Stephen H Muggleton

List of Publications by Year
in descending order

53 papers	4,838 citations	304743 22 h-index	189892 50 g-index
58 all docs	58 docs citations	58 times ranked	2241 citing authors

#	Article	IF	Citations
1	Inverse entailment and progol. New Generation Computing, 1995, 13, 245-286.	3.3	1,001
2	Inductive Logic Programming: Theory and methods. The Journal of Logic Programming, 1994, 19-20, 629-679.	1.7	952
3	Inductive logic programming. New Generation Computing, 1991, 8, 295-318.	3.3	550
4	Functional genomic hypothesis generation and experimentation by a robot scientist. Nature, 2004, 427, 247-252.	27.8	481
5	Machine Invention of First-order Predicates by Inverting Resolution. , 1988, , 339-352.		223
6	Protein secondary structure prediction using logic-based machine learning. Protein Engineering, Design and Selection, 1992, 5, 647-657.	2.1	191
7	Pharmacophore Discovery Using the Inductive Logic Programming System PROGOL. Machine Learning, 1998, 30, 241-270.	5.4	100
8	Meta-interpretive learning of higher-order dyadic datalog: predicate invention revisited. Machine Learning, 2015, 100, 49-73.	5.4	94
9	ILP turns 20. Machine Learning, 2012, 86, 3-23.	5.4	91
10	Structured machine learning: the next ten years. Machine Learning, 2008, 73, 3-23.	5.4	90
11	Learning from positive data. Lecture Notes in Computer Science, 1997, , 358-376.	1.3	82
12	Inductive programming meets the real world. Communications of the ACM, 2015, 58, 90-99.	4.5	78
13	Meta-interpretive learning: application to grammatical inference. Machine Learning, 2014, 94, 25-49.	5.4	77
14	Application of abductive ILP to learning metabolic network inhibition from temporal data. Machine Learning, 2006, 64, 209-230.	5.4	71
15	Ultra-Strong Machine Learning: comprehensibility of programs learned with ILP. Machine Learning, 2018, 107, 1119-1140.	5.4	67
16	Automated Discovery of Food Webs from Ecological Data Using Logic-Based Machine Learning. PLoS ONE, 2011, 6, e29028.	2.5	56
17	Exceeding human limits. Nature, 2006, 440, 409-410.	27.8	52
18	Construction and Validation of Food Webs Using Logic-Based Machine Learning and Text Mining. Advances in Ecological Research, 2013, 49, 225-289.	2.7	40

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19	Scaffold Hopping in Drug Discovery Using Inductive Logic Programming. Journal of Chemical Information and Modeling, 2008, 48, 949-957.	5.4	38
20	Automated discovery of structural signatures of protein fold and function11Edited by J. Thornton. Journal of Molecular Biology, 2001, 306, 591-605.	4.2	35
21	Turning 30: New Ideas in Inductive Logic Programming. , 2020, , .		35
22	The Identification of Similarities between Biological Networks: Application to the Metabolome and Interactome. Journal of Molecular Biology, 2007, 369, 1126-1139.	4.2	32
23	Compression, Significance and Accuracy. , 1992, , 338-347.		28
24	Learning programs in the event calculus. Lecture Notes in Computer Science, 1997, , 205-212.	1.3	24
25	The Automatic Discovery of Structural Principles Describing Protein Fold Space. Journal of Molecular Biology, 2003, 330, 839-850.	4.2	22
26	Learning efficient logic programs. Machine Learning, 2019, 108, 1063-1083.	5.4	18
27	Inductive logic programming at 30. Machine Learning, 2022, 111, 147-172.	5.4	18
28	Meta-Interpretive Learning from noisy images. Machine Learning, 2018, 107, 1097-1118.	5.4	17
29	Beneficial and harmful explanatory machine learning. Machine Learning, 2021, 110, 695-721.	5.4	17
30	QG/GA: a stochastic search for Progol. Machine Learning, 2008, 70, 121-133.	5.4	16
31	Logical Minimisation of Meta-Rules Within Meta-Interpretive Learning. Lecture Notes in Computer Science, 2015, , 62-75.	1.3	16
32	Learning probabilistic logic models from probabilistic examples. Machine Learning, 2008, 73, 55-85.	5.4	15
33	The lattice structure and refinement operators forÂtheÂhypothesis space bounded by a bottom clause. Machine Learning, 2009, 76, 37-72.	5.4	15
34	Meta-Interpretive Learning of Data Transformation Programs. Lecture Notes in Computer Science, 2016, , 46-59.	1.3	14
35	Automated identification of protein-ligand interaction features using Inductive Logic Programming: a hexose binding case study. BMC Bioinformatics, 2012, 13, 162.	2.6	12
36	Mathematical applications of inductive logic programming. Machine Learning, 2006, 64, 25-64.	5.4	11

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37	Modeling the effects of toxins in metabolic networks. IEEE Engineering in Medicine and Biology Magazine, 2007, 26, 37-46.	0.8	10
38	Learning higher-order logic programs. Machine Learning, 2020, 109, 1289-1322.	5.4	10
39	How Does Predicate Invention Affect Human Comprehensibility?. Lecture Notes in Computer Science, 2017, , 52-67.	1.3	10
40	Chess Revision: Acquiring the Rules of Chess Variants through FOL Theory Revision from Examples. Lecture Notes in Computer Science, 2010, , 123-130.	1.3	10
41	Abductive Knowledge Induction from Raw Data. , 2021, , .		8
42	Towards Machine Learning of Predictive Models from Ecological Data. Lecture Notes in Computer Science, 2015, , 154-167.	1.3	7
43	Logical Vision: One-Shot Meta-Interpretive Learning from Real Images. Lecture Notes in Computer Science, 2018, , 46-62.	1.3	6
44	Multi-Class protein fold recognition using large margin logic based divide and conquer learning. SIGKDD Explorations: Newsletter of the Special Interest Group (SIG) on Knowledge Discovery & Data Mining, 2010, 11, 117-122.	4.0	4
45	Human-Like Rule Learning from Images Using One-Shot Hypothesis Derivation. Lecture Notes in Computer Science, 2022, , 234-250.	1.3	4
46	Incorporating Virtual Reactions into a Logicâ€based Ligandâ€based Virtual Screening Method to Discover New Leads. Molecular Informatics, 2015, 34, 615-625.	2.5	3
47	Machine Discovery of Comprehensible Strategies for Simple Games Using Meta-interpretive Learning. New Generation Computing, 2019, 37, 203-217.	3.3	3
48	Complete Bottom-Up Predicate Invention in Meta-Interpretive Learning. , 2020, , .		3
49	Guest editorial: special issue on Inductive Logic Programming (ILP 2011). Machine Learning, 2012, 89, 213-214.	5.4	2
50	Top program construction and reduction for polynomial time Meta-Interpretive learning. Machine Learning, 2021, 110, 755-778.	5.4	2
51	WIBL: Workbench for Integrative Biological Learning. Journal of Integrative Bioinformatics, 2011, 8, 14-22.	1.5	1
52	Special Issue on Semantic Technology. New Generation Computing, 2019, 37, 359-360.	3.3	0
53	How Much Can Experimental Cost BeÂReduced in Active Learning of Agent Strategies?. Lecture Notes in Computer Science, 2018, , 38-53.	1.3	0