

Jarkko Kari

List of Publications by Year in descending order

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Version: 2024-02-01

96
papers

2,234
citations

361045

20
h-index

243296

44
g-index

121
all docs

121
docs citations

121
times ranked

636
citing authors

#	ARTICLE	IF	CITATIONS
1	Decidability and Periodicity of Low Complexity Tilings. Theory of Computing Systems, 2023, 67, 125-148.	0.7	2
2	On Perfect Coverings of Two-Dimensional Grids. Lecture Notes in Computer Science, 2022, , 152-163.	1.0	2
3	Nilpotency and periodic points in non-uniform cellular automata. Acta Informatica, 2021, 58, 319-333.	0.5	0
4	On the domino problem of the Baumslag-Solitar groups. Theoretical Computer Science, 2021, 894, 12-22.	0.5	3
5	Sequentializing cellular automata. Natural Computing, 2020, 19, 759-772.	1.8	2
6	An algebraic geometric approach to Nivat's conjecture. Information and Computation, 2020, 271, 104481.	0.5	26
7	On the conjugacy problem of cellular automata. Information and Computation, 2020, 274, 104531.	0.5	2
8	Foundations of Reversible Computation. Lecture Notes in Computer Science, 2020, , 1-40.	1.0	12
9	Nivat's conjecture and pattern complexity in algebraic subshifts. Theoretical Computer Science, 2019, 777, 379-386.	0.5	30
10	On Expansivity and Pseudo-Orbit Tracing Property for Cellular Automata*. Fundamenta Informaticae, 2019, 171, 239-259.	0.3	0
11	Low-Complexity Tilings of the Plane. Lecture Notes in Computer Science, 2019, , 35-45.	1.0	24
12	Words of Minimum Rank in Deterministic Finite Automata. Lecture Notes in Computer Science, 2019, , 74-87.	1.0	0
13	Reversible Cellular Automata: From Fundamental Classical Results to Recent Developments. New Generation Computing, 2018, 36, 145-172.	2.5	26
14	Conjugacy of One-Dimensional One-Sided Cellular Automata is Undecidable. Lecture Notes in Computer Science, 2018, , 227-238.	1.0	2
15	Tiling Problem and Undecidability in Cellular Automata. , 2018, , 201-219.		0
16	Finite generating sets for reversible gate sets under general conservation laws. Theoretical Computer Science, 2017, 701, 27-39.	0.5	6
17	Preface / Editorial. Fundamenta Informaticae, 2017, 155, v-vii.	0.3	0
18	Cellular automata and powers of $\hat{p} \cdot q$. RAIRO - Theoretical Informatics and Applications, 2017, 51, 191-204.	0.5	5

#	ARTICLE	IF	CITATIONS
19	The Group of Reversible Turing Machines. Lecture Notes in Computer Science, 2016, , 49-62.	1.0	7
20	Piecewise Affine Functions, Sturmian Sequences and Wang Tiles. Fundamenta Informaticae, 2016, 145, 257-277.	0.3	1
21	Sub Rosa, A System of Quasiperiodic Rhombic Substitution Tilings with n-Fold Rotational Symmetry. Discrete and Computational Geometry, 2016, 55, 972-996.	0.4	9
22	An "almost dual" to Gottschalk's Conjecture. Lecture Notes in Computer Science, 2016, , 77-89.	1.0	9
23	Strongly Universal Reversible Gate Sets. Lecture Notes in Computer Science, 2016, , 239-254.	1.0	1
24	Statistical Mechanics of Surjective Cellular Automata. Journal of Statistical Physics, 2015, 160, 1198-1243.	0.5	15
25	An Algebraic Geometric Approach to Nivat's Conjecture. Lecture Notes in Computer Science, 2015, , 273-285.	1.0	13
26	Solving the Induced Subgraph Problem in the Randomized Multiparty Simultaneous Messages Model. Lecture Notes in Computer Science, 2015, , 370-384.	1.0	11
27	A Universal Cellular Automaton Without Sensitive Subsystems. Lecture Notes in Computer Science, 2015, , 44-55.	1.0	0
28	Tiling Problem and Undecidability in Cellular Automata. , 2015, , 1-20.		0
29	Non-uniform Cellular Automata. Theoretical Computer Science, 2014, 559, 1-2.	0.5	0
30	Undecidable Properties of Self-affine Sets and Multi-tape Automata. Lecture Notes in Computer Science, 2014, , 352-364.	1.0	2
31	Universal pattern generation by cellular automata. , 2013, , .		0
32	Modified Traffic Cellular Automaton for the Density Classification Task. Fundamenta Informaticae, 2012, 116, 141-156.	0.3	13
33	Decidability and undecidability in cellular automata. International Journal of General Systems, 2012, 41, 539-554.	1.2	5
34	Consistency of multidimensional combinatorial substitutions. Theoretical Computer Science, 2012, 454, 178-188.	0.5	2
35	On continuous weighted finite automata. Linear Algebra and Its Applications, 2012, 436, 1791-1824.	0.4	1
36	Universal pattern generation by cellular automata. Theoretical Computer Science, 2012, 429, 180-184.	0.5	21

