mechanism. <i>Information Sciences</i> , <b>2017</b> , 378, 303-316	7.7	27
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682	A New Aggregation Method-Based Error Analysis for Decision-Theoretic Rough Sets and Its Application in Hesitant Fuzzy Information Systems. <b>2017</b> , 25, 1685-1697		25
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677	Analysis of faults fixing system using rough sets: A case study in large-scale telecommunication company (telecom egypt). <b>2017</b> ,		
676	A three-way decisions model for decision tables. <b>2017</b> ,		0
675	Generalization of Pawlak's rough approximation spaces by using $\alpha$ -open sets and its applications. <b>2017</b> , 33, 1327-1337		2
674	Sentiment analysis of text based on three-way decisions. <b>2017</b> , 33, 245-254		14
673	Quantitative composite decision-theoretic rough set. <b>2017</b> ,		
672	Uncertain Information Classification: A Four-Way Decision Making Approach. <b>2017</b> ,		1
671	Decision-theoretic rough sets under Pythagorean fuzzy information. <b>2018</b> , 33, 818-835		22
670	Complex neutrosophic concept lattice and its applications to air quality analysis. <b>2018</b> , 109, 206-213		21
669	A three learning states Bayesian knowledge tracing model. <b>2018</b> , 148, 189-201		16



668	Local rough set: A solution to rough data analysis in big data. <b>2018</b> , 97, 38-63		74
667	Characteristics of three-way concept lattices and three-way rough concept lattices. <b>2018</b> , 146, 181-189		24
666	Dominance-based fuzzy rough set approach for incomplete interval-valued data. <b>2018</b> , 34, 423-436		23
665	Matrix-pattern-oriented classifier with boundary projection discrimination. <b>2018</b> , 149, 1-17		1
664	Method for three-way decisions using ideal TOPSIS solutions at Pythagorean fuzzy information. <i>Information Sciences</i> , <b>2018</b> , 435, 282-295	7-7	153
663	CE3: A three-way clustering method based on mathematical morphology. <b>2018</b> , 155, 54-65		76
662	New inclusion relation of neutrosophic sets with applications and related lattice structure. <b>2018</b> , 9, 1753-1763		61
661	A unified framework for characterizing rough sets with evidence theory in various approximation spaces. <i>Information Sciences</i> , <b>2018</b> , 454-455, 144-160	7-7	17
660	Local neighborhood rough set. <b>2018</b> , 153, 53-64		58
659	Decision-theoretic rough set approaches to multi-covering approximation spaces based on fuzzy probability measure. <b>2018</b> , 34, 1917-1931		12
658	Three-way decisions model based on rough fuzzy set. <b>2018</b> , 34, 2051-2059		2
657	Three-way decision perspectives on class-specific attribute reducts. <i>Information Sciences</i> , <b>2018</b> , 450, 227-245		50
656	A survey of decision making methods based on two classes of hybrid soft set models. <b>2018</b> , 49, 511-529		97
655	A Novel TODIM Method-Based Three-Way Decision Model for Medical Treatment Selection. <b>2018</b> , 20, 1240-1255		49
654	Three-way group decisions based on prospect theory. <b>2018</b> , 69, 25-35		21
653	Rule acquisition and optimal scale selection in multi-scale formal decision contexts and their applications to smart city. <b>2018</b> , 83, 564-581		27
652	Development of Multimodal Biometric Systems with Three-Way and Fuzzy Set-Based Decision Mechanisms. <b>2018</b> , 20, 128-140		7
651	Interval-Valued Neutrosophic Graph Representation of Concept Lattice and Its ((alpha ,beta ,gamma ))-Decomposition. <b>2018</b> , 43, 723-740		32

650	Equivalent Structures of Interval Sets and Fuzzy Interval Sets. <b>2018</b> , 33, 68-92		3
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648	A Dynamic Three-way Decision Model based on the Updating of Attribute Values. <b>2018</b> , 142, 71-84		51
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646	Parameter Reduction of Fuzzy Soft Sets: An Adjustable Approach Based on the Three-Way Decision. <b>2018</b> , 20, 928-942		14
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644	On transformations from semi-three-way decision spaces to three-way decision spaces based on triangular norms and triangular conorms. <i>Information Sciences</i> , <b>2018</b> , 432, 22-51	7-7	12
643	Multi-granulation bipolar-valued fuzzy probabilistic rough sets and their corresponding three-way decisions over two universes. <b>2018</b> , 22, 8207-8226		11
642	Fuzzy Cognitive Maps Based Models for Pattern Classification: Advances and Challenges. <b>2018</b> , 83-98		12
641	Incremental Updating Methods with Three-Way Decision Models in Incomplete Information Systems. <b>2018</b> ,		0
640	A Pythagorean Fuzzy Multigranulation Probabilistic Model for Mine Ventilator Fault Diagnosis. <b>2018</b> , 2018, 1-19		8
639	Three-way recommendation integrating global and local information. <b>2018</b> , 2018, 1397-1401		3
638	Novel Three-Way Decisions Models with Multi-Granulation Rough Intuitionistic Fuzzy Sets. <b>2018</b> , 10, 662		6
637	An Optimization View on Intuitionistic Fuzzy Three-Way Decisions. <b>2018</b> , 363-377		1
636	Three-Way Decisions with Interval-Valued Intuitionistic Fuzzy Decision-Theoretic Rough Sets in Group Decision-Making. <b>2018</b> , 10, 281		10
635	Three-way decision and granular computing. <b>2018</b> , 103, 107-123		252
634	Composite Sequential Three-Way Decisions. <b>2018</b> , 177-186		
633	A New Strategy for Virtual Machine Migration Based on Decision-Theoretic Rough Sets. <b>2018</b> , E101.B, 2172-2185		1

632	RETRACTED: Three-way decisions based on neutrosophic sets and AHP-QFD framework for supplier selection problem. <b>2018</b> , 89, 19-30	83
631	Covering rough set-based three-way decision feature selection. <b>2018</b> ,	2
630	L-fuzzy concept analysis for three-way decisions: basic definitions and fuzzy inference mechanisms. <b>2018</b> , 9, 1857-1867	22
629	Distance-based double-quantitative rough fuzzy sets with logic operations. <b>2018</b> , 101, 206-233	23
628	Three-way n-valued neutrosophic concept lattice at different granulation. <b>2018</b> , 9, 1839-1855	21
627	An attribute reduction method based on three-way decisions model for decision tables. <b>2018</b> ,	
626	Intuitionistic fuzzy possibility measure-based three-way decisions for incomplete data. <b>2018</b> , 35, 5657-5666	10
625	Double-quantitative decision-theoretic approach to multigranulation approximate space. <b>2018</b> , 98, 236-258	24
624	Attribute Reduction Algorithm Based on Improved Information Gain Rate and Ant Colony Optimization. <b>2018</b> , 139-150	
623	Medical Diagnosis Based on Single-Valued Neutrosophic Probabilistic Rough Multisets over Two Universes. <b>2018</b> , 10, 213	15
622	A Novel Three-way decision model with decision-theoretic rough sets using utility theory. <b>2018</b> , 159, 321-335	41
621	Relationships between three-way concepts and classical concepts. <b>2018</b> , 35, 1063-1075	6
620	A Conflict Analysis Model Based on Three-Way Decisions. <b>2018</b> , 522-532	5
619	A cautious ranking methodology with its application for stock screening. <b>2018</b> , 71, 835-848	3
618	Covering-Based Optimistic-Pessimistic Multigranulation Decision-Theoretic Rough Sets. <b>2018</b> , 137-147	1
617	A Method to Determine the Number of Clusters Based on Multi-validity Index. <b>2018</b> , 427-439	3
616	Vector-based approaches for computing approximations in multigranulation rough set. <b>2018</b> , 2018, 1538-1543	
615	The determination of three-way decisions with decision-theoretic rough sets considering the loss function evaluated by multiple experts. <b>2019</b> , 4, 285-297	14

614	Optimal granulation selection for multi-label data based on multi-granulation rough sets. <b>2019</b> , 4, 323-335	9
613	Three-way decisions with reflexive probabilistic rough fuzzy sets. <b>2019</b> , 4, 363-375	7
612	Optimal granularity selection based on cost-sensitive sequential three-way decisions with rough fuzzy sets. <b>2019</b> , 163, 131-144	16
611	Sequential three-way classifier with justifiable granularity. <b>2019</b> , 163, 103-119	49
610	Information fusion in rough set theory : An overview. <b>2019</b> , 48, 107-118	59
609	A novel three-way decision model under multiple-criteria environment. <i>Information Sciences</i> , <b>2019</b> , 471, 29-51	7-7 79
608	Attribute reduction based on misclassification cost in variable precision rough set model. <b>2019</b> , 37, 5129-5142	1
607	Granule description based on positive and negative attributes. <b>2019</b> , 4, 337-350	11
606	Multi-granulation fuzzy decision-theoretic rough sets and bipolar-valued fuzzy decision-theoretic rough sets and their applications. <b>2019</b> , 4, 483-509	8
605	Medicines selection via fuzzy upward $\mathbb{E}$ -covering rough sets. <b>2019</b> , 37, 4369-4390	1
604	Pseudolabel Decision-Theoretic Rough Set. <b>2019</b> , 2019, 1-16	2
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602	Three-way decisions based feature fusion for Chinese irony detection. <b>2019</b> , 113, 324-335	36
601	Multi-Granulation Fuzzy Rough Sets Based on Fuzzy Preference Relations and Their Applications. <b>2019</b> , 7, 147825-147848	5
600	Novel Parameterized Utility Function on Dual Hesitant Fuzzy Rough Sets and Its Application in Pattern Recognition. <b>2019</b> , 10, 71	
599	Smart Product-Service Systems Solution Design via Hybrid Crowd Sensing Approach. <b>2019</b> , 7, 128463-128473	13
598	A characterization of novel rough fuzzy sets of information systems and their application in decision making. <b>2019</b> , 122, 253-261	18
597	Gesture Control for Human-Robot Interaction Based on Three-Way Decision Model. <b>2019</b> ,	0

