Masahiro Inuiguchi

List of Publications by Year
in descending order

90 papers	2,008 citations	361045 20 h-index	253896 43 g-index
92 all docs	92 docs citations	92 times ranked	915 citing authors

#	Article	IF	Citations
1	Possibilistic linear programming: a brief review of fuzzy mathematical programming and a comparison with stochastic programming in portfolio selection problem. Fuzzy Sets and Systems, 2000, 111, 3-28.	1.6	648
2	Minimax regret solution to linear programming problems with an interval objective function. European Journal of Operational Research, 1995, 86, 526-536.	3.5	176
3	Portfolio selection under independent possibilistic information. Fuzzy Sets and Systems, 2000, 115, 83-92.	1.6	158
4	Fuzzy rough sets and multiple-premise gradual decision rules. International Journal of Approximate Reasoning, 2006, 41, 179-211.	1.9	139
5	Robust optimization under softness in a fuzzy linear programming problem. International Journal of Approximate Reasoning, 1998, 18, 21-34.	1.9	81
6	Possible and necessary efficiency in possibilistic multiobjective linear programming problems and possible efficiency test. Fuzzy Sets and Systems, 1996, 78, 231-241.	1.6	72
7	Modality constrained programming problems: A unified approach to fuzzy mathematical programming problems in the setting of possibility theory. Information Sciences, 1993, 67, 93-126.	4.0	70
8	Possible and necessary optimality tests in possibilistic linear programming problems. Fuzzy Sets and Systems, 1994, 67, 29-46.	1.6	70
9	A possibilistic linear program is equivalent to a stochastic linear program in a special case. Fuzzy Sets and Systems, 1995, 76, 309-317.	1.6	53
10	Relative modalities and their use in possibilistic linear programming. Fuzzy Sets and Systems, 1990, 35, 303-323.	1.6	44
11	ATTRIBUTE REDUCTION IN VARIABLE PRECISION ROUGH SET MODEL. International Journal of Uncertainty, Fuzziness and Knowledge-Based Systems, 2006, 14, 461-479.	0.9	40
12	Pairwise comparison based interval analysis for group decision aiding with multiple criteria. Fuzzy Sets and Systems, 2015, 274, 79-96.	1.6	37
13	A unified approach to reducts in dominance-based rough set approach. Soft Computing, 2010, 14, 507-515.	2.1	29
14	Possibilistic Linear Programming with Fuzzy If-Then Rule Coefficients. Fuzzy Optimization and Decision Making, 2002, 1, 65-91.	3.4	26
15	Necessity measure optimization in linear programming problems with fuzzy polytopes. Fuzzy Sets and Systems, 2007, 158, 1882-1891.	1.6	25
16	Dynamic Optimization of Simultaneous Dispatching and Conflict-free Routing for Automated Guided Vehicles - Petri Net Decomposition Approach -. Journal of Advanced Mechanical Design, Systems and Manufacturing, 2010, 4, 701-715.	0.3	25
17	Decomposition of Petri nets and Lagrangian relaxation for solving routing problems for AGVs. International Journal of Production Research, 2009, 47, 3957-3977.	4.9	24
18	Oblique fuzzy vectors and their use in possibilistic linear programming. Fuzzy Sets and Systems, 2003, 135, 123-150.	1.6	23

#	Article	IF	Citations
19	Column generation with dual inequalities for railway crew scheduling problems. Public Transport, 2011, 3, 25-42.	1.7	23
20	Some properties of extended fuzzy preference relations using modalities. Information Sciences, 1992, 61, 187-209.	4.0	22
21	A Combined column generation and heuristics for railway short-term rolling stock planning with regular inspection constraints. Computers and Operations Research, 2017, 81, 14-25.	2.4	21
22	Qualitative and quantitative data envelopment analysis with interval data. Annals of Operations Research, 2012, 195, 189-220.	2.6	17
23	Enumeration of All Possibly Optimal Vertices with Possible Optimality Degrees in Linear Programming Problems with a Possibilistic Objective Function. Fuzzy Optimization and Decision Making, 2004, 3, 311-326.	3.4	15
24	Data Envelopment Analysis with Fuzzy Input-Output Data. Lecture Notes in Economics and Mathematical Systems, 2000, , 296-307.	0.3	11
25	Fuzzy Linear Programming with Interactive Uncertain Parameters. Reliable Computing, 2004, 10, 357-367.	0.8	11
26	An Inner Approximation Method for Optimization over the Weakly Efficient Set. Journal of Global Optimization, 2000, 16, 197-217.	1.1	9
27	Fuzzy-Rough Hybridization. , 2015, , 425-451.		9
28	A fundamental study for partially defined cooperative games. Fuzzy Optimization and Decision Making, 2016, 15, 281-306.	3.4	9
29	Several Reducts in Dominance-Based Rough Set Approach. , 2008, , 163-175.		9
30	Global optimality test for maximin solution of bilevel linear programming with ambiguous lower-level objective function. Annals of Operations Research, 2017, 256, 285-304.	2.6	8
31	New conditions for testing necessarily/possibly efficiency of non-degenerate basic solutions based on the tolerance approach. European Journal of Operational Research, 2020, 283, 341-355.	3.5	8
32	Improving Interval Weight Estimations in Interval AHP by Relaxations. Journal of Advanced Computational Intelligence and Intelligent Informatics, 2017, 21, 1135-1143.	0.5	8
33	Improvement of Column Generation Method for Railway Crew Scheduling Problems. IEEJ Transactions on Electronics, Information and Systems, 2010, 130, 275-283.	0.1	7
34	Bilevel linear programming with ambiguous objective function of the follower. Fuzzy Optimization and Decision Making, 2016, 15, 415-434.	3.4	6
35	A Successive Lagrangian Relaxation Method for Solving Flowshop Scheduling Problems with Total Weighted Tardiness. , 2007, , .		5
36	On the utility of imprecise rules induced by MLEM2 in classification. , 2014, , .		5

