Alan Bundy

List of Publications by Year in descending order

69 papers	1,629 citations	516710 16 h-index	377865 34 g-index
78 all docs	78 docs citations	78 times ranked	473 citing authors

#	Article	IF	Citations
1	The use of explicit plans to guide inductive proofs. , 1988, , 111-120.		170
2	Rippling: A heuristic for guiding inductive proofs. Artificial Intelligence, 1993, 62, 185-253.	5.8	162
3	Dynamic, Automatic, First-Order Ontology repair by Diagnosis of Failed Plan Execution. International Journal on Semantic Web and Information Systems, 2007, 3, 1-35.	5.1	159
4	The OYSTER-CLAM system. Lecture Notes in Computer Science, 1990, , 647-648.	1.3	113
5	Productive use of failure in inductive proof. Journal of Automated Reasoning, 1996, 16, 79-111.	1.4	104
6	The Automation of Proof by Mathematical Induction. , 2001, , 845-911.		83
7	Experiments with proof plans for induction. Journal of Automated Reasoning, 1991, 7, 303-324.	1.4	75
8	Using meta-level inference for selective application of multiple rewrite rule sets in algebraic manipulation. Artificial Intelligence, 1981, 16, 189-211.	5.8	74
9	Incidence calculus: A mechanism for probabilistic reasoning. Journal of Automated Reasoning, 1985, 1, 263.	1.4	73
10	Conjecture Synthesis for Inductive Theories. Journal of Automated Reasoning, 2011, 47, 251-289.	1.4	60
11	Solving symbolic equations with PRESS. Journal of Symbolic Computation, 1989, 7, 71-84.	0.8	27
12	On Automating Diagrammatic Proofs of Arithmetic Arguments. Journal of Logic, Language and Information, 1999, 8, 297-321.	0.6	26
13	Scheme-based theorem discovery and concept invention. Expert Systems With Applications, 2012, 39, 1637-1646.	7.6	24
14	An interface between CLAM and HOL. Lecture Notes in Computer Science, 1998, , 87-104.	1.3	24
15	Middle-out reasoning for synthesis and induction. Journal of Automated Reasoning, 1996, 16, 113-145.	1.4	22
16	Automated theorem provers: a practical tool for the working mathematician?. Annals of Mathematics and Artificial Intelligence, 2011, 61, 3-14.	1.3	22
17	Correctness criteria of some algorithms for uncertain reasoning using Incidence Calculus. Journal of Automated Reasoning, 1986, 2, 109-126.	1.4	19
18	Automatic verification of functions with accumulating parameters. Journal of Functional Programming, 1999, 9, 225-245.	0.8	17

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19	The use of proof plans to sum series. Lecture Notes in Computer Science, 1992, , 325-339.	1.3	17
20	Prolog programming techniques. Instructional Science, 1991, 20, 111-133.	2.0	16
21	A recursive techniques editor for Prolog. Instructional Science, 1991, 20, 135-172.	2.0	15
22	Ascertaining Mathematical Theorems. Electronic Notes in Theoretical Computer Science, 2006, 151, 21-38.	0.9	15
23	Solving symbolic equations with press. Lecture Notes in Computer Science, 1982, , 109-116.	1.3	15
24	A Critique of Proof Planning. Lecture Notes in Computer Science, 2002, , 160-177.	1.3	11
25	Scheme-Based Synthesis of Inductive Theories. Lecture Notes in Computer Science, 2010, , 348-361.	1.3	10
26	A generalized interval package and its use for semantic checking. ACM Transactions on Mathematical Software, 1984, 10, 397-409.	2.9	9
27	What is the difference between real creativity and mere novelty?. Behavioral and Brain Sciences, 1994, 17, 533-534.	0.7	9
28	Experiments in automating hardware verification using inductive proof planning. Lecture Notes in Computer Science, 1996, , 94-108.	1.3	9
29	Lightweight Formalisation in Support of Requirements Engineering. Automated Software Engineering, 1998, 5, 183-210.	2.9	9
30	Proof planning for maintainable configuration systems. Artificial Intelligence for Engineering Design, Analysis and Manufacturing: AIEDAM, 1998, 12, 345-356.	1.1	9
31	MATHsAiD: A Mathematical Theorem Discovery Tool. , 2006, , .		9
32	Attacking Group Protocols by Refuting Incorrect Inductive Conjectures. Journal of Automated Reasoning, 2006, 36, 149-176.	1.4	9
33	A Higher Order Approach to Ontology Evolution in Physics. Journal on Data Semantics, 2013, 2, 163-187.	2.0	9
34	A comprehensive comparison between generalized incidence calculus and the Dempster-Shafer theory of evidence. International Journal of Human Computer Studies, 1994, 40, 1009-1032.	5.6	8
35	A General Setting for Flexibly Combining and Augmenting Decision Procedures. Journal of Automated Reasoning, 2002, 28, 257-305.	1.4	8
36	Towards Ontology Evolution in Physics. Lecture Notes in Computer Science, 2008, , 98-110.	1.3	8

