Gert de Cooman

List of Publications by Year
in descending order

88 papers	1,666 citations	257357 24 h-index	315616 38 g-index
98 all docs	98 docs citations	98 times ranked	383 citing authors

#	Article	IF	Citations
1	POSSIBILITY THEORY I: THE MEASURE- AND INTEGRAL-THEORETIC GROUNDWORK. International Journal of General Systems, 1997, 25, 291-323.	1.2	195
2	Supremum preserving upper probabilities. Information Sciences, 1999, 118, 173-212.	4.0	100
3	A behavioral model for linguistic uncertainty. Information Sciences, 2001, 134, 1-37.	4.0	78
4	POSSIBILITY THEORY II: CONDITIONAL POSSIBILITY. International Journal of General Systems, 1997, 25, 325-351.	1.2	67
5	POSSIBILITY THEORY III: POSSIBILISTIC INDEPENDENCE. International Journal of General Systems, 1997, 25, 353-371.	1.2	65
6	IMPRECISE MARKOV CHAINS AND THEIR LIMIT BEHAVIOR. Probability in the Engineering and Informational Sciences, 2009, 23, 597-635.	0.6	64
7	Updating beliefs with incomplete observations. Artificial Intelligence, 2004, 159, 75-125.	3.9	58
8	A behavioural model for vague probability assessments. Fuzzy Sets and Systems, 2005, 154, 305-358.	1.6	55
9	Imprecise probability trees: Bridging two theories of imprecise probability. Artificial Intelligence, 2008, 172, 1400-1427.	3.9	51
10	A random set description of a possibility measure and its natural extension. IEEE Transactions on Systems, Man and Cybernetics, Part A: Systems and Humans, 2000, 30, 124-130.	3.4	40
11	Weak and strong laws of large numbers for coherent lower previsions. Journal of Statistical Planning and Inference, 2008, 138, 2409-2432.	0.4	38
12	n-Monotone exact functionals. Journal of Mathematical Analysis and Applications, 2008, 347, 143-156.	0.5	37
13	Independent natural extension. Artificial Intelligence, 2011, 175, 1911-1950.	3.9	36
14	Coherence of rules for defining conditional possibility. International Journal of Approximate Reasoning, 1999, 21, 63-107.	1.9	35
15	Epistemic irrelevance in credal nets: The case of imprecise Markov trees. International Journal of Approximate Reasoning, 2010, 51, 1029-1052.	1.9	35
16	Exchangeability and sets of desirable gambles. International Journal of Approximate Reasoning, 2012, 53, 363-395.	1.9	35
17	A possibilistic hierarchical model for behaviour under uncertainty. Theory and Decision, 2002, 52, 327-374.	0.5	32
18	Lower previsions induced by multi-valued mappings. Journal of Statistical Planning and Inference, 2005, 133, 173-197.	0.4	32

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19	Marginal extension in the theory of coherent lower previsions. International Journal of Approximate Reasoning, 2007, 46, 188-225.	1.9	32
20	Integration and Conditioning in Numerical Possibility Theory. Annals of Mathematics and Artificial Intelligence, 2001, 32, 87-123.	0.9	29
21	Precisionâ€"imprecision equivalence in a broad class of imprecise hierarchical uncertainty models. Journal of Statistical Planning and Inference, 2002, 105, 175-198.	0.4	29
22	Coherent lower previsions in systems modelling: products and aggregation rules. Reliability Engineering and System Safety, 2004, 85, 113-134.	5.1	28
23	Belief models: An order-theoretic investigation. Annals of Mathematics and Artificial Intelligence, 2005, 45, 5-34.	0.9	25
24	Conglomerable natural extension. International Journal of Approximate Reasoning, 2012, 53, 1200-1227.	1.9	25
25	Imprecise stochastic processes in discrete time: global models, imprecise Markov chains, and ergodic theorems. International Journal of Approximate Reasoning, 2016, 76, 18-46.	1.9	21
26	Possibility and necessity integrals. Fuzzy Sets and Systems, 1996, 77, 207-227.	1.6	19
27	Irrelevant and independent natural extension for sets of desirable gambles. Journal of Artificial Intelligence Research, 0, 45, 601-640.	7.0	17
28	Credal networks under epistemic irrelevance: The sets of desirable gambles approach. International Journal of Approximate Reasoning, 2015, 56, 178-207.	1.9	16
29	Accept & reject statement-based uncertainty models. International Journal of Approximate Reasoning, 2015, 57, 69-102.	1.9	15
30	A Robust Dynamic Classifier Selection Approach for Hyperspectral Images with Imprecise Label Information. Sensors, 2020, 20, 5262.	2.1	15
31	Extreme lower probabilities. Fuzzy Sets and Systems, 2008, 159, 2163-2175.	1.6	14
32	Representation insensitivity in immediate prediction under exchangeability. International Journal of Approximate Reasoning, 2009, 50, 204-216.	1.9	14
33	Epistemic independence in numerical possibility theory. International Journal of Approximate Reasoning, 2003, 32, 23-42.	1.9	12
34	Dynamic programming for deterministic discrete-time systems with uncertain gain. International Journal of Approximate Reasoning, 2005, 39, 257-278.	1.9	12
35	Exchangeable lower previsions. Bernoulli, 2009, 15, .	0.7	12
36	Characterisation of ergodic upper transition operators. International Journal of Approximate Reasoning, 2012, 53, 573-583.	1.9	12

