Marco Zaffalon

List of Publications by Year
in descending order

88 papers	1,707 citations	331670 21 h-index	361022 35 g-index
99 all docs	99 docs citations	99 times ranked	980 citing authors

#	Article	IF	Citations
1	Information algebras in the theory of imprecise probabilities. International Journal of Approximate Reasoning, 2022, 142, 383-416.	3.3	2
2	Time Series Forecasting with Gaussian Processes Needs Priors. Lecture Notes in Computer Science, 2021, , 103-117.	1.3	10
3	Joint desirability foundations of social choice and opinion pooling. Annals of Mathematics and Artificial Intelligence, 2021, 89, 965.	1.3	2
4	The Weirdness Theorem and the Origin of Quantum Paradoxes. Foundations of Physics, 2021, 51, 1.	1.3	2
5	Probabilistic Reconciliation ofÂHierarchical Forecast via Bayesâ€™ Rule. Lecture Notes in Computer Science, 2021, , 211-226.	1.3	6
6	Impact on place of death in cancer patients: a causal exploration in southern Switzerland. BMC Palliative Care, 2020, 19, 160.	1.8	8
7	Recursive estimation for sparse Gaussian process regression. Automatica, 2020, 120, 109127.	5.0	16
8	Compatibility, desirability, and the running intersection property. Artificial Intelligence, 2020, 283, 103274.	5.8	6
9	Sampling Subgraphs with Guaranteed Treewidth for Accurate and Efficient Graphical Inference. , 2020, , .		3
10	Hierarchical estimation of parameters in Bayesian networks. Computational Statistics and Data Analysis, 2019, 137, 67-91.	1.2	12
11	Sum-of-squares for bounded rationality. International Journal of Approximate Reasoning, 2019, 105, 130-152.	3.3	5
12	Compatibility, Coherence and the RIP. Advances in Intelligent Systems and Computing, 2019, , 166-174.	0.6	0
13	Efficient learning of bounded-treewidth Bayesian networks from complete and incomplete data sets. International Journal of Approximate Reasoning, 2018, 95, 152-166.	3.3	19
14	Entropy-based pruning for learning Bayesian networks using BIC. Artificial Intelligence, 2018, 260, 42-50.	5.8	21
15	EDM Drilling optimisation using stochastic techniques. Procedia CIRP, 2018, 67, 350-355.	1.9	9
16	What Interplay of Factors Influences the Place of Death in Cancer Patients? An Innovative Probabilistic Approach Sheds Light on a Well-known Question. Journal of Pain and Symptom Management, 2018, 56, e25.	1.2	2
17	Desirability foundations of robust rational decision making. SynthÃˆse, 2018, , 1.	1.1	7
18	Approximate structure learning for large Bayesian networks. Machine Learning, 2018, 107, 1209-1227.	5.4	20

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19	A Gleason-Type Theorem for Any Dimension Based on a Gambling Formulation of Quantum Mechanics. Foundations of Physics, 2017, 47, 991-1002.	1.3	5
20	Statistical comparison of classifiers through Bayesian hierarchical modelling. Machine Learning, 2017, 106, 1817-1837.	5.4	27
21	Full conglomerability. Journal of Statistical Theory and Practice, 2017, 11, 634-669.	0.5	2
22	Hierarchical Multinomial-Dirichlet Model for the Estimation of Conditional Probability Tables. , 2017, , .		5
23	Full Conglomerability, Continuity and Marginal Extension. Advances in Intelligent Systems and Computing, 2017, , 355-362.	0.6	0
24	Conformity and independence with coherent lower previsions. International Journal of Approximate Reasoning, 2016, 78, 125-137.	3.3	3
25	Quantum mechanics: The Bayesian theory generalized to the space of Hermitian matrices. Physical Review A, 2016, 94, .	2.5	11
26	Bayesian network data imputation with application to survival tree analysis. Computational Statistics and Data Analysis, 2016, 93, 373-387.	1.2	15
27	Learning extended tree augmented naive structures. International Journal of Approximate Reasoning, 2016, 68, 153-163.	3.3	16
28	"Counting on the Group". , 2016, , .		41
29	Reliable survival analysis based on the Dirichlet process. Biometrical Journal, 2015, 57, 1002-1019.	1.0	4
30	Prior near ignorance for inferences in thek-parameter exponential family. Statistics, 2015, 49, 1104-1140.	0.6	7
31	Independent products in infinite spaces. Journal of Mathematical Analysis and Applications, 2015, 425, 460-488.	1.0	5
32	Approximate credal network updating by linear programming with applications to decision making. International Journal of Approximate Reasoning, 2015, 58, 25-38.	3.3	18
33	Imprecise Dirichlet Process With Application to the Hypothesis Test on the Probability That$X$â‰¤Y. Journal of Statistical Theory and Practice, 2015, 9, 658-684.	0.5	14
34	On the problem of computing the conglomerable natural extension. International Journal of Approximate Reasoning, 2015, 56, 1-27.	3.3	5
35	Bayesian Hypothesis Testing in Machine Learning. Lecture Notes in Computer Science, 2015, , 199-202.	1.3	2
36	Comments on â€œImprecise probability models for learning multinomial distributions from data. Applications to learning credal networksâ€•by AndrÃ©s R. Masegosa and SerafÃn Moral. International Journal of Approximate Reasoning, 2014, 55, 1597-1600.	3.3	2