596	Co-Training Based Sequential Three-Way Decisions for Cost-Sensitive Classification. <b>2019,</b>		3
595	Matrix-based approaches for updating approximations in neighborhood multigranulation rough sets while neighborhood classes decreasing or increasing. <b>2019, 37, 2847-2867</b>		4
594	Understanding the composition and evolution of terrorist group networks: A rough set approach. <b>2019, 101, 983-992</b>		7
593	Generalized multi-scale decision tables with multi-scale decision attributes. <b>2019, 115, 194-208</b>		18
592	A three-way grey incidence clustering approach with changing decision objects. <b>2019, 137, 106087</b>		3
591	Three-way fuzzy matroids and granular computing. <b>2019, 114, 44-50</b>		12
590	A multiphase cost-sensitive learning method based on the multiclass three-way decision-theoretic rough set model. <i>Information Sciences</i> , <b>2019, 485, 248-262</b>	7.7	39
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588	Early Detection of Possible Undergraduate Drop Out Using a New Method Based on Probabilistic Rough Set Theory. <b>2019, 211-232</b>		
587	A three-way c-means algorithm. <b>2019, 82, 105536</b>		11
586	A Bibliometric Profile of Research on Rough Sets. <b>2019, 534-548</b>		5
585	Methods to Edit Multi-label Training Sets Using Rough Sets Theory. <b>2019, 369-380</b>		1
584	A Robust Long-Term Pedestrian Tracking-by-Detection Algorithm Based on Three-Way Decision. <b>2019, 522-533</b>		
583	An optimization-based formulation for three-way decisions. <i>Information Sciences</i> , <b>2019, 495, 185-214</b>	7.7	32
582	Hesitant relations: Novel properties and applications in three-way decisions. <i>Information Sciences</i> , <b>2019, 497, 165-188</b>	7.7	4
581	Three-way fuzzy partitions defined by shadowed sets. <i>Information Sciences</i> , <b>2019, 497, 23-37</b>	7.7	13
580	Three-way conflict analysis: Reformulations and extensions of the Pawlak model. <b>2019, 180, 26-37</b>		66
579	A Fuzzy Rough Set Model Based on Reliability Over Dual-Universe and Its Applications. <b>2019, 7, 50605-50617</b>		2

578	NIS-Apriori Algorithm with a Target Descriptor for Handling Rules Supported by Minor Instances. <b>2019</b> , 247-259		
577	A Three-Way Clustering Method Based on Ensemble Strategy and Three-Way Decision. <b>2019</b> , 10, 59		7
576	A Novel Interval Three-Way Concept Lattice Model with Its Application in Medical Diagnosis. <b>2019</b> , 7, 103		12
575	Three-way group decisions with interval-valued decision-theoretic rough sets based on aggregating inclusion measures. <b>2019</b> , 110, 31-45		24
574	A theoretical study on the object (property) oriented concept lattices based on three-way decisions. <b>2019</b> , 23, 9477-9489		12
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572	Sequential three-way decisions in multi-category image recognition with deep features based on distance factor. <i>Information Sciences</i> , <b>2019</b> , 489, 18-36	7-7	31
571	A three-way decision method based on Gaussian kernel in a hybrid information system with images: An application in medical diagnosis. <b>2019</b> , 77, 734-749		29
570	A multiperiod hybrid decision support model for medical diagnosis and treatment based on similarities and three-way decision theory. <b>2019</b> , 36, e12377		11
569	Granule description based knowledge discovery from incomplete formal contexts via necessary attribute analysis. <i>Information Sciences</i> , <b>2019</b> , 485, 347-361	7-7	22
568	Three way decisions based grey incidence analysis clustering approach for panel data and its application. <b>2019</b> , 48, 2117-2137		7
567	Logistics Partner Selection Based on Three-way Decisions. <b>2019</b> ,		
566	Two-Direction Dynamic Three-Way Decision Algorithm Based on PS-Rough Set. <b>2019</b> ,		
565	A Decision-Theoretic Rough Set Approach to Lattice-Valued Information System. <b>2019</b> ,		
564	An Apriori-based Data Analysis on Suspicious Network Event Recognition. <b>2019</b> ,		0
563	. <b>2019</b> ,		1
562	Three-way decision model based on multi-granularity space and intuitionistic fuzzy sets. <b>2019</b> ,		
561	Optimization of Basic Clustering for Ensemble Clustering: An Information-Theoretic Perspective. <b>2019</b> , 7, 179048-179062		4

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559	A self-adaptive cascade ConvNets model based on label relation mining. <b>2019</b> , 328, 29-38		2
558	Structured approximations as a basis for three-way decisions in rough set theory. <b>2019</b> , 165, 92-109		49
557	Multigranulation sequential three-way decisions based on multiple thresholds. <b>2019</b> , 105, 396-416		36
556	Three-way k-means: integrating k-means and three-way decision. <b>2019</b> , 10, 2767-2777		37
555	Cost-sensitive three-way class-specific attribute reduction. <b>2019</b> , 105, 153-174		26
554	A sequential three-way approach to multi-class decision. <b>2019</b> , 104, 108-125		60
553	Fuzziness and incremental information of disjoint regions in double-quantitative decision-theoretic rough set model. <b>2019</b> , 10, 2669-2690		14
552	A Rough set model and its applications with TOPSIS method to decision making. <b>2019</b> , 165, 420-431		22
551	A three-way decision ensemble method for imbalanced data oversampling. <b>2019</b> , 107, 1-16		21
550	Three-way enhanced convolutional neural networks for sentence-level sentiment classification. <i>Information Sciences</i> , <b>2019</b> , 477, 55-64	7-7	67
549	Granular maximum decision entropy-based monotonic uncertainty measure for attribute reduction. <b>2019</b> , 104, 9-24		26
548	Probabilistic decision making based on rough sets in interval-valued fuzzy information systems. <b>2019</b> , 4, 391-405		3
547	A cost-sensitive three-way combination technique for ensemble learning in sentiment classification. <b>2019</b> , 105, 85-97		44
546	Research on the optimization of new energy vehicle industry research and development subsidy about generic technology based on the three-way decisions. <b>2019</b> , 212, 46-55		34
545	Updating three-way decisions in incomplete multi-scale information systems. <i>Information Sciences</i> , <b>2019</b> , 476, 274-289	7-7	75
544	Incremental updating knowledge in neighborhood multigranulation rough sets under dynamic granular structures. <b>2019</b> , 163, 811-829		18
543	A review on methods and software for fuzzy cognitive maps. <b>2019</b> , 52, 1707-1737		80

542	Rough fuzzy bipolar soft sets and application in decision-making problems. <b>2019</b> , 23, 1603-1614		33
541	A survey of parameter reduction of soft sets and corresponding algorithms. <b>2019</b> , 52, 1839-1872		77
540	Tri-partition cost-sensitive active learning through kNN. <b>2019</b> , 23, 1557-1572		25
539	Novel soft fuzzy rough rings (ideals) of rings and their application in decision making. <b>2019</b> , 23, 3167-3189		1
538	Multi-granulation interval-valued fuzzy probabilistic rough sets and their corresponding three-way decisions based on interval-valued fuzzy preference relations. <b>2019</b> , 4, 89-108		29
537	Shadowed numbers and their standard and multidimensional arithmetic. <i>Information Sciences</i> , <b>2020</b> , 507, 485-502	7.7	4
536	Interval data driven construction of shadowed sets with application to linguistic word modelling. <i>Information Sciences</i> , <b>2020</b> , 507, 503-521	7.7	38
535	NIS-Apriori-based rule generation with three-way decisions and its application system in SQL. <i>Information Sciences</i> , <b>2020</b> , 507, 755-771	7.7	17
534	Risk appetite dual hesitant fuzzy three-way decisions with TODIM. <i>Information Sciences</i> , <b>2020</b> , 507, 585-605		60
533	Covering-based intuitionistic fuzzy rough sets and applications in multi-attribute decision-making. <b>2020</b> , 53, 671-701		31
532	A general model of decision-theoretic three-way approximations of fuzzy sets based on a heuristic algorithm. <i>Information Sciences</i> , <b>2020</b> , 507, 522-539	7.7	40
531	Covering based multigranulation fuzzy rough sets and corresponding applications. <b>2020</b> , 53, 1093-1126		32
530	A three-way decision method in a fuzzy condition decision information system and its application in credit card evaluation. <b>2020</b> , 5, 513-526		5
529	Multi-granularity three-way decisions with adjustable hesitant fuzzy linguistic multigranulation decision-theoretic rough sets over two universes. <i>Information Sciences</i> , <b>2020</b> , 507, 665-683	7.7	69
528	Sequential three-way decisions via multi-granularity. <i>Information Sciences</i> , <b>2020</b> , 507, 606-629	7.7	45
527	Three-Way Group Conflict Analysis Based on Pythagorean Fuzzy Set Theory. <b>2020</b> , 28, 447-461		85
526	Multigranulation rough-fuzzy clustering based on shadowed sets. <i>Information Sciences</i> , <b>2020</b> , 507, 553-573		40
525	Credit scoring using three-way decisions with probabilistic rough sets. <i>Information Sciences</i> , <b>2020</b> , 507, 700-714	7.7	43