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37	Forward irrelevance. Journal of Statistical Planning and Inference, 2009, 139, 256-276.	0.4	11
38	Finitely additive extensions of distribution functions and moment sequences: The coherent lower prevision approach. International Journal of Approximate Reasoning, 2008, 48, 132-155.	1.9	10
39	Constrained optimization problems under uncertainty with coherent lower previsions. Fuzzy Sets and Systems, 2012, 206, 74-88.	1.6	10
40	Coherent choice functions, desirability and indifference. Fuzzy Sets and Systems, 2018, 341, 1-36.	1.6	10
41	Conditioning, updating and lower probability zero. International Journal of Approximate Reasoning, 2015, 67, 1-36.	1.9	9
42	Lexicographic choice functions. International Journal of Approximate Reasoning, 2018, 92, 97-119.	1.9	9
43	The construction of possibility measures from samples on %plane1D;4AF;-semi-partitions. Information Sciences, 1998, 106, 3-24.	4.0	8
44	A Daniell-Kolmogorov theorem for supremum preserving upper probabilities. Fuzzy Sets and Systems, 1999, 102, 429-444.	1.6	7
45	Further thoughts on possibilistic previsions: A rejoinder. Fuzzy Sets and Systems, 2005, 154, 375-385.	1.6	7
46	A unifying approach to integration for bounded positive charges. Journal of Mathematical Analysis and Applications, 2008, 340, 982-999.	0.5	7
47	Robust queueing theory: an initial study using imprecise probabilities. Queueing Systems, 2016, 82, 75-101.	0.6	7
48	A particular upper expectation as global belief model for discrete-time finite-state uncertain processes. International Journal of Approximate Reasoning, 2021, 131, 30-55.	1.9	7
49	Imprecise probabilities. Risk, Decision and Policy, 2000, 5, 107-109.	0.1	6
50	Possibility measures and possibility integrals defined on a complete lattice. Fuzzy Sets and Systems, 2001, 120, 459-467.	1.6	6
51	Practical implementation of possibilistic probability mass functions. Soft Computing, 2003, 7, 304-309.	2.1	6
52	The Hausdorff Moment Problem under Finite Additivity. Journal of Theoretical Probability, 2007, 20, 663-693.	0.4	6
53	Representation theorems for partially exchangeable random variables. Fuzzy Sets and Systems, 2016, 284, 1-30.	1.6	6
54	Lower Previsions for Unbounded Random Variables. Advances in Intelligent and Soft Computing, 2002, , 146-155.	0.2	6