#	Article	IF	Citations
37	Imprecise Rules for Data Privacy. Lecture Notes in Computer Science, 2015, , 129-139.	1.0	5
38	Application of Column Generation for Railway Crew Scheduling Problems with Practical Constraints. IEEJ Transactions on Electronics, Information and Systems, 2011, 131, 1199-1208.	0.1	5
39	Necessary efficiency is partitioned into possible and necessary optimalities. , 2013, , .		4
40	Non-uniqueness of Interval Weight Vector to Consistent Interval Pairwise Comparison Matrix and Logarithmic Estimation Methods. Lecture Notes in Computer Science, 2016, , 39-50.	1.0	4
41	The Core and the Related Solution Concepts in Cooperative Fuzzy Games. Journal of Japan Society for Fuzzy Theory and Systems, 2000, 12, 193-202.	0.0	3
42	A bilevel decomposition approach to railway crew rostering problems for fair labor condition. , 2012, , .		3
43	Diminishing Utility Decision Model for Weighting Criteria. International Journal of Information Technology and Decision Making, 2015, 14, 1263-1284.	2.3	3
44	Improvement of Interval Weight Estimation in Interval AHP. , 2016, , .		3
45	Utilization of Imprecise Rules for Privacy Protection. Lecture Notes in Computer Science, 2019, , 260-270.	1.0	3
46	Possibilistic Programming for Variaus Decision Making : Part 1:Introduction to Possiblilistic Programming. Journal of Japan Society for Fuzzy Theory and Systems, 2000, 12, 10-18.	0.0	2
47	Decomposition of timed automata for solving scheduling problems. Conference Proceedings IEEE International Conference on Systems, Man, and Cybernetics, 2008, , .	0.0	2
48	Visualization with Voronoi tessellation and moving output units in Self-Organizing map of the real-number system. , 2008, , .		2
49	An integrated column generation and lagrangian relaxation for flowshop scheduling problems. , 2009, , .		2
50	A decomposition method for optimal firing sequence problems for first-order hybrid Petri nets. , 2009, , .		2
51	Approximation-oriented Fuzzy Rough Set Approaches. Fundamenta Informaticae, 2015, 142, 21-51.	0.3	2
52	Non-parametric interval weight estimation methods from a crisp pairwise comparison matrix. , 2017, , .		2
53	Structure-Based Attribute Reduction: A Rough Set Approach. Studies in Computational Intelligence, 2015, , 113-160.	0.7	2
54	Enumeration of Possibly Optimal Extreme Points in Linear Programming Problems with Single Objective Function Coefficient Vectors in Convex Polytopes. Journal of Japan Society for Fuzzy Theory and Systems, 2000, 12, 169-175.	0.0	1

