

# Andre Nies

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2713879/publications.pdf>

Version: 2024-02-01

125  
papers

2,050  
citations

394421

19  
h-index

377865

34  
g-index

126  
all docs

126  
docs citations

126  
times ranked

206  
citing authors

#	ARTICLE	IF	CITATIONS
1	MUCHNIK DEGREES AND CARDINAL CHARACTERISTICS. <i>Journal of Symbolic Logic</i> , 2021, 86, 471-498.	0.5	0
2	Highness properties close to PA completeness. <i>Israel Journal of Mathematics</i> , 2021, 244, 419-465.	0.8	7
3	Randomness and initial segment complexity for measures. <i>Theoretical Computer Science</i> , 2021, 900, 1-1.	0.9	0
4	RANDOMNESS NOTIONS AND REVERSE MATHEMATICS. <i>Journal of Symbolic Logic</i> , 2020, 85, 271-299.	0.5	0
5	Computing from projections of random points. <i>Journal of Mathematical Logic</i> , 2020, 20, 1950014.	0.6	1
6	Martin-Löf random quantum states. <i>Journal of Mathematical Physics</i> , 2019, 60, 092201.	1.1	4
7	Martin-Löf Randomness Implies Multiple Recurrence in Effectively Closed Sets. <i>Notre Dame Journal of Formal Logic</i> , 2019, 60, .	0.4	0
8	THE COMPLEXITY OF TOPOLOGICAL GROUP ISOMORPHISM. <i>Journal of Symbolic Logic</i> , 2018, 83, 1190-1203.	0.5	6
9	Calibrating word problems of groups via the complexity of equivalence relations. <i>Mathematical Structures in Computer Science</i> , 2018, 28, 457-471.	0.6	9
10	Effectively closed subgroups of the infinite symmetric group. <i>Proceedings of the American Mathematical Society</i> , 2018, 146, 5421-5435.	0.8	3
11	From Eventually Different Functions to Pandemic Numberings. <i>Lecture Notes in Computer Science</i> , 2018, , 97-106.	1.3	0
12	Reals which compute little. , 2017, , 261-275.		19
13	Calculus of Cost Functions. <i>Theory and Applications of Computability</i> , 2017, , 183-216.	1.3	3
14	Metric Scott analysis. <i>Advances in Mathematics</i> , 2017, 318, 46-87.	1.1	19
15	Describing finite groups by short first-order sentences. <i>Israel Journal of Mathematics</i> , 2017, 221, 85-115.	0.8	5
16	A Universal Separable Diversity. <i>Analysis and Geometry in Metric Spaces</i> , 2017, 5, 138-151.	0.5	6
17	Lowness, Randomness, and Computable Analysis. <i>Lecture Notes in Computer Science</i> , 2017, , 738-754.	1.3	1
18	Randomness and differentiability. <i>Transactions of the American Mathematical Society</i> , 2016, 368, 581-605.	0.9	30

#	ARTICLE	IF	CITATIONS
19	Coherent randomness tests and computing the $\Sigma^1_1$ -trivial sets. Journal of the European Mathematical Society, 2016, 18, 773-812.	1.4	16
20	USING ALMOST-EVERYWHERE THEOREMS FROM ANALYSIS TO STUDY RANDOMNESS. Bulletin of Symbolic Logic, 2016, 22, 305-331.	0.2	11
21	Lightface $\Sigma^1_1$ -Completeness of Density Sets Under Effective Wadge Reducibility. Lecture Notes in Computer Science, 2016, , 234-239.	1.3	0
22	A Computational Approach to the Borwein-Ditor Theorem. Lecture Notes in Computer Science, 2016, , 99-104.	1.3	0
23	DEMUTH'S PATH TO RANDOMNESS. Bulletin of Symbolic Logic, 2015, 21, 270-305.	0.2	5
24	A Unifying Approach to the Gamma Question. , 2015, , .		8
25	Solovay functions and their applications in algorithmic randomness. Journal of Computer and System Sciences, 2015, 81, 1575-1591.	1.2	8
26	Counting the changes of random $\Sigma^1_1$ sets. Journal of Logic and Computation, 2015, 25, 1073-1089.	0.8	7
27	Feasible Analysis, Randomness, and Base Invariance. Theory of Computing Systems, 2015, 56, 439-464.	1.1	5
28	Local Compactness for Computable Polish Metric Spaces is $\Sigma^1_1$ -complete. Lecture Notes in Computer Science, 2015, , 286-290.	1.3	5
29	An Analogy between Cardinal Characteristics and Highness Properties of Oracles. , 2015, , .		6
30	The Complexity of Recursive Splittings of Random Sets. Computability, 2014, 3, 1-8.	0.3	0
31	Algorithmic Aspects of Lipschitz Functions. Computability, 2014, 3, 45-61.	0.3	11
32	Denjoy, Demuth and density. Journal of Mathematical Logic, 2014, 14, 1450004.	0.6	13
33	Universality for left-computably enumerable metric spaces. Lobachevskii Journal of Mathematics, 2014, 35, 292-294.	0.9	1
34	CHARACTERIZING LOWNESS FOR DEMUTH RANDOMNESS. Journal of Symbolic Logic, 2014, 79, 526-560.	0.5	3
35	COMPLEXITY OF EQUIVALENCE RELATIONS AND PREORDERS FROM COMPUTABILITY THEORY. Journal of Symbolic Logic, 2014, 79, 859-881.	0.5	14
36	COMPUTING $\Sigma^1_1$ -TRIVIAL SETS BY INCOMPLETE RANDOM SETS. Bulletin of Symbolic Logic, 2014, 20, 80-90.	0.2	12

