

# Bart Kosko

## List of Publications by Year in descending order

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Version: 2024-02-01

56  
papers

5,801  
citations

279487

23  
h-index

315357

38  
g-index

60  
all docs

60  
docs citations

60  
times ranked

2692  
citing authors

#	ARTICLE	IF	CITATIONS
1	Fuzzy cognitive maps. International Journal of Man-Machine Studies, 1986, 24, 65-75.	0.7	2,616
2	FUZZINESS VS. PROBABILITY. International Journal of General Systems, 1990, 17, 211-240.	1.2	378
3	Virtual Worlds as Fuzzy Cognitive Maps. Presence: Teleoperators and Virtual Environments, 1994, 3, 173-189.	0.3	250
4	Hidden patterns in combined and adaptive knowledge networks. International Journal of Approximate Reasoning, 1988, 2, 377-393.	1.9	230
5	Stochastic Resonance in Continuous and Spiking Neuron Models With Levy Noise. IEEE Transactions on Neural Networks, 2008, 19, 1993-2008.	4.8	107
6	Optimal Noise Benefits in Neyman-Pearson and Inequality-Constrained Statistical Signal Detection. IEEE Transactions on Signal Processing, 2009, 57, 1655-1669.	3.2	107
7	Stochastic resonance in noisy threshold neurons. Neural Networks, 2003, 16, 755-761.	3.3	97
8	Adaptive Stochastic Resonance in Noisy Neurons Based on Mutual Information. IEEE Transactions on Neural Networks, 2004, 15, 1526-1540.	4.8	97
9	Noise-enhanced convolutional neural networks. Neural Networks, 2016, 78, 15-23.	3.3	86
10	Fuzzy knowledge combination. International Journal of Intelligent Systems, 1986, 1, 293-320.	3.3	80
11	Optimal fuzzy rules cover extrema. International Journal of Intelligent Systems, 1995, 10, 249-255.	3.3	78
12	Robust stochastic resonance: Signal detection and adaptation in impulsive noise. Physical Review E, 2001, 64, 051110.	0.8	77
13	Nanosignal Processing: Stochastic Resonance in Carbon Nanotubes That Detect Subthreshold Signals. Nano Letters, 2003, 3, 1683-1686.	4.5	65
14	Noise-Enhanced Detection of Subthreshold Signals With Carbon Nanotubes. IEEE Nanotechnology Magazine, 2006, 5, 613-627.	1.1	60
15	Noise Benefits in Quantizer-Array Correlation Detection and Watermark Decoding. IEEE Transactions on Signal Processing, 2011, 59, 488-505.	3.2	58
16	Fuzzy throttle and brake control for platoons of smart cars. Fuzzy Sets and Systems, 1996, 84, 209-234.	1.6	49
17	Robust stochastic resonance for simple threshold neurons. Physical Review E, 2004, 70, 031911.	0.8	46
18	Optimal Mean-Square Noise Benefits in Quantizer-Array Linear Estimation. IEEE Signal Processing Letters, 2010, 17, 1005-1009.	2.1	36