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523	On decision evaluation functions in generalized three-way decision spaces. <i>Information Sciences</i> , <b>2020</b> , 507, 733-754	7.7	9
522	Fuzzy neighborhood covering for three-way classification. <i>Information Sciences</i> , <b>2020</b> , 507, 795-808	7.7	61
521	Three-way decisions with decision-theoretic rough sets in multiset-valued information tables. <i>Information Sciences</i> , <b>2020</b> , 507, 684-699	7.7	40
520	Interval-valued hesitant fuzzy multi-granularity three-way decisions in consensus processes with applications to multi-attribute group decision making. <i>Information Sciences</i> , <b>2020</b> , 511, 192-211	7.7	35
519	A novel target threat assessment method based on three-way decisions under intuitionistic fuzzy multi-attribute decision making environment. <b>2020</b> , 87, 103276		42
518	Three-way confusion matrix for classification: A measure driven view. <i>Information Sciences</i> , <b>2020</b> , 507, 772-794	7.7	46
517	Occupational risk assessment with grey system theory. <b>2020</b> , 28, 717-732		4
516	. <b>2020</b> , 28, 3008-3022		15
515	Three-way decisions in fuzzy incomplete information systems. <b>2020</b> , 11, 667-674		15
514	Three-way decision based on decision-theoretic rough sets with single-valued neutrosophic information. <b>2020</b> , 11, 657-665		21
513	On rule acquisition methods for data classification in heterogeneous incomplete decision systems. <b>2020</b> , 193, 105472		2
512	On modeling similarity and three-way decision under incomplete information in rough set theory. <b>2020</b> , 191, 105251		28
511	Three-way group decisions based on multigranulation hesitant fuzzy decision-theoretic rough set over two universes. <b>2020</b> , 38, 2165-2179		10
510	Three-way decision on two universes. <i>Information Sciences</i> , <b>2020</b> , 515, 263-279	7.7	16
509	Three-way granular computing, rough sets, and formal concept analysis. <b>2020</b> , 116, 106-125		126
508	A recursive algorithm to increase the speed of regression-based binary recommendation systems. <i>Information Sciences</i> , <b>2020</b> , 512, 1324-1334	7.7	2
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506	A novel sequential three-way decisions model based on penalty function. <b>2020</b> , 192, 105350	17
505	PF-TOPSIS method based on CPFERS models: An application to unconventional emergency events. <b>2020</b> , 139, 106192	37
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502	Intelligent online catastrophe assessment and preventive control via a stacked denoising autoencoder. <b>2020</b> , 380, 306-320	7
501	Neutrosophic fusion of rough set theory: An overview. <b>2020</b> , 115, 103117	19
500	Three-Way Group Decision in a Covering Decision Information System. <b>2020</b> , 8, 5172-5188	0
499	An intelligent stock trading decision support system based on rough cognitive reasoning. <b>2020</b> , 160, 113763	3
498	Toward a Dempster-Shafer theory of concepts. <b>2020</b> , 125, 14-25	7
497	A fuzzy rough hybrid decision making technique for identifying the infected population of COVID-19. <b>2020</b> , 1-11	3
496	Soft decision-making based on decision-theoretic rough set and Takagi-Sugeno fuzzy model with application to the autonomous fault diagnosis of satellite power system. <b>2020</b> , 106, 106108	8
495	Three-way group decisions under hesitant fuzzy linguistic environment for green supplier selection. <b>2020</b> , 49, 2919-2945	12
494	Three-stage reject inference learning framework for credit scoring using unsupervised transfer learning and three-way decision theory. <b>2020</b> , 137, 113366	40
493	BWM and MULTIMOORA-based multigranulation sequential three-way decision model for multi-attribute group decision-making problem. <b>2020</b> , 125, 169-186	15
492	Fuzzy Covering-Based Three-Way Clustering. <b>2020</b> , 2020, 1-10	0
491	Spatial and temporal reasoning with granular computing and three way formal concept analysis. <b>2020</b> , 6, 797	1
490	On decision evaluation functions in three-way decision spaces derived from overlap and grouping functions. <b>2020</b> , 24, 15159-15178	3
489	An Automatic Image Segmentation Algorithm Based on Three-Way Decisions. <b>2020</b> ,	

488	Comparison of six types of rough approximations based on j-neighborhood space and j-adhesion neighborhood space. <b>2020</b> , 39, 4515-4531		25
487	Novel Models of Fuzzy Rough Coverings Based on Fuzzy $\beta$ -Neighborhood and its Application to Decision-Making. <b>2020</b> , 8, 224354-224364		12
486	The Interval Parameter Optimization Model Based on Three-Way Decision Space and Its Application on Green Products Recommendation <b>2020</b> , 2020, 1-12		2
485	Measuring the Efficiency of Economic Growth towards Sustainable Growth with Grey System Theory. <b>2020</b> , 12, 10121		3
484	Transformation Of Non-Commitment Decision Risk Of Three-Way Decision Based on Limited Time Observation. <b>2020</b> , 1651, 012056		
483	Action Strategy Analysis in Probabilistic Preference Movement-Based Three-Way Decision. <b>2020</b> , 2020, 1-13		0
482	Three-Way Ensemble Clustering for Incomplete Data. <b>2020</b> , 8, 91855-91864		10
481	Novel classes of coverings based multigranulation fuzzy rough sets and corresponding applications to multiple attribute group decision-making. <b>2020</b> , 53, 6197-6256		9
480	Extension of labeled multiple attribute decision making based on fuzzy neighborhood three-way decision. <b>2020</b> , 32, 17731-17758		7
479	A novel three-way decision method in a hybrid information system with images and its application in medical diagnosis. <b>2020</b> , 92, 103651		22
478	Double-quantitative variable consistency dominance-based rough set approach. <b>2020</b> , 124, 1-26		12
477	Preference degree-based multi-granularity sequential three-way group conflict decisions approach to the integration of TCM and Western medicine. <b>2020</b> , 143, 106393		7
476	Constructing three-way concept lattice based on the composite of classical lattices. <b>2020</b> , 121, 174-186		7
475	Neighborhood rough set-based three-way clustering considering attribute correlations: An approach to classification of potential gout groups. <i>Information Sciences</i> , <b>2020</b> , 535, 28-41	7-7	18
474	Bibliometric analysis of rough sets research. <b>2020</b> , 94, 106467		11
473	On relationship between three-way concept lattices. <i>Information Sciences</i> , <b>2020</b> , 538, 396-414	7-7	5
472	Single-parameter decision-theoretic rough set. <i>Information Sciences</i> , <b>2020</b> , 539, 49-80	7-7	12
471	Three-way decisions of rough vague sets from the perspective of fuzziness. <i>Information Sciences</i> , <b>2020</b> , 523, 111-132	7-7	14

470	Three sequential multi-class three-way decision models. <i>Information Sciences</i> , <b>2020</b> , 537, 62-90	7.7	8
469	Construction of three-way attribute partial order structure via cognitive science and granular computing. <b>2020</b> , 197, 105859		4
468	Granule description in knowledge granularity and representation. <b>2020</b> , 203, 106160		8
467	Optimal scale selection and attribute reduction in multi-scale decision tables based on three-way decision. <i>Information Sciences</i> , <b>2020</b> , 541, 36-59	7.7	11
466	A prospect theory-based three-way decision model. <b>2020</b> , 203, 106129		34
465	Extending characteristic relations on an incomplete data set by the three-way decision theory. <b>2020</b> , 119, 108-121		4
464	Optimal scale selection by integrating uncertainty and cost-sensitive learning in multi-scale decision tables. <b>2020</b> , 11, 1095-1114		12
463	An MADM approach to covering-based variable precision fuzzy rough sets: an application to medical diagnosis. <b>2020</b> , 11, 2181-2207		29
462	A decision-theoretic rough set model with q-rung orthopair fuzzy information and its application in stock investment evaluation. <b>2020</b> , 91, 106212		47
461	A model of three-way decisions for Knowledge Harnessing. <b>2020</b> , 120, 184-202		8
460	Shadowed Neighborhoods Based on Fuzzy Rough Transformation for Three-Way Classification. <b>2020</b> , 28, 978-991		22
459	Incrementally updating approximations based on the graded tolerance relation in incomplete information tables. <b>2020</b> , 24, 8655-8671		1
458	A co-training approach for sequential three-way decisions. <b>2020</b> , 11, 1129-1139		4
457	Strategy selection under entropy measures in movement-based three-way decision. <b>2020</b> , 119, 280-291		16
456	Intuitionistic Fuzzy Three-Way Decision Model Based on the Three-Way Granular Computing Method. <b>2020</b> , 12, 1068		4
455	Three-way multi-attribute decision-making based on outranking relations. <b>2020</b> , 1-1		70
454	A novel decision-making approach based on three-way decisions in fuzzy information systems. <i>Information Sciences</i> , <b>2020</b> , 541, 362-390	7.7	43
453	Incremental three-way neighborhood approach for dynamic incomplete hybrid data. <i>Information Sciences</i> , <b>2020</b> , 541, 98-122	7.7	12