#	ARTICLE	IF	CITATIONS
37	Joining non-low C.E. sets with diagonally non-computable functions. Journal of Logic and Computation, 2013, 23, 1183-1194.	0.8	1
38	$\Sigma^0_1$ -triviality in computable metric spaces. Proceedings of the American Mathematical Society, 2013, 141, 2885-2899.	0.8	6
39	Calibrating the complexity of $\Delta^0_2$ sets via their changes. , 2013, , .		1
40	The Classification Problem for Compact Computable Metric Spaces. Lecture Notes in Computer Science, 2013, , 320-328.	1.3	14
41	Low upper bounds in the Turing degrees revisited. Journal of Logic and Computation, 2012, 22, 693-699.	0.8	0
42	Characterizing the strongly jump-traceable sets via randomness. Advances in Mathematics, 2012, 231, 2252-2293.	1.1	15
43	Computably enumerable sets below random sets. Annals of Pure and Applied Logic, 2012, 163, 1596-1610.	0.5	5
44	Randomness notions and partial relativization. Israel Journal of Mathematics, 2012, 191, 791-816.	0.8	14
45	Demuth's Path to Randomness. Lecture Notes in Computer Science, 2012, , 159-173.	1.3	4
46	Equivalence Relations That Are $\Sigma^0_3$ Complete for Computable Reducibility. Lecture Notes in Computer Science, 2012, , 26-33.	1.3	10
47	Borel structures and Borel theories. Journal of Symbolic Logic, 2011, 76, 461-476.	0.5	5
48	Upper bounds on ideals in the computably enumerable Turing degrees. Annals of Pure and Applied Logic, 2011, 162, 465-473.	0.5	5
49	Demuth randomness and computational complexity. Annals of Pure and Applied Logic, 2011, 162, 504-513.	0.5	25
50	Universal recursively enumerable sets of strings. Theoretical Computer Science, 2011, 412, 2253-2261.	0.9	8
51	Benign cost functions and lowness properties. Journal of Symbolic Logic, 2011, 76, 289-312.	0.5	18
52	Studying Randomness Through Computation. , 2011, , 207-222.		3
53	Interactions of Computability and Randomness. , 2011, , .		5
54	Higher Kurtz randomness. Annals of Pure and Applied Logic, 2010, 161, 1280-1290.	0.5	8