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55	Ample fields as a basis for possibilistic processes. Fuzzy Sets and Systems, 2001, 120, 445-458.	1.6	5
56	Exchangeable choice functions. International Journal of Approximate Reasoning, 2018, 100, 85-104.	1.9	5
57	Maximin and Maximal Solutions for Linear Programming Problems with Possibilistic Uncertainty. Communications in Computer and Information Science, 2012, , 430-439.	0.4	5
58	Coherent Predictive Inference under Exchangeability with Imprecise Probabilities. Journal of Artificial Intelligence Research, 0, 52, 1-95.	7.0	5
59	Confidence relations and ordinal information. Information Sciences, 1998, 104, 241-277.	4.0	4
60	Lower previsions induced by filter maps. Journal of Mathematical Analysis and Applications, 2014, 410, 101-116.	0.5	4
61	Extreme lower previsions. Journal of Mathematical Analysis and Applications, 2015, 421, 1042-1080.	0.5	4
62	Randomness is inherently imprecise. International Journal of Approximate Reasoning, 2022, 141, 28-68.	1.9	4
63	A New Method for Learning Imprecise Hidden Markov Models. Communications in Computer and Information Science, 2012, , 460-469.	0.4	4
64	Extension of coherent lower previsions to unbounded random variables. , 2003, , 277-288.		4
65	The F.ÂRiesz Representation Theorem and Finite Additivity. Advances in Soft Computing, 2008, , 243-252.	0.4	3
66	Optimal control of a linear system subject to partially specified input noise. International Journal of Robust and Nonlinear Control, 2019, 29, 3892-3914.	2.1	3
67	Relating Epistemic Irrelevance to Event Trees. Advances in Soft Computing, 2008, , 66-73.	0.4	3
68	Learning in games using the imprecise Dirichlet model. International Journal of Approximate Reasoning, 2009, 50, 243-256.	1.9	2
69	Infinite Exchangeability for Sets of Desirable Gambles. Communications in Computer and Information Science, 2010, , 60-69.	0.4	2
70	Coherent and Archimedean choice in general Banach spaces. International Journal of Approximate Reasoning, 2021, 140, 255-255.	1.9	2
71	COHERENCE OF DEMPSTER'S CONDITIONING RULE IN DISCRETE POSSIBILISTIC MARKOV MODELS. International Journal of Uncertainty, Fuzziness and Knowlege-Based Systems, 2000, 08, 241-252.	0.9	1
72	Computing lower and upper expected first-passage and return times in imprecise birthâ€"death chains. International Journal of Approximate Reasoning, 2017, 80, 137-173.	1.9	1

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73	A behavioural justification for using sensitivity analysis in imprecise multinomial processes. Journal of Mathematical Analysis and Applications, 2018, 468, 513-546.	0.5	1
74	Game-theoretic upper expectations for discrete-time finite-state uncertain processes. Journal of Mathematical Analysis and Applications, 2021, 504, 125399.	0.5	1
75	Factorisation Properties of the Strong Product. Advances in Intelligent and Soft Computing, 2010, , 139-147.	0.2	1
76	Imprecise Bernoulli Processes. Communications in Computer and Information Science, 2012, , 400-409.	0.4	1
77	Extreme Lower Previsions and Minkowski Indecomposability. Lecture Notes in Computer Science, 2013, , 157-168.	1.0	1
78	Lexicographic Choice Functions WithoutÂArchimedeanicity. Advances in Intelligent Systems and Computing, 2017, , 479-486.	0.5	1
79	Natural Extension of Choice Functions. Communications in Computer and Information Science, 2018, , 201-213.	0.4	1
80	Inference with Choice Functions MadeÂPractical. Lecture Notes in Computer Science, 2020, , 113-127.	1.0	1
81	Editorial: Imprecise probability perspectives on artificial intelligence. Annals of Mathematics and Artificial Intelligence, 2005, 45, 1-4.	0.9	0
82	A CONSTRAINED OPTIMIZATION PROBLEM UNDER UNCERTAINTY. , 2010, , .		0
83	Lower Previsions Induced by Filter Maps. Communications in Computer and Information Science, 2012, , 440-449.	0.4	0
84	Predictive Inference Under Exchangeability, and the Imprecise Dirichlet Multinomial Model. Springer Proceedings in Mathematics and Statistics, 2015, , 13-33.	0.1	0
85	Coherent and Archimedean Choice in General Banach Spaces. Communications in Computer and Information Science, 2020, , 180-194.	0.4	0
86	Reasoning with Vague Probability Assessments. , 2006, , 5-6.		0
87	Extreme Lower Probabilities. , 2006, , 211-221.		0
88	Imprecise Discrete-Time Markov Chains. SpringerBriefs in Statistics, 2022, , 51-65.	0.3	0