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37	Extended Tree Augmented Naive Classifier. Lecture Notes in Computer Science, 2014, , 176-189.	1.3	9
38	Min-BDeu and Max-BDeu Scores for Learning Bayesian Networks. Lecture Notes in Computer Science, 2014, , 426-441.	1.3	1
39	On the complexity of solving polytree-shaped limited memory influence diagrams with binary variables. Artificial Intelligence, 2013, 205, 30-38.	5.8	9
40	Probability and time. Artificial Intelligence, 2013, 198, 1-51.	5.8	25
41	Conglomerable coherence. International Journal of Approximate Reasoning, 2013, 54, 1322-1350.	3.3	9
42	Density-ratio robustness in dynamic state estimation. Mechanical Systems and Signal Processing, 2013, 37, 54-75.	8.0	9
43	Approximating Credal Network Inferences by Linear Programming. Lecture Notes in Computer Science, 2013, , 13-24.	1.3	5
44	Discovering Subgroups of Patients from DNA Copy Number Data Using NMF on Compacted Matrices. PLoS ONE, 2013, 8, e79720.	2.5	7
45	Updating credal networks is approximable in polynomial time. International Journal of Approximate Reasoning, 2012, 53, 1183-1199.	3.3	13
46	Conglomerable natural extension. International Journal of Approximate Reasoning, 2012, 53, 1200-1227.	3.3	25
47	Evaluating credal classifiers by utility-discounted predictive accuracy. International Journal of Approximate Reasoning, 2012, 53, 1282-1301.	3.3	49
48	A model of prior ignorance for inferences in the one-parameter exponential family. Journal of Statistical Planning and Inference, 2012, 142, 1960-1979.	0.6	10
49	Bayesian Networks with Imprecise Probabilities: Theory and Application to Classification. Intelligent Systems Reference Library, 2012, , 49-93.	1.2	50
50	Robust Filtering Through Coherent Lower Previsions. IEEE Transactions on Automatic Control, 2011, 56, 1567-1581.	5.7	26
51	Independent natural extension. Artificial Intelligence, 2011, 175, 1911-1950.	5.8	36
52	Notes on desirability and conditional lower previsions. Annals of Mathematics and Artificial Intelligence, 2010, 60, 251-309.	1.3	21
53	Conditional models: Coherence and inference through sequences of joint mass functions. Journal of Statistical Planning and Inference, 2010, 140, 1805-1833.	0.6	15
54	Generalized loopy 2U: A new algorithm for approximate inference in credal networks. International Journal of Approximate Reasoning, 2010, 51, 474-484.	3.3	19