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37	Attacking a Protocol for Group Key Agreement by Refuting Incorrect Inductive Conjectures. Lecture Notes in Computer Science, 2004, , 137-151.	1.3	6
38	Automating Event-B invariant proofs by rippling and proof patching. Formal Aspects of Computing, 2019, 31, 95-129.	1.8	6
39	Attacking Group Multicast Key Management Protocols Using Coral. Electronic Notes in Theoretical Computer Science, 2005, 125, 125-144.	0.9	5
40	An overview of Prolog debugging tools. Instructional Science, 1991, 20, 193-214.	2.0	4
41	System description: An interface between CLAM and HOL. Lecture Notes in Computer Science, 1998, , 134-138.	1.3	4
42	Planning Proofs of Equations in CCS. Automated Software Engineering, 2000, 7, 263-304.	2.9	4
43	Functional Inferences over Heterogeneous Data. Lecture Notes in Computer Science, 2016, , 159-166.	1.3	4
44	Synthesis and Transformation of Logic Programs from Constructive, Inductive Proof. Workshops in Computing, 1992, , 27-45.	0.4	4
45	AI Bridges and dreams. AI and Society, 1987, 1, 62-71.	4.6	3
46	Recovering incidence functions. , 1993, , 241-248.		3
47	Constructing probabilistic ATMSs using extended incidence calculus. International Journal of Approximate Reasoning, 1996, 15, 145-182.	3.3	3
48	Meta-level inference: Two applications. Journal of Automated Reasoning, 1988, 4, 15.	1.4	2
49	â€œSemantic procedureâ€•is an oxymoron. Behavioral and Brain Sciences, 1993, 16, 339-340.	0.7	2
50	The Method of Assigning Incidences. Applied Intelligence, 1998, 9, 139-161.	5.3	2
51	Proofs-as-Programs as a Framework for the Design of an Analogy-Based ML Editor. Formal Aspects of Computing, 2002, 13, 403-421.	1.8	2
52	The Use of Rippling to Automate Event-B Invariant Preservation Proofs. Lecture Notes in Computer Science, 2012, , 231-236.	1.3	2
53	A Framework for the Principled Debugging of Prolog Programs: How to Debug Non-Terminating Programs. , 1992, , 22-55.		2
54	Planning and Patching Proof. Lecture Notes in Computer Science, 2004, , 26-37.	1.3	2

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55	Commentary on: solving symbolic equations with PRESS. SIGSAM Bulletin: A Quarterly Publication of the Special Interest Group on Symbolic & Algebraic Manipulation, 1988, 22, 27-40.	0.3	1
56	On the relations between incidence calculus and ATMS. , 1993, , 249-256.		1
57	Automating the synthesis of decision procedures in a constructive metatheory. Annals of Mathematics and Artificial Intelligence, 1998, 22, 259-279.	1.3	1
58	Recursive Program Optimization through Inductive Synthesis Proof Transformation. Journal of Automated Reasoning, 1999, 22, 65-115.	1.4	1
59	Psychological Validity of Schematic Proofs. Lecture Notes in Computer Science, 2005, , 321-341.	1.3	1
60	On Process Equivalence = Equation Solving in CCS. Journal of Automated Reasoning, 2009, 43, 53-80.	1.4	1
61	European collaboration on automated reasoning. AI Communications, 2014, 27, 25-35.	1.2	1
62	Solving guesstimation problems using the Semantic Web: Four lessons from an application. Semantic Web, 2015, 6, 197-210.	1.9	1
63	Best-First Rippling. Lecture Notes in Computer Science, 2006, , 83-100.	1.3	1
64	The Design of the CADE-16 Inductive Theorem Prover Contest. Lecture Notes in Computer Science, 1999, , 374-377.	1.3	1
65	Probability, truth, and logic: reply to Cheeseman. Computational Intelligence, 1988, 4, 69-70.	3.2	0
66	Leaky virtual machines and the best of both worlds. Behavioral and Brain Sciences, 1998, 21, 632-633.	0.7	0
67	AI Bridges and Dreams. AI and Society, 2007, 21, 659-668.	4.6	0
68	Automatic Synthesis of Decision Procedures: A Case Study of Ground and Linear Arithmetic. Lecture Notes in Computer Science, 2007, , 80-93.	1.3	0
69	The History of the DReaM Group. , 2021, , 1-35.		0