#	ARTICLE	IF	CITATIONS
55	Counting the Changes of Random $\{\Delta^0_2\}$ Sets. Lecture Notes in Computer Science, 2010, , 162-171.	1.3	4
56	Finite automata presentable abelian groups. Annals of Pure and Applied Logic, 2009, 161, 458-467.	0.5	12
57	Superhighness. Notre Dame Journal of Formal Logic, 2009, 50, .	0.4	5
58	The First Order Theories of the Medvedev and Muchnik Lattices. Lecture Notes in Computer Science, 2009, , 324-331.	1.3	1
59	Superhighness and Strong Jump Traceability. Lecture Notes in Computer Science, 2009, , 726-737.	1.3	2
60	Lowness properties and approximations of the jump. Annals of Pure and Applied Logic, 2008, 152, 51-66.	0.5	26
61	Lowness of higher randomness notions. Israel Journal of Mathematics, 2008, 166, 39-60.	0.8	15
62	FA-presentable groups and rings. Journal of Algebra, 2008, 320, 569-585.	0.7	24
63	From Automatic Structures to Borel Structures. Proceedings - Symposium on Logic in Computer Science, 2008, , .	0.0	12
64	Indifferent Sets. Journal of Logic and Computation, 2008, 19, 425-443.	0.8	11
65	LOWNESS FOR COMPUTABLE MACHINES. Lecture Notes Series, Institute for Mathematical Sciences, 2008, , 79-86.	0.2	6
66	ELIMINATING CONCEPTS. Lecture Notes Series, Institute for Mathematical Sciences, 2008, , 225-247.	0.2	5
67	A LOWER CONE IN THE $wtt$ DEGREES OF NON-INTEGRAL EFFECTIVE DIMENSION. Lecture Notes Series, Institute for Mathematical Sciences, 2008, , 249-260.	0.2	3
68	Randomness via effective descriptive set theory. Journal of the London Mathematical Society, 2007, 75, 495-508.	1.0	19
69	Comparing quasi-finitely axiomatizable and prime groups. Journal of Group Theory, 2007, 10, .	0.2	8
70	Using random sets as oracles. Journal of the London Mathematical Society, 2007, 75, 610-622.	1.0	57
71	Describing Groups. Bulletin of Symbolic Logic, 2007, 13, 305-339.	0.2	49
72	A Weakly 2-Random Set That Is Not Generalized Low. Lecture Notes in Computer Science, 2007, , 474-477.	1.3	3

#	ARTICLE	IF	CITATIONS
73	Randomness and Computability: Open Questions. Bulletin of Symbolic Logic, 2006, 12, 390-410.	0.2	65
74	Kolmogorov's Loveland randomness and stochasticity. Annals of Pure and Applied Logic, 2006, 138, 183-210.	0.5	44
75	Lowness Properties and Approximations of the Jump. Electronic Notes in Theoretical Computer Science, 2006, 143, 45-57.	0.9	3
76	Calibrating Randomness. Bulletin of Symbolic Logic, 2006, 12, 411-491.	0.2	59
77	Lowness and nullsets. Journal of Symbolic Logic, 2006, 71, 1044-1052.	0.5	24
78	Non-cupping and randomness. Proceedings of the American Mathematical Society, 2006, 135, 837-844.	0.8	6
79	Kolmogorov-Loveland Randomness and Stochasticity. Lecture Notes in Computer Science, 2005, , 422-433.	1.3	0
80	Lowness properties and randomness. Advances in Mathematics, 2005, 197, 274-305.	1.1	157
81	Program Size Complexity for Possibly Infinite Computations. Notre Dame Journal of Formal Logic, 2005, 46, 51.	0.4	6
82	FINITELY GENERATED GROUPS AND FIRST-ORDER LOGIC. Journal of the London Mathematical Society, 2005, 71, 545-562.	1.0	6
83	Randomness, relativization and Turing degrees. Journal of Symbolic Logic, 2005, 70, 515-535.	0.5	90
84	RELATIVIZING CHAITIN'S HALTING PROBABILITY. Journal of Mathematical Logic, 2005, 05, 167-192.	0.6	43
85	Lowness for the Class of Schnorr Random Reals. SIAM Journal on Computing, 2005, 35, 647-657.	1.0	45
86	Aspects of free groups. Journal of Algebra, 2003, 263, 119-125.	0.7	12
87	Lowness Properties of Reals and Hyper-Immunity. Electronic Notes in Theoretical Computer Science, 2003, 84, 73-79.	0.9	6
88	Separating Classes of Groups by First-Order Sentences. International Journal of Algebra and Computation, 2003, 13, 287-302.	0.5	24
89	PARAMETER DEFINABILITY IN THE RECURSIVELY ENUMERABLE DEGREES. Journal of Mathematical Logic, 2003, 03, 37-65.	0.6	9
90	Global properties of the lattice of $\Pi^0_1$ classes. Proceedings of the American Mathematical Society, 2003, 132, 239-249.	0.8	3