452	Three-way decisions with decision-theoretic rough sets based on Pythagorean fuzzy covering. <b>2020</b> , 24, 18671-18688		4
451	A dynamic framework for updating neighborhood multigranulation approximations with the variation of objects. <i>Information Sciences</i> , <b>2020</b> , 519, 382-406	7-7	7
450	Three-way decisions: beyond rough sets and granular computing. <b>2020</b> , 11, 989-1002		33
449	A three-way decision method in a hybrid decision information system and its application in medical diagnosis. <b>2020</b> , 53, 4707-4736		12
448	Three-way decisions based blocking reduction models in hierarchical classification. <i>Information Sciences</i> , <b>2020</b> , 523, 63-76	7-7	9
447	Complex network analysis of three-way decision researches. <b>2020</b> , 11, 973-987		26
446	Data-driven stochastic optimization approaches to determine decision thresholds for risk estimation models. <b>2020</b> , 52, 1098-1121		0
445	Incremental updating probabilistic neighborhood three-way regions with time-evolving attributes. <b>2020</b> , 120, 1-23		8
444	Multi-Attribute Group Decision Making Based on Multigranulation Probabilistic Models with Interval-Valued Neutrosophic Information. <b>2020</b> , 8, 223		6
443	A multiple attribute decision making three-way model for intuitionistic fuzzy numbers. <b>2020</b> , 119, 177-203		55
442	Sequential three-way multiple attribute group decisions with individual attributes and its consensus achievement based on social influence. <i>Information Sciences</i> , <b>2020</b> , 518, 286-308	7-7	11
441	A three-way decision model based on cumulative prospect theory. <i>Information Sciences</i> , <b>2020</b> , 519, 74-92	7-7	34
440	Semantics of soft sets and three-way decision with soft sets. <b>2020</b> , 194, 105538		31
439	Three-way conflict analysis: A unification of models based on rough sets and formal concept analysis. <b>2020</b> , 194, 105556		20
438	A Novel Three-Way Investment Decisions Based on Decision-Theoretic Rough Sets with Hesitant Fuzzy Information. <b>2020</b> , 22, 2708-2719		11
437	Multi-Class Decision-Making Method for Decision-Theoretic Rough Sets Based on the Constructive Covering Algorithm. <b>2020</b> , 8, 57833-57848		1
436	A novel method for sentiment classification of drug reviews using fusion of deep and machine learning techniques. <b>2020</b> , 198, 105949		34
435	Intuitionistic fuzzy three-way formal concept analysis based attribute correlation degree. <b>2021</b> , 40, 1567-1583		4

434	Set-theoretic models of three-way decision. <b>2021</b> , 6, 133-148		32
433	A Sequential Three-Way Decision Model With Intuitionistic Fuzzy Numbers. <b>2021</b> , 51, 2640-2652		25
432	A novel sequential three-way decision model with autonomous error correction. <b>2021</b> , 212, 106526		9
431	A multigranulation fuzzy rough approach to multisource information systems. <b>2021</b> , 25, 933-947		0
430	Three-way decision on information tables. <i>Information Sciences</i> , <b>2021</b> , 545, 25-43	7.7	16
429	PROMETHEE II method based on variable precision fuzzy rough sets with fuzzy neighborhoods. <b>2021</b> , 54, 1281-1319		6
428	Two-stage three-way enhanced technique for ensemble learning in inclusive policy text classification. <i>Information Sciences</i> , <b>2021</b> , 547, 271-288	7.7	12
427	A novel methodology to select sustainable municipal solid waste management scenarios from three-way decisions perspective. <b>2021</b> , 280, 124312		8
426	Three-way decision with co-training for partially labeled data. <i>Information Sciences</i> , <b>2021</b> , 544, 500-518	7.7	14
425	Multi-source information fusion based on rough set theory: A review. <b>2021</b> , 68, 85-117		41
424	Variable-precision three-way concepts in L-contexts. <b>2021</b> , 130, 107-125		8
423	MAGDM-oriented dual hesitant fuzzy multigranulation probabilistic models based on MULTIMOORA. <b>2021</b> , 12, 1219-1241		9
422	An initialization method to improve the training time of matrix factorization algorithm for fast recommendation. <b>2021</b> , 25, 3975-3987		2
421	Three-way multi-attribute decision making under hesitant fuzzy environments. <i>Information Sciences</i> , <b>2021</b> , 552, 328-351	7.7	23
420	Conflict analysis based on three-way decision for triangular fuzzy information systems. <b>2021</b> , 132, 88-106		17
419	Conflict resolution using game theory and rough sets. <b>2021</b> , 36, 237-259		11
418	Network-based evidential three-way theoretic model for large-scale group decision analysis. <i>Information Sciences</i> , <b>2021</b> , 547, 689-709	7.7	14
417	Ground truthing from multi-rater labeling with three-way decision and possibility theory. <i>Information Sciences</i> , <b>2021</b> , 545, 771-790	7.7	17

416	Label distribution feature selection for multi-label classification with rough set. <b>2021</b> , 128, 32-55	9
415	Fuzzy entropies for class-specific and classification-based attribute reducts in three-way probabilistic rough set models. <b>2021</b> , 12, 433-457	7
414	Optimal scale combination selection for multi-scale decision tables based on three-way decision. <b>2021</b> , 12, 281-301	2
413	Risk interval-valued three-way decisions model with regret theory and its application to project resource allocation. <b>2021</b> , 72, 180-199	17
412	Measures and approximations using empirical structures. <b>2021</b> , 6, 47-58	
411	The geometry of three-way decision. <b>2021</b> , 51, 6298-6325	42
410	Three-Way Clustering Method Based on Stability Theory. <b>2021</b> , 9, 33944-33953	5
409	Multi-Attribute Group Decision Making Method Based on Shapley Values and Three-Way Decisions under Hesitant Fuzzy Linguistic Environment. <b>2021</b> , 11, 47-62	
408	Complex neutrosophic $\mathbb{E}$ -equal concepts and their applications in water quality. <b>2021</b> , 233-267	0
407	Knowledge Graph Representation Learning for Link Prediction with Three-Way Decisions. <b>2021</b> , 266-278	
406	Three-Way Decisions Based RNN Models for Sentiment Classification. <b>2021</b> , 247-258	
405	Optimal Scale Combination Selection Integrating Three-Way Decision With Hasse Diagram. <b>2021</b> , PP,	4
404	Dynamic and Updating Multigranulation Decision-Theoretic Rough Approximations When Adding or Deleting Objects. <b>2021</b> , 9, 123648-123659	
403	Some extensions of covering-based multigranulation fuzzy rough sets from new perspectives. <b>2021</b> , 25, 6633-6651	8
402	An energy-aware virtual machine migration strategy based on three-way decisions. <b>2021</b> , 7, 8597-8597	2
401	Three-way rough semiconcept. <b>2021</b> , 40, 4317-4330	1
400	Operators, fuzzy operators and Pawlak's approximations in operators. <b>2021</b> , 32, 1211	
399	AH3: An adaptive hierarchical feature representation model for three-way decision boundary processing. <b>2021</b> , 130, 259-272	5

398	Measuring the outcome of movement-based three-way decision using proportional utility functions. <b>2021</b> , 51, 8598		3
397	Fuzzy soft covering-based multi-granulation fuzzy rough sets and their applications. <b>2021</b> , 40, 1		13
396	A three-way decision method based on hybrid data. <b>2021</b> , 40, 8639-8650		2
395	Data-driven sequential three-way decisions for unlabeled information system. <b>2021</b> , 1-12		1
394	Covering Fuzzy Rough Sets via Variable Precision. <b>2021</b> , 2021, 1-10		2
393	Approaches to Three-Way Decisions Based on the Evaluation of Probabilistic Linguistic Terms Sets. <b>2021</b> , 13, 764		4
392	Three-way decisions with decision-theoretic rough sets based on covering-based q-rung orthopair fuzzy rough set model. <b>2021</b> , 40, 9765-9785		3
391	Three-Way Image Classification with Evidential Deep Convolutional Neural Networks. 1		3
390	Probabilistic Linguistic Three-Way Multi-Attribute Decision Making for Hidden Property Evaluation of Judgment Debtor. <b>2021</b> , 2021, 1-16		2
389	Domain Adaptation Using a Three-Way Decision Improves the Identification of Autism Patients from Multisite fMRI Data. <b>2021</b> , 11,		4
388	Three-way decisions based multi-attribute decision making with probabilistic dominance relations. <i>Information Sciences</i> , <b>2021</b> , 559, 75-96	7-7	17
387	Improving Incremental Nonnegative Matrix Factorization Method for Recommendations Based on Three-Way Decision Making. 1		3
386	Fast inference in convolutional neural networks based on sequential three-way decisions. <i>Information Sciences</i> , <b>2021</b> , 560, 370-385	7-7	9
385	Three-Way Decisions Based on Q-Rung Orthopair Fuzzy 2-Tuple Linguistic Sets with Generalized Maclaurin Symmetric Mean Operators. <b>2021</b> , 9, 1387		5
384	Certain types of fuzzy soft covering based fuzzy rough sets with application to decision-making. <b>2021</b> , 40, 10825-10836		3
383	A comprehensive study of upward fuzzy preference relation based fuzzy rough set models: Properties and applications in treatment of coronavirus disease. <b>2021</b> , 36, 3704-3745		1
382	A novel approach of two-stage three-way co-opetition decision for crowdsourcing task allocation scheme. <i>Information Sciences</i> , <b>2021</b> , 559, 191-211	7-7	7
381	3W-AlignNet: a Feature Alignment Framework for Person Search with Three-Way Decision Theory. 1		0