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37	On time-symmetry in cellular automata. <i>Journal of Computer and System Sciences</i> , 2012, 78, 1115-1126.	0.9	24
38	Tiling Problem and Undecidability in Cellular Automata. , 2012, , 3198-3211.		2
39	Cellular Automata, the Collatz Conjecture and Powers of 3/2. <i>Lecture Notes in Computer Science</i> , 2012, , 40-49.	1.0	7
40	Limit Sets of Stable and Unstable Cellular Automata. <i>Fundamenta Informaticae</i> , 2011, 110, 45-57.	0.3	7
41	On the hierarchy of conservation laws in a cellular automaton. <i>Natural Computing</i> , 2011, 10, 1275-1294.	1.8	13
42	A Survey on Picture-Walking Automata. <i>Lecture Notes in Computer Science</i> , 2011, , 183-213.	1.0	14
43	Linear Algebra Based Bounds for One-Dimensional Cellular Automata. <i>Lecture Notes in Computer Science</i> , 2011, , 1-7.	1.0	0
44	Lossy to Lossless Spatially Scalable Depth Map Coding with Cellular Automata. , 2009, , .		8
45	Digital Image Compression. <i>Monographs in Theoretical Computer Science</i> , 2009, , 453-479.	0.6	14
46	On post correspondence problem for letter monotonic languages. <i>Theoretical Computer Science</i> , 2009, 410, 2957-2960.	0.5	2
47	A Binary Image Scalable Coder Based on Reversible Cellular Automata Transform and Arithmetic Coding. , 2009, , .		4
48	The Undecidability of the Infinite Ribbon Problem: Implications for Computing by Self-Assembly. <i>SIAM Journal on Computing</i> , 2009, 38, 2356-2381.	0.8	19
49	Tiling Problem and Undecidability in Cellular Automata. , 2009, , 9158-9172.		1
50	Bounds on Non-surjective Cellular Automata. <i>Lecture Notes in Computer Science</i> , 2009, , 439-450.	1.0	3
51	Unambiguous Automata. <i>Mathematics in Computer Science</i> , 2008, 1, 625-638.	0.2	8
52	On the Undecidability of the Tiling Problem. , 2008, , 74-82.		3
53	The Most General Conservation Law for a Cellular Automaton. , 2008, , 194-203.		2
54	Periodicity and Immortality in Reversible Computing. <i>Lecture Notes in Computer Science</i> , 2008, , 419-430.	1.0	37

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55	Binary operations on automatic functions. RAIRO - Theoretical Informatics and Applications, 2008, 42, 217-236.	0.5	0
56	A tight linear bound on the synchronization delay of bijective automata. Theoretical Computer Science, 2007, 380, 23-36.	0.5	5
57	The Tiling Problem Revisited (Extended Abstract). Lecture Notes in Computer Science, 2007, , 72-79.	1.0	13
58	Theory of cellular automata: A survey. Theoretical Computer Science, 2005, 334, 3-33.	0.5	456
59	A new dimension sensitive property for cellular automata. Theoretical Computer Science, 2005, 345, 235-247.	0.5	4
60	Reversible Cellular Automata. Lecture Notes in Computer Science, 2005, , 57-68.	1.0	33
61	Rectangles and Squares Recognized by Two-Dimensional Automata. Lecture Notes in Computer Science, 2004, , 134-144.	1.0	29
62	A New Dimension Sensitive Property for Cellular Automata. Lecture Notes in Computer Science, 2004, , 416-426.	1.0	4
63	Synchronizing finite automata on Eulerian digraphs. Theoretical Computer Science, 2003, 295, 223-232.	0.5	89
64	Infinite Snake Tiling Problems. Lecture Notes in Computer Science, 2003, , 67-77.	1.0	9
65	A NOTE ON SYNCHRONIZED AUTOMATA AND ROAD COLORING PROBLEM. International Journal of Foundations of Computer Science, 2002, 13, 459-471.	0.8	35
66	Multistage block-matching motion estimation for superresolution video reconstruction. , 2002, , .		3
67	Synchronizing Finite Automata on Eulerian Digraphs. Lecture Notes in Computer Science, 2001, , 432-438.	1.0	18
68	RECENT RESULTS ON APERIODIC WANG TILINGS. , 2000, , 83-95.		1
69	Linear Cellular Automata with Multiple State Variables. Lecture Notes in Computer Science, 2000, , 110-121.	1.0	8
70	On the Circuit Depth of Structurally Reversible Cellular Automata. Fundamenta Informaticae, 1999, 38, 93-107.	0.3	18
71	Video compression by mean-corrected motion compensation of partial quadrees. IEEE Transactions on Circuits and Systems for Video Technology, 1997, 7, 86-96.	5.6	19
72	Computational fractal geometry with WFA. Acta Informatica, 1997, 34, 151-166.	0.5	5