#	Article	IF	Citations
55	Generalizations of Rough Sets : Rough sets under similarity, fuzzy and dominance relations. Journal of Japan Society for Fuzzy Theory and Systems, 2001, 13, 562-570.	0.0	1
56	A Decomposition Approach to Railway Crew Rostering Problems for Fair Labor Condition. Transactions of the Institute of Systems Control and Information Engineers, 2012, 25, 272-280.	0.1	1
57	The contributions of K. Asai and H. Tanaka in fuzzy optimization. , 2013, , .		1
58	Bilevel linear programming with lower-level fuzzy objective function. , 2017, , .		1
59	Estimation Methods of Interval Weights Centered at Geometric Mean from a Pairwise Comparison Matrix. , 2018, , .		1
60	Increasing Convergence of the Quality of Estimated Interval Weight Vector in Interval AHP. , 2018, , .		1
61	Data anonymization with imprecise rules and its performance evaluations. Journal of Ambient Intelligence and Humanized Computing, 2023, 14, 15023-15035.	3.3	1
62	Knowledge Acquisition with Deep Fuzzy Inference Model and Its Application to a Medical Diagnosis. , 2019, , .		1
63	Petri Net Decomposition Method for Simultaneous Optimization of Task Assignment and Routing for AGVs. Transactions of the Institute of Systems Control and Information Engineers, 2009, 22, 191-198.	0.1	1
64	Deadlock Avoidance Scheduling for Dual-armed Cluster Tools by Petri Net Decomposition Approach. Transactions of the Society of Instrument and Control Engineers, 2013, 49, 479-487.	0.1	1
65	Logarithmic Conversion Approach to the Estimation of Interval Priority Weights from a Pairwise Comparison Matrix. Lecture Notes in Computer Science, 2015, , 77-88.	1.0	1
66	Robust optimality analysis of non-degenerate basic feasible solutions in linear programming problems with fuzzy objective coefficients. Fuzzy Optimization and Decision Making, 0, , 1.	3.4	1
67	Application of Genetic Annealing to a Fuzzy Manpower Allocation Problem. Journal of Japan Society for Fuzzy Theory and Systems, 1998, 10, 98-107.	0.0	0
68	Inner approximation algorithms for optimization over the weakly efficient set. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1999, 32, 5915-5920.	0.4	0
69	Possibilistic Programming for Various Decision Making : Part4:Optimization Approaches. Journal of Japan Society for Fuzzy Theory and Systems, 2000, 12, 507-514.	0.0	0
70	Possiblistic Programming for Various Decision Making : Part3:Stochastic and Possibilistic Programming. Journal of Japan Society for Fuzzy Theory and Systems, 2000, 12, 377-381.	0.0	0
71	Modus ponens versus modus tollens associated with rough gradual decision rules induced from a decision table. International Journal of Hybrid Intelligent Systems, 2005, 2, 109-131.	0.9	0
72	Rule Induction through Clustering Classes for Nominal and Numerical Data. , 2007, , .		0

#	Article	IF	Citations
73	A study on the decomposition of transition firing sequence problems for Petri Nets. , 2007, , .		0
74	Petri Net decomposition approach for the simultaneous optimization of task assignment and routing with automated guided vehicles. , 2008, , .		0
75	A cut and column generation for flowshop scheduling problems to minimize the total weighted tardiness. , 2010, , .		0
76	Inducing rules considering inclusion relations between conclusions. , 2010, , .		0
77	Rule Induction from Information Tables with Ordinal Decision Attributes. , 2010, , .		0
78	Lazy classification using dominance-based rough membership values. , 2011, , .		0
79	Decision rule visualization for knowledge discovery by means of rough set approach. , 2011, , .		0
80	Column generation for sequence dependent flowshop scheduling to minimize the total weighted tardiness. , 2011, , .		0
81	Attribute reduction for imprecise decision tables. , 2012, , .		0
82	Supplementary rules for MLEM2 decision rules and their usefulness in classification problems. , 2014, , .		0
83	A mixture model approach to utilizing published decision rules. , 2017, , .		0
84	Rule-Based Classifier Using Bernoulli Mixture Model for Utilizing Published Rules. Journal of Japan Society for Fuzzy Theory and Intelligent Informatics, 2018, 30, 501-508.	0.0	0
85	An Evidence Theoretic Approach to Interval Analytic Hierarchy Process. Lecture Notes in Computer Science, 2018, , 60-71.	1.0	0
86	A Fuzzily Partitioned Interval Function Model for Ordinal Regression. , 2018, , .		0
87	Decomposition and Coordination Method for Flowshop Scheduling Problems Represented by Timed Automata. Transactions of the Society of Instrument and Control Engineers, 2009, 45, 369-378.	0.1	0
88	Application of Column Generation for Train-set Scheduling Problems with Regular Maintenance Constraints. IEEJ Transactions on Electronics, Information and Systems, 2012, 132, 151-159.	0.1	0
89	Possibilistic DEA with Fuzzy Input-Output Data. Journal of Japan Society for Fuzzy Theory and Systems, 1999, 11, 472-481.	0.0	0
90	Interval Analysis for Decision Aiding. Advances in Intelligent Systems and Computing, 2015, , 15-29.	0.5	0