380	On three types of soft fuzzy coverings based rough sets. <b>2021</b> , 185, 452-467		7
379	Democratic three-way decisions based on voting mechanism. 1		1
378	Real-Time Optimal Negotiation Mode Selection Based on Three-Way Decision for Decentralized Remote Sensing Satellite Cluster. <b>2021</b> , 2021, 1-13		
377	Three-Way Multi-Attribute Decision Making Based on Outranking Relations under Intuitionistic Fuzzy Environments. <b>2021</b> , 13, 1384		1
376	On Different Types of Single-Valued Neutrosophic Covering Rough Set with Application in Decision-Making. <b>2021</b> , 2021, 1-16		1
375	Three-way Conflict Analysis: Alliance, Conflict, and Neutrality Reducts of Three-valued Situation Tables. 1		2
374	Three-way Decision Models of Cognitive Computing in Pythagorean Fuzzy Environments. 1		1
373	Multi-granular Intuitionistic Fuzzy Three-Way Decision Model Based on the Risk Preference Outranking Relation. 1		1
372	3-Way Concept Analysis Based on 3-Valued Formal Contexts. 1		4
371	A novel three-way group investment decision model under intuitionistic fuzzy multi-attribute group decision-making environment. <i>Information Sciences</i> , <b>2021</b> , 569, 557-581	7-7	12
370	A Multi-Criteria Three-Way Decision Making Method in a Picture Fuzzy Probabilistic Decision System. 1		0
369	Fuzzy portfolio selection based on three-way decision and cumulative prospect theory. <b>2022</b> , 13, 293		4
368	Uncertainty quantification in skin cancer classification using three-way decision-based Bayesian deep learning. <b>2021</b> , 135, 104418		29
367	The effectiveness of three-way classification with interpretable perspective. <i>Information Sciences</i> , <b>2021</b> , 567, 237-255	7-7	9
366	A novel grey multi-criteria three-way decisions model and its application. <b>2021</b> , 158, 107405		8
365	Three-way decisions based on some Hamacher aggregation operators under double hierarchy linguistic environment. <b>2021</b> , 36, 7731		2
364	A three-way decision methodology to multi-attribute decision-making in multi-scale decision information systems. <i>Information Sciences</i> , <b>2021</b> , 568, 175-198	7-7	12
363	Three-way decision based on third-generation prospect theory with Z-numbers. <i>Information Sciences</i> , <b>2021</b> , 569, 13-38	7-7	18

362	A new classification and ranking decision method based on three-way decision theory and TOPSIS models. <i>Information Sciences</i> , <b>2021</b> , 568, 54-85	7.7	12
361	Three-way recommendation model based on shadowed set with uncertainty invariance. <b>2021</b> , 135, 53-70		5
360	A novel fusion-based deep learning model for sentiment analysis of COVID-19 tweets. <b>2021</b> , 228, 107242		23
359	Decision-theoretic five-way approximation of fuzzy sets. <i>Information Sciences</i> , <b>2021</b> , 572, 200-222	7.7	2
358	Three-way Naive Bayesian Collaborative Filtering Recommendation Model for Smart City. <b>2021</b> , 76, 103373		4
357	Multi-attribute group three-way decision making with degree-based linguistic term sets. <b>2021</b> , 137, 69-93		2
356	Convex combination-based consensus analysis for intuitionistic fuzzy three-way group decision. <i>Information Sciences</i> , <b>2021</b> , 574, 542-566	7.7	14
355	A three-way decision method based on fuzzy rough set models under incomplete environments. <i>Information Sciences</i> , <b>2021</b> , 577, 22-48	7.7	8
354	Novel three-way generative classifier with weighted scoring distribution. <i>Information Sciences</i> , <b>2021</b> , 579, 732-750	7.7	1
353	Granular-conditional-entropy-based attribute reduction for partially labeled data with proxy labels. <i>Information Sciences</i> , <b>2021</b> , 580, 111-128	7.7	2
352	TWD-SFNN: Three-way decisions with a single hidden layer feedforward neural network. <i>Information Sciences</i> , <b>2021</b> , 579, 15-32	7.7	14
351	A decision-theoretic fuzzy rough set in hesitant fuzzy information systems and its application in multi-attribute decision-making. <i>Information Sciences</i> , <b>2021</b> , 579, 103-127	7.7	15
350	A novel three-way decision approach under hesitant fuzzy information. <i>Information Sciences</i> , <b>2021</b> , 578, 482-506	7.7	6
349	Multi-attribute three-way decisions based on ideal solutions under interval-valued intuitionistic fuzzy environment. <b>2021</b> , 138, 12-37		3
348	A novel multi-granularity three-way decision making approach in q-rung orthopair fuzzy information systems. <b>2021</b> , 138, 161-187		6
347	Detecting influential news in online communities: An approach based on hexagons of opposition generated by three-way decisions and probabilistic rough sets. <i>Information Sciences</i> , <b>2021</b> , 578, 364-377	7.7	2
346	An online reviews-driven method for the prioritization of improvements in hotel services. <b>2021</b> , 87, 104382		8
345	Classifying the degree of exposure of customers to COVID-19 in the restaurant industry: A novel intuitionistic fuzzy set extension of the TOPSIS-Sort. <b>2021</b> , 113, 107906		6

344	Three-way conflict analysis based on hesitant fuzzy information systems. <b>2021</b> , 139, 12-27		3
343	A novel approach of three-way decisions with information interaction strategy for intelligent decision making under uncertainty. <i>Information Sciences</i> , <b>2021</b> , 581, 106-135	7-7	3
342	A three-way decision approach with probabilistic dominance relations under intuitionistic fuzzy information. <i>Information Sciences</i> , <b>2022</b> , 582, 114-145	7-7	10
341	An automatic three-way clustering method based on sample similarity. <b>2021</b> , 12, 1545-1556		1
340	On Three Types of Soft Rough Covering-Based Fuzzy Sets. <b>2021</b> , 2021, 1-9		8
339	Generalized multigranulation fuzzy rough sets based on upward additive consistency. <b>2021</b> , 25, 3377-3401		1
338	Consensus reaching with the externality effect of social network for three-way group decisions. 1		2
337	Work Resumption After Epidemic Using Three-Way Decisions. <b>2021</b> , 23, 630-641		6
336	A novel three-way decision model based on utility theory in incomplete fuzzy decision systems. <b>2021</b> , 1-1		25
335	Incremental Sequential Three-Way Decision Using a Deep Stacked Autoencoder. <b>2019</b> , 409-423		1
334	Three-Way Decision for Handling Uncertainty in Machine Learning: A Narrative Review. <b>2020</b> , 137-152		11
333	Three-Way Decisions Community Detection Model Based on Weighted Graph Representation. <b>2020</b> , 153-165		2
332	An Adjusted Apriori Algorithm to Itemsets Defined by Tables and an Improved Rule Generator with Three-Way Decisions. <b>2020</b> , 95-110		1
331	A Graph-Based Keyphrase Extraction Model with Three-Way Decision. <b>2020</b> , 111-121		3
330	Evidential Deep Neural Networks for Uncertain Data Classification. <b>2020</b> , 427-437		2
329	On Interpreting Three-Way Decisions through Two-Way Decisions. <b>2014</b> , 73-82		2
328	Incremental Three-Way Decisions with Incomplete Information. <b>2014</b> , 128-135		5
327	Cost-Sensitive Three-Way Decisions Model Based on CCA. <b>2014</b> , 172-180		5

326	Hybrid Model Based on Rough Sets Theory and Fuzzy Cognitive Maps for Decision-Making. <b>2014</b> , 169-178	6
325	Cost-Sensitive Sequential Three-Way Decision for Face Recognition. <b>2014</b> , 375-383	5
324	Three-Way Weighted Entropies and Three-Way Attribute Reduction. <b>2014</b> , 707-719	4
323	Applying Three-way Decisions to Sentiment Classification with Sentiment Uncertainty. <b>2014</b> , 720-731	5
322	Three-Way Formal Concept Analysis. <b>2014</b> , 732-741	53
321	A Three-Way Decisions Clustering Algorithm for Incomplete Data. <b>2014</b> , 765-776	11
320	Sentiment Analysis with Automatically Constructed Lexicon and Three-Way Decision. <b>2014</b> , 777-788	4
319	A Novel Intelligent Multi-attribute Three-Way Group Sorting Method Based on Dempster-Shafer Theory. <b>2014</b> , 789-800	4
318	An Overview of Function Based Three-Way Decisions. <b>2014</b> , 812-823	4
317	An Integrated Method for Micro-blog Subjective Sentence Identification Based on Three-Way Decisions and Naive Bayes. <b>2014</b> , 844-855	9
316	PICKT: A Solution for Big Data Analysis. <b>2015</b> , 15-25	11
315	A Multi-view Decision Model Based on CCA. <b>2015</b> , 266-274	3
314	Decision-Level Sensor-Fusion Based on DTRS. <b>2015</b> , 321-332	1
313	Region Vector Based Attribute Reducts in Decision-Theoretic Rough Sets. <b>2015</b> , 355-365	1
312	How to Evaluate Three-Way Decisions Based Binary Classification?. <b>2015</b> , 366-375	1
311	Optimistic Decision-Theoretic Rough Sets in Multi-covering Space. <b>2016</b> , 282-293	2
310	Rough Sets in Machine Learning: A Review. <b>2017</b> , 87-118	15
309	C&E Re-clustering: Reconstruction of Clustering Results by Three-Way Strategy. <b>2017</b> , 540-549	1

308	Covering-Based Optimistic Multigranulation Decision-Theoretic Rough Sets Based on Maximal Descriptors. <b>2017</b> , 238-248	1
307	Sequential Three-Way Decisions in Efficient Classification of Piecewise Stationary Speech Signals. <b>2017</b> , 264-277	7
306	A Three-Way Recommender System for Popularity-Based Costs. <b>2017</b> , 278-289	4
305	Three-Way Decisions Based on Intuitionistic Fuzzy Sets. <b>2017</b> , 290-299	7
304	The Research of Attribute Granular Computing Model in Cognitive and Decision-Making. <b>2017</b> , 93-103	2
303	A Method for Boundary Processing in Three-Way Decisions Based on Hierarchical Feature Representation. <b>2018</b> , 123-136	1
302	Naive Bayesian Rough Sets. <b>2010</b> , 719-726	50
301	Attribute Reduction in Decision-Theoretic Rough Set Model: A Further Investigation. <b>2011</b> , 466-475	29
300	A New Discriminant Analysis Approach under Decision-Theoretic Rough Sets. <b>2011</b> , 476-485	11
299	Automatically Determining the Number of Clusters Using Decision-Theoretic Rough Set. <b>2011</b> , 504-513	18
298	A New Formulation of Multi-category Decision-Theoretic Rough Sets. <b>2011</b> , 514-522	17
297	An Empirical Comparison of Rule Sets Induced by LERS and Probabilistic Rough Classification. <b>2013</b> , 261-276	6
296	Semi-supervised Vehicle Recognition: An Approximate Region Constrained Approach. <b>2012</b> , 161-166	1
295	Cost-Sensitive Classification Based on Decision-Theoretic Rough Set Model. <b>2012</b> , 379-388	19
294	Decision-Theoretic Rough Sets with Probabilistic Distribution. <b>2012</b> , 389-398	14
293	An Outline of a Theory of Three-Way Decisions. <b>2012</b> , 1-17	183
292	Three-Way Decisions Solution to Filter Spam Email: An Empirical Study. <b>2012</b> , 287-296	29
291	An Extension to Rough c-Means Clustering Algorithm Based on Boundary Area Elements Discrimination. <b>2013</b> , 17-33	3