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73	Digital Images and Formal Languages. , 1997, , 599-616.		45
74	Finite state transformation of images. Computers and Graphics, 1996, 20, 125-135.	1.4	13
75	TWO LOWER BOUNDS ON DISTRIBUTIVE GENERATION OF LANGUAGES. Fundamenta Informaticae, 1996, 25, 271-284.	0.3	1
76	A small aperiodic set of Wang tiles. Discrete Mathematics, 1996, 160, 259-264.	0.4	111
77	On the power of L-systems in image generation. Acta Informatica, 1994, 31, 761-773.	0.5	2
78	Reversibility and surjectivity problems of cellular automata. Journal of Computer and System Sciences, 1994, 48, 149-182.	0.9	174
79	Rice's theorem for the limit sets of cellular automata. Theoretical Computer Science, 1994, 127, 229-254.	0.5	83
80	Some hierarchies for the communication complexity measures of cooperating grammar systems. Theoretical Computer Science, 1994, 127, 123-147.	0.5	9
81	Image-data compression using edge-optimizing algorithm for WFA inference. Information Processing and Management, 1994, 30, 829-838.	5.4	28
82	Two lower bounds on distributive generation of languages. Lecture Notes in Computer Science, 1994, , 423-432.	1.0	4
83	Parametrized recurrent systems for image generation. Information Processing Letters, 1993, 48, 267-274.	0.4	0
84	Image compression using weighted finite automata. Computers and Graphics, 1993, 17, 305-313.	1.4	110
85	Image compression using Weighted Finite Automata. Lecture Notes in Computer Science, 1993, , 392-402.	1.0	14
86	Properties of Limit Sets of Cellular Automata. , 1993, , 311-321.		2
87	Some hierarchies for the communication complexity measures of cooperating grammar systems. Lecture Notes in Computer Science, 1993, , 495-505.	1.0	2
88	The topological entropy of cellular automata is uncomputable. Ergodic Theory and Dynamical Systems, 1992, 12, 255-265.	0.4	94
89	The Nilpotency Problem of One-Dimensional Cellular Automata. SIAM Journal on Computing, 1992, 21, 571-586.	0.8	120
90	The impact of the number of cooperating grammars on the generative power. Theoretical Computer Science, 1992, 98, 249-262.	0.5	6

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91	Reversibility of 2D cellular automata is undecidable. <i>Physica D: Nonlinear Phenomena</i> , 1990, 45, 379-385.	1.3	136
92	Observations concerning a public-key cryptosystem based on iterated morphisms. <i>Theoretical Computer Science</i> , 1989, 66, 45-53.	0.5	8
93	A cryptanalytic observation concerning systems based on language theory. <i>Discrete Applied Mathematics</i> , 1988, 21, 265-268.	0.5	9
94	A cryptosystem based on propositional logic. , 1988, , 209-219.		1
95	Tiling Problems on Baumslag-Solitar groups.. <i>Electronic Proceedings in Theoretical Computer Science, EPTCS</i> , 0, 128, 35-46.	0.8	6
96	Substitution Discrete Plane Tilings with $2n$ -Fold Rotational Symmetry for Odd n . <i>Discrete and Computational Geometry</i> , 0, , .	0.4	2