#	ARTICLE	IF	CITATIONS
91	The $\forall$ -theory of $\mathcal{R}$ ( $\leq, \vee, \wedge$ ) is undecidable. Transactions of the American Mathematical Society, 2003, 356, 3025-3067.	0.9	6
92	TRIVIAL REALS. , 2003, , .		33
93	Randomness, Computability, and Density. SIAM Journal on Computing, 2002, 31, 1169-1183.	1.0	42
94	Trivial Reals. Electronic Notes in Theoretical Computer Science, 2002, 66, 36-52.	0.9	1
95	Initial segments of the lattice of $\hat{1}0$ classes. Journal of Symbolic Logic, 2001, 66, 1749-1765.	0.5	5
96	On the filter of computably enumerable supersets of an $r$ -maximal set. Archive for Mathematical Logic, 2001, 40, 415-423.	0.3	3
97	Interpreting $N$ in the computably enumerable weak truth table degrees. Annals of Pure and Applied Logic, 2001, 107, 35-48.	0.5	2
98	Undecidability Results for Low Complexity Time Classes. Journal of Computer and System Sciences, 2000, 60, 465-479.	1.2	3
99	Differences of Computably Enumerable Sets. Mathematical Logic Quarterly, 2000, 46, 555-561.	0.2	3
100	Structural properties and $\hat{1}20$ enumeration degrees. Journal of Symbolic Logic, 2000, 65, 285-292.	0.5	5
101	Effectively dense Boolean algebras and their applications. Transactions of the American Mathematical Society, 2000, 352, 4989-5012.	0.9	8
102	A New Spectrum of Recursive Models. Notre Dame Journal of Formal Logic, 1999, 40, 307.	0.4	12
103	Atomless $r$ -maximal sets. Israel Journal of Mathematics, 1999, 113, 305-322.	0.8	4
104	Branching in the enumeration degrees of the $\hat{1}20$ sets. Israel Journal of Mathematics, 1999, 110, 29-59.	0.8	4
105	Coding in the Partial Order of Enumerable Sets. Advances in Mathematics, 1998, 133, 133-162.	1.1	18
106	Computably enumerable sets and quasi-reducibility. Annals of Pure and Applied Logic, 1998, 95, 1-35.	0.5	22
107	Interpretability and Definability in the Recursively Enumerable Degrees. Proceedings of the London Mathematical Society, 1998, 77, 241-291.	1.3	57
108	Intervals of the Lattice of Computably Enumerable Sets and Effective Boolean Algebras. Bulletin of the London Mathematical Society, 1997, 29, 683-692.	0.8	11

#	ARTICLE	IF	CITATIONS
109	Computable Models of Theories with Few Models. Notre Dame Journal of Formal Logic, 1997, 38, .	0.4	60
110	Definability in the Recursively Enumerable Degrees. Bulletin of Symbolic Logic, 1996, 2, 392-404.	0.2	12
111	Interpreting true arithmetic in the theory of the r.e. truth table degrees. Annals of Pure and Applied Logic, 1995, 75, 269-311.	0.5	6
112	The undecidability of the $\hat{4}$ -theory for the r.e. wtt and Turing degrees. Journal of Symbolic Logic, 1995, 60, 1118-1136.	0.5	9
113	The last question on recursively enumerable-degrees. Algebra and Logic, 1994, 33, 307-314.	0.3	10
114	Recursively Enumerable Equivalence Relations Modulo Finite Differences. Mathematical Logic Quarterly, 1994, 40, 490-518.	0.2	4
115	The theory of the recursively enumerable weak truth-table degrees is undecidable. Journal of Symbolic Logic, 1992, 57, 864-874.	0.5	14
116	Cappable recursively enumerable degrees and Post's program. Archive for Mathematical Logic, 1992, 32, 51-56.	0.3	4
117	The theory of the polynomial many-one degrees of recursive sets is undecidable. Lecture Notes in Computer Science, 1992, , 209-218.	1.3	11
118	Undecidability results for low complexity degree structures. , 0, , .		2
119	Borel structures: a brief survey. , 0, , 124-134.		3
120	The reverse mathematics of theorems of Jordan and Lebesgue. Journal of Symbolic Logic, 0, , 1-18.	0.5	3
121	Finite axiomatizability for profinite groups. Proceedings of the London Mathematical Society, 0, , .	1.3	1
122	FRAÏSSÉ% LIMITS FOR RELATIONAL METRIC STRUCTURES. Journal of Symbolic Logic, 0, , 1-22.	0.5	1
123	Automatic Structures: Richness and Limitations. Logical Methods in Computer Science, 0, Volume 3, Issue 2, .	0.4	33
124	Randomness and Solovay degrees. Journal of Logic and Analysis, 0, , 1-13.	0.5	1
125	Universal Recursively Enumerable Sets of Strings. Lecture Notes in Computer Science, 0, , 170-182.	1.3	4