290	Three-Way Decision Based Overlapping Community Detection. <b>2013</b> , 279-290	4
289	Three-Way Decisions in Dynamic Decision-Theoretic Rough Sets. <b>2013</b> , 291-301	18
288	Granular Computing and Sequential Three-Way Decisions. <b>2013</b> , 16-27	56
287	Cost-Sensitive Three-Way Decision: A Sequential Strategy. <b>2013</b> , 325-337	25
286	Two-Phase Classification Based on Three-Way Decisions. <b>2013</b> , 338-345	4
285	A Three-Way Decisions Model Based on Constructive Covering Algorithm. <b>2013</b> , 346-353	10
284	A Scientometrics Study of Rough Sets in Three Decades. <b>2013</b> , 28-40	6
283	Probabilistic Approaches to the Rough Set Theory and Their Applications in Decision-Making. <b>2014</b> , 67-80	2
282	A Three-Way Decisions Approach to Density-Based Overlapping Clustering. <b>2014</b> , 92-109	3
281	Three-Way Decisions in Stochastic Decision-Theoretic Rough Sets. <b>2014</b> , 110-130	2
280	Three-Way Decisions Versus Two-Way Decisions on Filtering Spam Email. <b>2014</b> , 69-91	7
279	A Three-Way Decisions Approach to Density-Based Overlapping Clustering. <b>2014</b> , 92-109	6
278	Three-Way Decisions in Stochastic Decision-Theoretic Rough Sets. <b>2014</b> , 110-130	10
277	Partial-overall dominance three-way decision models in interval-valued decision systems. <b>2020</b> , 126, 308-325	14
276	Information measure of absolute and relative quantification in double-quantitative decision-theoretic rough set model. <b>2018</b> , 2018, 1436-1441	3
275	Rough set-based rule generation and Apriori-based rule generation from table data sets: a survey and a combination. <b>2019</b> , 4, 203-213	6
274	A Regret-Based Three-Way Decision Model Under Interval Type-2 Fuzzy Environment. <b>2020</b> , 1-1	16
273	Certain Types of Covering-Based Multigranulation ( I , T )-Fuzzy Rough Sets with Application to Decision-Making. <b>2020</b> , 2020, 1-20	11

272	The Approach to Probabilistic Decision-Theoretic Rough Set in Intuitionistic Fuzzy Information Systems. <b>2020</b> , 12, 1-26		2
271	Soft Rough q-Rung Orthopair m-Polar Fuzzy Sets and q-Rung Orthopair m-Polar Fuzzy Soft Rough Sets and Their Applications. <b>2021</b> , 9, 139186-139200		2
270	Loss function information fusion and decision rule deduction of three-way decisions by construing interval-valued q-Rung Orthopair fuzzy integral. <b>2021</b> , 1-1		2
269	Incremental updating three-way regions with variations of objects and attributes in incomplete neighborhood systems. <i>Information Sciences</i> , <b>2021</b> , 584, 479-479	7.7	0
268	Conflict analysis based on three-way decision for trapezoidal fuzzy information systems. 1		2
267	Corrigendum to "Comparison of six types of rough approximations based on j-neighborhood space and j-adhesion neighborhood space". <b>2021</b> , 1-9		3
266	Failure mode and effect analysis: A three-way decision approach. <b>2021</b> , 106, 104505		1
265	TWD-R: A three-way decision approach based on regret theory in multi-scale decision information systems. <i>Information Sciences</i> , <b>2021</b> , 581, 711-739	7.7	6
264	Three-Way Decision Based on Belief Function. <b>2014</b> , 742-752		
263	Acquisition and Reduction of Incomplete Decision Information System Based on Similarity and Dissimilarity Knowledge Granules. <b>2014</b> , 13, 1140-1146		
262	Decisions Tree Learning Method Based on Three-Way Decisions. <b>2015</b> , 389-400		2
261	A Decision-Theoretic Rough Set Approach to Multi-class Cost-Sensitive Classification. <b>2016</b> , 250-260		1
260	Three-Way Decisions Based Multi-label Learning Algorithm with Label Dependency. <b>2016</b> , 240-249		1
259	Experimental Framework: Bankruptcy Prediction Using Soft Computing Based Deep Learning Technique. <b>2017</b> , 21-37		
258	A Multi-objective Attribute Reduction Method in Decision-Theoretic Rough Set Model. <b>2017</b> , 117-128		
257	An Efficient Incremental Mining Algorithm for Dynamic Databases. <b>2017</b> , 1-12		2
256	Dynamic Three Way Decisions and Its Application Based on Two-Direction PS-Probabilistic Rough Set. <b>2017</b> , 376-389		
255	Three-Way Decisions Cost Model Based on Continuous Domain. <b>2017</b> , 340-358		

254	A Proposal of Machine Learning by Rule Generation from Tables with Non-deterministic Information and Its Prototype System. <b>2017</b> , 535-551		
253	A Review on Rough Set-Based Interrelationship Mining. <b>2017</b> , 257-273		3
252	A Self-adaptive Cascade ConvNets Model Based on Three-Way Decision Theory. <b>2017</b> , 433-444		0
251	Three-Way Decisions with DEA Approach. <b>2017</b> , 226-237		1
250	Ensemble Re-clustering: Refinement of Hard Clustering by Three-Way Strategy. <b>2017</b> , 423-430		1
249	Rough-Set-Based Decision Model for Incomplete Information Systems. <b>2018</b> , 2200-2212		
248	An Adaptive Three-Way Clustering Algorithm for Mixed-Type Data. <b>2018</b> , 379-388		1
247	An Ensemble Classifier Based on Three-Way Decisions for Social Touch Gesture Recognition. <b>2018</b> , 370-379		1
246	Considerations on Rule Induction Methods by the Conventional Rough Set Theory from a View of STRIM. <b>2018</b> , 202-214		1
245	Introduction. <b>2019</b> , 1-6		
244	Rough-Set-Based Decision Model for Incomplete Information Systems. <b>2019</b> , 748-763		
243	CSLI: Cost-Sensitive Collaborative Filtering with Local Information Embedding. <b>2019</b> , 321-330		
242	A Combined Weighted Concept Lattice for Multi-source Semantic Interoperability of ECG-Ontologies Based on Inclusion Degree and Information Entropy. <b>2019</b> , 109-130		
241	Three-Way Clustering Analysis Based on Voting Theory. <b>2019</b> , 09, 2349-2356		
240	Three-way decision of target threat decision making based on adaptive threshold algorithms. <b>2020</b> , 2020, 293-297		1
239	Rough Sets Non-Deterministic Information Analysis and a NIS-Apriori System [A Rule Generation System Based on Possible World Semantics] <b>2020</b> , 32, 747-758		
238	A novel approach to three-way conflict analysis and resolution with Pythagorean fuzzy information. <i>Information Sciences</i> , <b>2021</b> , 584, 65-65	7-7	4
237	An integrated approach based on the decision-theoretic rough set for resilient-sustainable supplier selection and order allocation. <b>2021</b> , ahead-of-print,		



236	AMG-DTRS: Adaptive multi-granulation decision-theoretic rough sets. <b>2022</b> , 140, 7-30		4
235	Random sampling accelerator for attribute reduction. <b>2022</b> , 140, 75-91		2
234	Hierarchical sequential three-way decision model. <b>2022</b> , 140, 156-172		2
233	Exploring ensemble oversampling method for imbalanced keyword extraction learning in policy text based on three-way decisions and SMOTE. <b>2022</b> , 188, 116051		1
232	NTP-Miner: Nonoverlapping Three-Way Sequential Pattern Mining. <b>2022</b> , 16, 1-21		5
231	Three-way decision based on canonical soft sets of hesitant fuzzy sets. <b>2021</b> , 7, 2061-2083		4
230	On Some Types of Multigranulation Covering Based on Binary Relations. <b>2021</b> , 2021, 1-12		
229	Comparison of twelve types of rough approximations based on j-neighborhood space and j-adhesion neighborhood space. 1		0
228	Updating knowledge in multigranulation decision-theoretic rough set model based on decision support degree. <b>2020</b> , 2020, 335-343		2
227	In Search of Effective Granulization with DTRS for Ternary Classification. 237-248		
226	An Intrusion Detection Approach Based on Autoencoder and Three-way Decisions. <b>2020</b> ,		
225	Three-way multi-granularity learning towards open topic classification. <i>Information Sciences</i> , <b>2022</b> , 585, 41-57	7.7	1
224	Three-way group consensus decision based on hierarchical social network consisting of decision makers and participants. <i>Information Sciences</i> , <b>2022</b> , 585, 289-312	7.7	3
223	Sequential three-branch decision method based on Bayesian principle. <b>2021</b> ,		
222	Rough set model based on variable universe.		0
221	Mixed data-driven sequential three-way decision via subjective-objective dynamic fusion. <b>2021</b> , 237, 107728		1
220	A comparative study of different granular structures induced from the information systems. 1		0
219	Topological approach to generalized soft rough sets via near concepts. 1		3