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55	Inference and risk measurement with the pari-mutuel model. International Journal of Approximate Reasoning, 2010, 51, 1145-1158.	3.3	32
56	Epistemic irrelevance in credal nets: The case of imprecise Markov trees. International Journal of Approximate Reasoning, 2010, 51, 1029-1052.	3.3	35
57	Factorisation Properties of the Strong Product. Advances in Intelligent and Soft Computing, 2010, , 139-147.	0.2	1
58	Limits of learning about a categorical latent variable under prior near-ignorance. International Journal of Approximate Reasoning, 2009, 50, 597-611.	3.3	15
59	Credal networks for military identification problems. International Journal of Approximate Reasoning, 2009, 50, 666-679.	3.3	17
60	Coherence graphs. Artificial Intelligence, 2009, 173, 104-144.	5.8	16
61	Reproducing human decisions in reservoir management: the case of lake Lugano. Environmental Science and Engineering, 2009, , 252-263.	0.2	6
62	Lazy naive credal classifier. , 2009, , .		9
63	JNCC2: An extension of naive Bayes classifier suited for small and incomplete data sets. Environmental Modelling and Software, 2008, 23, 960-961.	4.5	3
64	Decision-theoretic specification of credal networks: A unified language for uncertain modeling with sets of Bayesian networks. International Journal of Approximate Reasoning, 2008, 49, 345-361.	3.3	28
65	Credal Model Averaging: An Extension of Bayesian Model Averaging to Imprecise Probabilities. Lecture Notes in Computer Science, 2008, , 257-271.	1.3	11
66	Fast algorithms for robust classification with Bayesian nets. International Journal of Approximate Reasoning, 2007, 44, 200-223.	3.3	8
67	Notes on â€œNotes on conditional previsionsâ€. International Journal of Approximate Reasoning, 2007, 44, 358-365.	3.3	15
68	Equivalence Between Bayesian and Credal Nets on an Updating Problem. , 2006, , 223-230.		6
69	Credible classification for environmental problems. Environmental Modelling and Software, 2005, 20, 1003-1012.	4.5	25
70	Distribution of mutual information from complete and incomplete data. Computational Statistics and Data Analysis, 2005, 48, 633-657.	1.2	46
71	Robust inference of trees. Annals of Mathematics and Artificial Intelligence, 2005, 45, 215-239.	1.3	4
72	Editorial: Imprecise probability perspectives on artificial intelligence. Annals of Mathematics and Artificial Intelligence, 2005, 45, 1-4.	1.3	0

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73	Updating beliefs with incomplete observations. Artificial Intelligence, 2004, 159, 75-125.	5.8	58
74	Assessing Debris Flow Hazard by Credal Nets. , 2004, , 125-132.		6
75	Tree-Based Credal Networks for Classification. Reliable Computing, 2003, 9, 487-509.	0.8	19
76	Reliable diagnoses of dementia by the naive credal classifier inferred from incomplete cognitive data. Artificial Intelligence in Medicine, 2003, 29, 61-79.	6.5	60
77	Probabilistic graphical models. International Journal of Intelligent Systems, 2003, 18, 149-151.	5.7	3
78	Zero-Dimensional Spin Accumulation and Spin Dynamics in a Mesoscopic Metal Island. Physical Review Letters, 2003, 91, 186601.	7.8	47
79	The naive credal classifier. Journal of Statistical Planning and Inference, 2002, 105, 5-21.	0.6	90
80	Exact credal treatment of missing data. Journal of Statistical Planning and Inference, 2002, 105, 105-122.	0.6	49
81	An optimization methodology for intermodal terminal management. Journal of Intelligent Manufacturing, 2001, 12, 521-534.	7.3	82
82	Credal Classification for Dementia Screening. Lecture Notes in Computer Science, 2001, , 67-76.	1.3	1
83	2U: an exact interval propagation algorithm for polytrees with binary variables. Artificial Intelligence, 1998, 106, 77-107.	5.8	82
84	A note about redundancy in influence diagrams. International Journal of Approximate Reasoning, 1998, 19, 351-365.	3.3	8
85	Constraint Logic Programming and Integer Programming approaches and their collaboration in solving an assignment scheduling problem. Constraints, 1997, 1, 245-264.	0.7	34
86	Conservative Inference Rule for Uncertain Reasoning under Incompleteness. Journal of Artificial Intelligence Research, 0, 34, 757-821.	7.0	30
87	Solving Limited Memory Influence Diagrams. Journal of Artificial Intelligence Research, 0, 44, 97-140.	7.0	12
88	Axiomatising Incomplete Preferences through Sets of Desirable Gambles. Journal of Artificial Intelligence Research, 0, 60, 1057-1126.	7.0	16