#	ARTICLE	IF	CITATIONS
19	Adaptive fuzzy systems for target tracking. Intelligent Systems Engineering, 1992, 1, 3.	0.5	35
20	Fuzzy cognitive maps of public support for insurgency and terrorism. Journal of Defense Modeling and Simulation, 2017, 14, 17-32.	1.2	33
21	Fuzzy prediction and filtering in impulsive noise. Fuzzy Sets and Systems, 1996, 77, 15-33.	1.6	27
22	THE NOISY EXPECTATION-MAXIMIZATION ALGORITHM. Fluctuation and Noise Letters, 2013, 12, 1350012.	1.0	26
23	Noise can speed backpropagation learning and deep bidirectional pretraining. Neural Networks, 2020, 129, 359-384.	3.3	22
24	The Noisy Expectation-Maximization Algorithm for Multiplicative Noise Injection. Fluctuation and Noise Letters, 2016, 15, 1650007.	1.0	20
25	Noise-boosted bidirectional backpropagation and adversarial learning. Neural Networks, 2019, 120, 9-31.	3.3	20
26	Noise benefits in backpropagation and deep bidirectional pre-training. , 2013, , .		19
27	Additive Fuzzy Systems: From Generalized Mixtures to Rule Continua. International Journal of Intelligent Systems, 2018, 33, 1573-1623.	3.3	19
28	Quantum forbidden-interval theorems for stochastic resonance. Journal of Physics A: Mathematical and Theoretical, 2009, 42, 465309.	0.7	18
29	Using Noise to Speed up Markov Chain Monte Carlo Estimation. Procedia Computer Science, 2015, 53, 113-120.	1.2	15
30	Bidirectional Associative Memories: Unsupervised Hebbian Learning to Bidirectional Backpropagation. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2021, 51, 103-115.	5.9	15
31	Bidirectional Backpropagation. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2020, 50, 1982-1994.	5.9	14
32	Neural Fuzzy Agents for Profile Learning and Adaptive Object Matching. Presence: Teleoperators and Virtual Environments, 1998, 7, 617-637.	0.3	13
33	Probable equivalence, superpower sets, and superconditionals. International Journal of Intelligent Systems, 2004, 19, 1151-1171.	3.3	10
34	Using noise to speed up video classification with recurrent backpropagation. , 2017, , .		10
35	Noise can speed Markov chain Monte Carlo estimation and quantum annealing. Physical Review E, 2019, 100, 053309.	0.8	10
36	Noisy hidden Markov models for speech recognition. , 2013, , .		7

#	ARTICLE	IF	CITATIONS
37	Noise benefits in the expectation-maximization algorithm: Nem theorems and models. , 2011, , .		6
38	Noise-benefit forbidden-interval theorems for threshold signal detectors based on cross correlations. Physical Review E, 2014, 90, 052124.	0.8	6
39	Optimal noise benefits in Neyman-Pearson signal detection. Proceedings of the IEEE International Conference on Acoustics, Speech, and Signal Processing, 2008, , .	1.8	5
40	Converting Neural Networks to Rule Foam. , 2019, , .		4
41	High Capacity Neural Block Classifiers with Logistic Neurons and Random Coding. , 2020, , .		4
42	Triply fuzzy function approximation for hierarchical Bayesian inference. Fuzzy Optimization and Decision Making, 2012, 11, 241-268.	3.4	3
43	Training Generative Adversarial Networks with Bidirectional Backpropagation. , 2018, , .		3
44	Convergence of Generalized Probability Mixtures That Describe Adaptive Fuzzy Rule-based Systems. , 2020, , .		3
45	Quantizer noise benefits in nonlinear signal detection with alpha-stable channel noise. , 2009, , .		2
46	Noise Benefits in Feedback Machine Learning: Bidirectional Backpropagation. Understanding Complex Systems, 2019, , 267-275.	0.3	2
47	Bayesian Bidirectional Backpropagation Learning. , 2021, , .		2
48	Neural signal-detection noise benefits based on error probability. , 2009, , .		1
49	Generalized mixture representations and combinations for additive fuzzy systems. , 2017, , .		1
50	Bayesian Pruned Random Rule Foams for XAI. , 2021, , .		1
51	Bidirectional Backpropagation for High-Capacity Blocking Networks. , 2021, , .		1
52	Adaptive fuzzy priors for Bayesian inference. , 2009, , .		0
53	Bayes Theorem Extends to Overlapping Hypotheses. , 2019, , .		0
54	Erratum to "Bidirectional Associative Memories: Unsupervised Hebbian Learning to Bidirectional Backpropagation" IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2021, 51, 2635-2635.	5.9	0

#	ARTICLE	IF	CITATIONS
55	NEURAL FUZZY ELLIPSOIDAL LEARNING AND PLATOON CONTROL, 1995, , 151-165.		0
56	Uniform Mixture Convergence of Continuously Transformed Fuzzy Systems. Lecture Notes in Networks and Systems, 2022, , 203-216.	0.5	0