218	On Some Types of Covering-Based I , T -Fuzzy Rough Sets and Their Applications. <b>2021</b> , 2021, 1-18		
217	Redefined fuzzy rough set models in fuzzy $\mathbb{E}$ -covering group approximation spaces. <b>2021</b> ,		2
216	An improved three-way decision model based on prospect theory. <b>2021</b> , 142, 109-109		1
215	Three-way decision model under a large-scale group decision-making environment with detecting and managing non-cooperative behaviors in consensus reaching process. 1		0
214	A cost-sensitive temporal-spatial three-way recommendation with multi-granularity decision. <i>Information Sciences</i> , <b>2022</b> ,	7-7	2
213	Three-way approximate reduct based on information-theoretic measure. <b>2022</b> , 142, 324-337		1
212	Incremental updating probabilistic approximations under multi-level and multi-dimensional variations in hybrid incomplete decision systems. <b>2022</b> , 142, 206-230		0
211	Granular rough sets and granular shadowed sets: Three-way approximations in Pawlak approximation spaces. <b>2022</b> , 142, 231-247		2
210	Optimization and decision-making of novel laser-induced thermal therapy for deep-lying tumor based on multi-objective genetic algorithm and three-way decisions method. <b>2022</b> , 104, 682-700		1
209	On three perspectives for deriving three-way decision with linguistic intuitionistic fuzzy information. <i>Information Sciences</i> , <b>2022</b> , 588, 350-380	7-7	6
208	A three-way decision approach with risk strategies in hesitant fuzzy decision information systems. <i>Information Sciences</i> , <b>2022</b> , 588, 293-314	7-7	3
207	Multi-grained rough set in job guidance for college graduates. <b>2020</b> ,		
206	Pessimistic-optimistic multi-granularity decision rough set attribute reduction algorithm under incomplete relations. <b>2021</b> ,		
205	Optimisation of Thresholds in Probabilistic Rough Sets with Artificial Bee Colony Algorithm. <b>2021</b> , 13, 522-539		
204	Item-Based Three-Way Decision Recommendation System. <b>2022</b> , 12, 187-198		
203	Dynamic maintenance of variable precision fuzzy neighborhood three-way regions in interval-valued fuzzy decision system. 1		0
202	A hybridized rough set and bat-inspired algorithm for knowledge inferencing in the diagnosis of chronic liver disease. 1		3
201	Adaptive Three-Way C-Means Clustering Based on the Cognition of Distance Stability.		0

200	Therapeutic Reasoning: A Conceptual Challenge for Medical Students' Surgical Clerkship.. <b>2022</b> , 1-6		
199	Sequential optimization three-way decision model with information gain for credit default risk evaluation. <b>2022</b> ,		1
198	Three-Way Decision Models Based on Multi-granulation Rough Intuitionistic Hesitant Fuzzy Sets. 1		1
197	Three-Way Ensemble Prediction for Workload in the Data Center. <b>2022</b> , 10, 10021-10030		2
196	Three-Way Decision Making Based on Data Envelopment Analysis with Interval Data. 1		0
195	A new three-way group decision-making model based on geometric heronian mean operators with q-rung orthopair uncertain linguistic information. <b>2022</b> , 1-20		1
194	Fuzzy covering-based rough set on two different universes and its application. 1		2
193	Multigranulation double-quantitative decision-theoretic rough sets based on logical operations. 1		1
192	A new three-way multi-criteria decision-making method with fuzzy complementary preference relations based on additive consistency. <i>Information Sciences</i> , <b>2022</b> , 592, 277-305	7.7	3
191	Cq-ROFRS: covering q-rung orthopair fuzzy rough sets and its application to multi-attribute decision-making process. 1		3
190	GLRM: Logical pattern mining in the case of inconsistent data distribution based on multigranulation strategy. <b>2022</b> , 143, 78-101		
189	Three-way decision based on confidence level change in rough set. <b>2022</b> , 143, 57-77		3
188	Local Neighborhood Rough Sets and Attribute Reduction in Information Systems. <b>2022</b> , 12, 264-275		
187	A Class of Stochastic Programming Model in Investment Portfolio Based on Covering Rough Set. <b>2022</b> , 2022, 1-12		1
186	Comprehensive fuzzy concept-oriented three-way decision and its application. <i>Information Sciences</i> , <b>2022</b> ,	7.7	0
185	A generalized model of three-way decision with ranking and reference tuple. <b>2022</b> , 144, 51-68		0
184	A novel method to attribute reduction based on weighted neighborhood probabilistic rough sets. <b>2022</b> , 144, 1-17		2
183	Hybrid sensing-based approach for the monitoring and maintenance of shared manufacturing resources. 1-19		3

182	Sequential Three-Way Decisions for Reducing Uncertainty in Dropout Prediction for Online Courses. <b>2022</b> , 46-55			
181	Real-time Monitoring and Control of the Breakthrough Stage in Ultrafast Laser Drilling based on Sequential Three-way Decision. <b>2022</b> , 1-1			
180	Multi-granularity decision rough set attribute reduction algorithm under quantum particle swarm optimization.			0
179	A multiple attribute decision-making three-way model at four-branch fuzzy environment. <b>2022</b> , 1-12			
178	The cost-sensitive approximation of neighborhood rough sets and granular layer selection. <b>2022</b> , 42, 3993-4003			0
177	Enhancing drug-drug interaction prediction by three-way decision and knowledge graph embedding. 1			0
176	Sequential multi-class three-way decisions based on cost-sensitive learning. <b>2022</b> ,			1
175	Decision-Theoretic Rough Sets based automated scheme for object and background classification in unevenly illuminated images. <b>2022</b> , 119, 108596			1
174	Multiview sequential three-way decisions based on partition order product space. <i>Information Sciences</i> , <b>2022</b> ,	7.7		2
173	A three-way decision method with pre-order relations. <i>Information Sciences</i> , <b>2022</b> , 595, 231-256	7.7		4
172	A novel granular computing model based on three-way decision. <b>2022</b> , 144, 92-112			1
171	Thresholds learning of three-way decisions in pairwise crime linkage. <b>2022</b> , 120, 108638			0
170	A regret theory-based three-way decision approach with three strategies. <i>Information Sciences</i> , <b>2022</b> , 595, 89-118	7.7		3
169	A landscape and implementation framework for probabilistic rough sets using ProbLog. <i>Information Sciences</i> , <b>2022</b> , 593, 546-576	7.7		0
168	Temporal-spatial three-way granular computing for dynamic text sentiment classification. <i>Information Sciences</i> , <b>2022</b> , 596, 551-566	7.7		3
167	Three-way multi-criteria group decision-making method in a fuzzy covering group approximation space. <i>Information Sciences</i> , <b>2022</b> , 599, 1-24	7.7		2
166	Three-way conflict analysis based on incomplete situation tables: A tentative study. <b>2022</b> , 145, 51-74			3
165	Dynamic three-way neighborhood decision model for multi-dimensional variation of incomplete hybrid data. <i>Information Sciences</i> , <b>2022</b> , 597, 358-391	7.7		1

164	Three-way decision with conflict analysis approach in the framework of fuzzy set theory. <b>2022</b> , 26, 309-326	2
163	Optimal Decision-Making Model of Agricultural Product Information Based on Three-Way Decision Theory. <b>2022</b> , 12, 41	
162	Double-Quantitative-Based Knowledge Reduction Approach to Inconsistency Information System. <b>2021</b> ,	
161	Threat Assessment for Aerial Targets Based on Three-way Multi-criteria Decision Making. <b>2021</b> ,	0
160	Optimal Scale Combinations Selection for Incomplete Generalized Multi-scale Decision Systems. <b>2021</b> ,	
159	Pneumonia Detection with Game-theoretic Rough Sets. <b>2021</b> ,	
158	Inclusion degree-based multigranulation rough fuzzy set over heterogeneous preference information and application to multiple attribute group decision making. 1	
157	A Novel Approach of Feature Space Reconstruction with Three-Way Decisions for Long-Tailed Text Classification.. <b>2022</b> , 2022, 3183469	
156	Adaptively weighted three-way decision oversampling: A cluster imbalanced-ratio based approach.	1
155	A unified incremental updating framework of attribute reduction for two-dimensionally time-evolving data. <i>Information Sciences</i> , <b>2022</b> , 601, 287-305	7.7 0
154	An error correction prediction model based on three-way decision and ensemble learning. <b>2022</b> , 146, 21-46	1
153	A novel attribute reduction method based on intuitionistic fuzzy three-way cognitive clustering. 1	0
152	Three-way investment decisions during the epidemic with Choquet-based bi-projection method. 1	
151	Local Knowledge Distance for Rough Approximation Measure in Multi-granularity Spaces. <i>Information Sciences</i> , <b>2022</b> ,	7.7 2
150	The updating methods of object-induced three-way concept in dynamic formal contexts. 1	1
149	A shadowed set-based three-way clustering ensemble approach. 1	0
148	General three-way decision models on incomplete information tables. <i>Information Sciences</i> , <b>2022</b> ,	7.7 1
147	An optimization viewpoint on evaluation-based interval-valued multi-attribute three-way decision model. <i>Information Sciences</i> , <b>2022</b> , 603, 60-90	7.7 0

