

# Jeremy Avigad

## List of Publications by Year in descending order

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62  
papers

1,348  
citations

471509

17  
h-index

395702

33  
g-index

66  
all docs

66  
docs citations

66  
times ranked

503  
citing authors

#	ARTICLE	IF	CITATIONS
1	Reliability of mathematical inference. <i>Synthese</i> , 2021, 198, 7377-7399.	1.1	21
2	Varieties of mathematical understanding. <i>Bulletin of the American Mathematical Society</i> , 2021, 59, 99-117.	1.5	4
3	MODULARITY IN MATHEMATICS. <i>Review of Symbolic Logic</i> , 2020, 13, 47-79.	0.7	15
4	Preface: Selected Extended Papers from Interactive Theorem Proving 2018. <i>Journal of Automated Reasoning</i> , 2020, 64, 793-794.	1.4	0
5	Introduction to Milestones in Interactive Theorem Proving. <i>Journal of Automated Reasoning</i> , 2018, 61, 1-8.	1.4	2
6	Opinion: The Mechanization of Mathematics. <i>Notices of the American Mathematical Society</i> , 2018, 65, 1.	0.2	11
7	Weak theories of nonstandard arithmetic and analysis. , 2017, , 19-46.		6
8	A Formally Verified Proof of the Central Limit Theorem. <i>Journal of Automated Reasoning</i> , 2017, 59, 389-423.	1.4	10
9	CHARACTER AND OBJECT. <i>Review of Symbolic Logic</i> , 2016, 9, 480-510.	0.7	8
10	A Heuristic Prover for Real Inequalities. <i>Journal of Automated Reasoning</i> , 2016, 56, 367-386.	1.4	8
11	Logic's Lost Genius and Gentzen's Centenary. <i>Notices of the American Mathematical Society</i> , 2016, 63, 1288-1292.	0.2	0
12	Oscillation and the mean ergodic theorem for uniformly convex Banach spaces. <i>Ergodic Theory and Dynamical Systems</i> , 2015, 35, 1009-1027.	0.6	9
13	Homotopy limits in type theory. <i>Mathematical Structures in Computer Science</i> , 2015, 25, 1040-1070.	0.6	18
14	Computability and analysis: the legacy of Alan Turing. , 2014, , 1-47.		66
15	Thomas Hales. <i>Dense Sphere Packings: A Blueprint for Formal Proofs</i> . Cambridge University Press, Cambridge, 2012, xiv + 271 pp.. <i>Bulletin of Symbolic Logic</i> , 2014, 20, 500-501.	0.2	0
16	The concept of "character" in Dirichlet's theorem on primes in an arithmetic progression. <i>Archive for History of Exact Sciences</i> , 2014, 68, 265-326.	0.5	10
17	Formally verified mathematics. <i>Communications of the ACM</i> , 2014, 57, 66-75.	4.5	81
18	A Heuristic Prover for Real Inequalities. <i>Lecture Notes in Computer Science</i> , 2014, , 61-76.	1.3	2

#	ARTICLE	IF	CITATIONS
19	Alan Turing: His Work and Impact, A Book Review. Notices of the American Mathematical Society, 2014, 61, 886.	0.2	0
20	Uniform distribution and algorithmic randomness. Journal of Symbolic Logic, 2013, 78, 334-344.	0.5	8
21	A Machine-Checked Proof of the Odd Order Theorem. Lecture Notes in Computer Science, 2013, , 163-179.	1.3	150
22	Uncomputably Noisy Ergodic Limits. Notre Dame Journal of Formal Logic, 2012, 53, .	0.4	2
23	Algorithmic randomness, reverse mathematics, and the dominated convergence theorem. Annals of Pure and Applied Logic, 2012, 163, 1854-1864.	0.5	17
24	$\hat{\Gamma}$ -Complete Decision Procedures for Satisfiability Over the Reals. Lecture Notes in Computer Science, 2012, , 286-300.	1.3	97
25	Zen and the art of formalisation. Mathematical Structures in Computer Science, 2011, 21, 679-682.	0.6	4
26	Building a push-button RESOLVE verifier: Progress and challenges. Formal Aspects of Computing, 2011, 23, 607-626.	1.8	46
27	Handbook of Practical Logic and Automated Reasoning, John Harrison, Cambridge University Press, 2009. Hardcover, ISBN-13: 978-0-521-89957-4, 681 pp. + xix, \$135.00.. Theory and Practice of Logic Programming, 2010, 10, 237-241.	1.5	0
28	Plato's Ghost: The Modernist Transformation of Mathematics by Jeremy Gray. Mathematical Intelligencer, 2010, 32, 79-81.	0.2	0
29	A FORMAL SYSTEM FOR EUCLID'S ELEMENTS. Review of Symbolic Logic, 2009, 2, 700-768.	0.7	110
30	Functional interpretation and inductive definitions. Journal of Symbolic Logic, 2009, 74, 1100-1120.	0.5	8
31	Local stability of ergodic averages. Transactions of the American Mathematical Society, 2009, 362, 261-288.	0.9	39
32	The metamathematics of ergodic theory. Annals of Pure and Applied Logic, 2009, 157, 64-76.	0.5	16
33	Understanding Proofs. , 2008, , 317-353.		38
34	A formally verified proof of the prime number theorem. ACM Transactions on Computational Logic, 2007, 9, 2.	0.9	33
35	Quantifier elimination for the reals with a predicate for the powers of two. Theoretical Computer Science, 2007, 370, 48-59.	0.9	4
36	A Decision Procedure for Linear $\mathbb{Q}$ -Equations. Journal of Automated Reasoning, 2007, 38, 353-373.	1.4	2