146	A three-way multi-attribute decision making method based on regret theory and its application to medical data in fuzzy environments. <b>2022</b> , 123, 108975		1
145	A Novel Sequential Three-Way Decision Model for Medical Diagnosis. <b>2022</b> , 14, 1004		
144	Superiority of three-way decisions from the perspective of probability.		0
143	Regret theory-based three-way decision model in hesitant fuzzy environments and its application to medical decision. <b>2022</b> , 1-1		3
142	Incomplete three-way multi-attribute group decision making based on adjustable multigranulation Pythagorean fuzzy probabilistic rough sets. <b>2022</b> , 147, 40-59		4
141	Concept learning consistency under three-way decision paradigm.		0
140	A novel three-way decision model with DEA method. <b>2022</b> ,		0
139	A novel behavioral three-way decision model with application to the treatment of mild symptoms of COVID-19. <b>2022</b> , 109055		0
138	Label enhancement-based feature selection via fuzzy neighborhood discrimination index. <b>2022</b> , 109119		0
137	Incremental maintenance of three-way regions with variations of objects and values in hybrid incomplete decision systems.		
136	A decision support system for diagnosis of hepatitis disease using an integrated rough set and fish swarm algorithm.		1
135	Reject inference in credit scoring using a three-way decision and safe semi-supervised support vector machine. <i>Information Sciences</i> , <b>2022</b> , 606, 614-627	7.7	0
134	The semantics of N-soft sets, their applications, and a coda about three-way decision. <i>Information Sciences</i> , <b>2022</b> , 606, 837-852	7.7	4
133	A Novel Method for Decision Making by Double-Quantitative Rough Sets in Hesitant Fuzzy Systems. <b>2022</b> , 10, 2069		
132	Three-Way Group Decisions with Incomplete Spherical Fuzzy Information for Treating Parkinson's Disease Using IoMT Devices. <b>2022</b> , 2022, 1-13		
131	Network rule extraction under the network formal context based on three-way decision.		0
130	Investigation of features causing semantic mergers of English modal verbs by approach of attribute partial order diagram. <b>2022</b> , 1-11		
129	Special section on credit risk modelling. Guest editorial. <b>2022</b> , 38, 1051-1053		

128	Semi-supervised shadowed sets for three-way classification on partial labeled data. <i>Information Sciences</i> , <b>2022</b> , 607, 1372-1390	7.7	0
127	Fuzzy Rough Set Decision Algorithms. <b>2022</b> , 63-76		
126	Comparing Hexagons of Opposition in Probabilistic Rough Set Theory. <b>2022</b> , 622-633		
125	A multi-criterion three-way decision-making method under linguistic interval-valued intuitionistic fuzzy environment.		2
124	Three-way sampling for rapid attribute reduction. <i>Information Sciences</i> , <b>2022</b> ,	7.7	1
123	Three-Way Decision Models Based on Ideal Relations in Multi-Attribute Decision-Making. <b>2022</b> , 24, 986		
122	Boundary region-based variable precision covering rough set models. <i>Information Sciences</i> , <b>2022</b> , 608, 1524-1540	7.7	0
121	A three-way decision method with prospect theory to multi-attribute decision-making and its applications under hesitant fuzzy environments. <b>2022</b> , 126, 109283		1
120	A novel interval-valued three-way decision theory under multiple criteria environment. <b>2022</b> , 109522		1
119	Exploring three-way group decisions with consensus evolution network for software ecosystem hierarchical criteria health rating. 1-18		
118	Multi-granularity visual explanations for CNN. <b>2022</b> , 109474		1
117	Three-way decisions based service migration strategy in mobile edge computing. <i>Information Sciences</i> , <b>2022</b> , 609, 533-547	7.7	0
116	Ensemble learning using three-way density-sensitive spectral clustering. <b>2022</b> , 149, 70-84		1
115	Uncertainty analysis in document publications using single-valued neutrosophic set and collaborative entropy.		
114	A hybrid approach to three-way conversational recommendation.		
113	Research on Hybrid Multi-Attribute Three-Way Group Decision Making Based on Improved VIKOR Model. <b>2022</b> , 10, 2783		
112	Three-way decision-based tri-training with entropy minimization. <b>2022</b> , 610, 33-51		0
111	Three-way decisions method based on matrices approaches oriented dynamic interval-valued information system. <b>2022</b> , 149, 116-130		

- 110 Cost-sensitive sequential three-way decision for information system with fuzzy decision. **2022**, 149, 85-103 1
- 109 Label distribution learning with noisy labels via three-way decisions. **2022**, 150, 19-34
- 108 A three-way decision approach with S-shaped utility function under Pythagorean fuzzy information. **2022**, 210, 118370 1
- 107 An Improved Three-Way K-Means Algorithm by Optimizing Cluster Centers. **2022**, 14, 1821 0
- 106 A constructing approach to multi-granularity object-induced three-way concept lattices. **2022**, 150, 229-241 1
- 105 Parameterized maximum-entropy-based three-way approximate attribute reduction. **2022**, 151, 85-100 0
- 104 A regret-theory-based three-way decision method with a priori probability tolerance dominance relation in fuzzy incomplete information systems. **2023**, 89, 382-396 0
- 103 Regret-based three-way decision making with possibility dominance and SPA theory in incomplete information system. **2023**, 211, 118688 0
- 102 Novel rough set theory-based method for epistemic uncertainty modeling, analysis and applications. **2023**, 113, 456-474 0
- 101 A Three-Way Group Decision-Making Approach Based on  $\Gamma$ Mixture Risk. **2022**, 124-132 0
- 100 Regret Theory-Based Three-Way Decision Method on Incomplete Multi-Scale Decision Information Systems With Interval Fuzzy Numbers. **2022**, 1-15 2
- 99 Platform-Based Corporate Social Responsibility Evaluation with  $\Gamma$ Three-Way Group Decisions Under Q-Rung Orthopair Fuzzy Environment. **2022**, 333-355 0
- 98 A Three-Way Decision Approach Combining Probabilistic and Decision-Theoretic Rough Set. **2022**, 0
- 97 Simultaneous-Fault Diagnosis of Satellite Power System Based on Fuzzy Neighborhood  $\Gamma$ Decision-Theoretic Rough Set. **2022**, 10, 3414 0
- 96 Matroidal structures on S-approximation spaces. **2022**, 26, 11231-11242 0
- 95 Number characteristics of information granules in information tables. 0
- 94 Three-way decision with ranking and reference tuple on information tables. **2022**, 613, 682-716 0
- 93 Decision self-information based on parameterized fuzzy  $\Gamma$ neighborhood and its application in three-way multi-attribute group decision-making. **2022**, 30, 4553-4573 0



92	Three-Way Clustering Based on Attribute In-tegration. <b>2022</b> , 11, 7317-7324	0
91	Three-way multi-attribute decision-making with multiple decision makers in heterogeneous incomplete decision systems.	0
90	Three-way preconcept and two forms of approximation operators.	1
89	Formal concept analysis perspectives on three-way conflict analysis. <b>2022</b> ,	0
88	DeeBERT-S3WD: Three-Way Multigranularity Decision for Interactive Information Sentiment Analysis Research. <b>2022</b> , 2022, 1-15	0
87	A three-way decision approach with prospect-regret theory via fuzzy set pair dominance degrees for incomplete information systems. <b>2022</b> ,	0
86	A three-way decision method under probabilistic linguistic term sets and its application to Air Quality Index. <b>2022</b> ,	0
85	Multi-criteria Large-Scale Group Decision-Making in Linguistic Contexts: A Perspective of Conflict Analysis and Resolution.	0
84	An artificial bee colony-based framework for multi-objective optimization of three-way decisions with probabilistic rough sets. <b>2022</b> , 1-19	0
83	A prospect-regret theory-based three-way decision model with intuitionistic fuzzy numbers under incomplete multi-scale decision information systems. <b>2022</b> , 119144	0
82	Sequential 3WD-based local optimal scale selection in dynamic multi-scale decision information systems. <b>2022</b> ,	0
81	Classification of the wind turbine components based on importance degrees: A three-way decision perspective. <b>2022</b> , 109754	0
80	Generalized multigranulation sequential three-way decision models for hierarchical classification. <b>2022</b> , 616, 66-87	0
79	Three-way decision approach for water ecological security evaluation and regulation coupled with VIKOR: A case study in Beijing-Tianjin-Hebei region. <b>2022</b> , 379, 134666	0
78	A Large Scale Group Three-Way Decision-based consensus model for site selection of New Energy Vehicle charging stations. <b>2023</b> , 214, 119107	1
77	Three-way Decision, Three-World Conception, and Explainable AI. <b>2022</b> , 39-53	0
76	Adaptive K-means Algorithm Based on Three-Way Decision. <b>2022</b> , 390-404	0
75	Attribute Reduction of Crisp-Crisp Concept Lattices Based on Three-Way Decisions. <b>2022</b> , 361-375	0

- 74 Update of optimal scale in dynamic multi-scale decision information systems. **2023**, 152, 310-324 ○
- 73 Logical coherence in Bayesian simultaneous three-way hypothesis tests. **2023**, 152, 297-309 ○
- 72 Neighborhood rough cognitive networks. **2022**, 109796 ○
- 71 New constructions of decision evaluation functions in three-way decision spaces based on uninorms. ○
- 70 Soft ordered double quantitative approximations based three-way decisions and their applications. **2022**, 12, ○
- 69 A review of sequential three-way decision and multi-granularity learning. **2022**, ○
- 68 A three-way classification with fuzzy decision trees. **2022**, 109788 1
- 67 A New Three-way Multi-attribute Decision Making Based on Regret Theory and TOPSIS Model. **2022**, ○
- 66 Multi-granularity sequential three-way recommendation based on collaborative deep learning. **2022**, ○
- 65 A method for incremental updating three-way decision with incomplete information system. **2022**, 59-71 ○
- 64 The intuitionistic fuzzy concept-oriented three-way decision model. **2023**, 619, 52-83 1
- 63 Three-way failure mode and effect analysis approach for reliability management in multigranular unbalanced linguistic contexts. **2023**, 175, 108909 ○
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