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37	William Tait. The provenance of pure reason: essays in the philosophy of mathematics and its history. Oxford University Press, Oxford, 2005, x + 332 pp.. Bulletin of Symbolic Logic, 2006, 12, 608-611.	0.2	1
38	Mathematical Method and Proof. Synthese, 2006, 153, 105-159.	1.1	45
39	Fundamental notions of analysis in subsystems of second-order arithmetic. Annals of Pure and Applied Logic, 2006, 139, 138-184.	0.5	11
40	The birth of model theory: Lowenheim's theorem in the frame of the theory of relatives. Mathematical Intelligencer, 2006, 28, 67-71.	0.2	1
41	Gnomes in the fog: The reception of brouwer's intuitionism in the 1920s. Mathematical Intelligencer, 2006, 28, 71-74.	0.2	0
42	Combining decision procedures for the reals. Logical Methods in Computer Science, 2006, 2, .	0.4	6
43	Forcing in Proof Theory. Bulletin of Symbolic Logic, 2004, 10, 305-333.	0.2	23
44	Number theory and elementary arithmetic. Philosophia Mathematica, 2003, 11, 257-284.	0.2	38
45	Eliminating definitions and Skolem functions in first-order logic. ACM Transactions on Computational Logic, 2003, 4, 402-415.	0.9	20
46	AN ORDINAL ANALYSIS OF ADMISSIBLE SET THEORY USING RECURSION ON ORDINAL NOTATIONS. Journal of Mathematical Logic, 2002, 02, 91-112.	0.6	4
47	Update Procedures and the 1-Consistency of Arithmetic. Mathematical Logic Quarterly, 2002, 48, 3-13.	0.2	20
48	Transfer principles in nonstandard intuitionistic arithmetic. Archive for Mathematical Logic, 2002, 41, 581-602.	0.3	9
49	Saturated models of universal theories. Annals of Pure and Applied Logic, 2002, 118, 219-234.	0.5	28
50	Sergei N. Artemov. <i>Explicit provability and constructive semantics</i>. The bulletin of symbolic logic, vol. 7 (2001), pp. 1-36.. Bulletin of Symbolic Logic, 2002, 8, 432-433.	0.2	0
51	Algebraic proofs of cut elimination. The Journal of Logic and Algebraic Programming, 2001, 49, 15-30.	1.4	11
52	Toshiyasu Arai. Some results on cut-elimination, provable well-orderings, induction and reflection. Annals of pure and applied logic, vol. 95 (1998), pp. 93-184.. Bulletin of Symbolic Logic, 2001, 7, 77-78.	0.2	0
53	Review of "Basic proof theory. ACM SIGACT News, 2001, 32, 15-19.	0.1	0
54	Interpreting classical theories in constructive ones. Journal of Symbolic Logic, 2000, 65, 1785-1812.	0.5	27

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55	The model-theoretic ordinal analysis of theories of predicative strength. <i>Journal of Symbolic Logic</i> , 1999, 64, 327-349.	0.5	8
56	An effective proof that open sets are Ramsey. <i>Archive for Mathematical Logic</i> , 1998, 37, 235-240.	0.3	10
57	Predicative functionals and an interpretation of $\text{ACA}_0$ . <i>Annals of Pure and Applied Logic</i> , 1998, 92, 1-34.	0.5	5
58	Gödel's Functional (Dialectica) Interpretation. <i>Studies in Logic and the Foundations of Mathematics</i> , 1998, , 337-405.	0.1	140
59	A Model-Theoretic Approach to Ordinal Analysis. <i>Bulletin of Symbolic Logic</i> , 1997, 3, 17-52.	0.2	17
60	Formalizing forcing arguments in subsystems of second-order arithmetic. <i>Annals of Pure and Applied Logic</i> , 1996, 82, 165-191.	0.5	33
61	On the relationship between $\text{ATR}_0$ and $\text{ACA}_0$ . <i>Journal of Symbolic Logic</i> , 1996, 61, 768-779.	0.5	25
62	TWO-SORTED FREGE ARITHMETIC IS NOT CONSERVATIVE. <i>Review of Symbolic Logic</i> , 0, , 1-32.	0.7	0