

Vijaya Ramachandran

List of Publications by Year in descending order

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61
papers

1,627
citations

394421

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62
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docs citations

62
times ranked

610
citing authors

#	ARTICLE	IF	CITATIONS
1	Data Oblivious Algorithms for Multicores. , 2021, , .		5
2	Cache-Oblivious Buffer Heap and Cache-Efficient Computation of Shortest Paths in Graphs. ACM Transactions on Algorithms, 2018, 14, 1-33.	1.0	2
3	Fine-grained complexity for sparse graphs. , 2018, , .		10
4	Resource Oblivious Sorting on Multicores. ACM Transactions on Parallel Computing, 2017, 3, 1-31.	1.4	12
5	Bounding Cache Miss Costs of Multithreaded Computations Under General Schedulers. , 2017, , .		4
6	Randomized Minimum Spanning Tree. , 2016, , 1747-1750.		0
7	Randomized Minimum Spanning Tree. , 2015, , 1-5.		0
8	Betweenness Centrality “ Incremental and Faster. Lecture Notes in Computer Science, 2014, , 577-588.	1.3	28
9	Oblivious algorithms for multicores and networks of processors. Journal of Parallel and Distributed Computing, 2013, 73, 911-925.	4.1	30
10	Competitive Cache Replacement Strategies for Shared Cache Environments. , 2012, , .		12
11	Revisiting the Cache Miss Analysis of Multithreaded Algorithms. Lecture Notes in Computer Science, 2012, , 172-183.	1.3	5
12	The Cache-Oblivious Gaussian Elimination Paradigm: Theoretical Framework, Parallelization and Experimental Evaluation. Theory of Computing Systems, 2010, 47, 878-919.	1.1	31
13	Cache-Oblivious Dynamic Programming for Bioinformatics. IEEE/ACM Transactions on Computational Biology and Bioinformatics, 2010, 7, 495-510.	3.0	24
14	Oblivious algorithms for multicores and network of processors. , 2010, , .		44
15	Randomized minimum spanning tree algorithms using exponentially fewer random bits. ACM Transactions on Algorithms, 2008, 4, 1-27.	1.0	12
16	Cache-efficient dynamic programming algorithms for multicores. , 2008, , .		59
17	Randomized Minimum Spanning Tree. , 2008, , 732-734.		0
18	The cache-oblivious gaussian elimination paradigm. , 2007, , .		17

#	ARTICLE	IF	CITATIONS
19	Cache-Oblivious Computation: Algorithms and Experimental Evaluation. , 2007, , .		1
20	The diameter of sparse random graphs. Random Structures and Algorithms, 2007, 31, 482-516.	1.1	43
21	Cache-oblivious dynamic programming. , 2006, , .		24
22	A Shortest Path Algorithm for Real-Weighted Undirected Graphs. SIAM Journal on Computing, 2005, 34, 1398-1431.	1.0	83
23	Emulations between QSM, BSP and LogP: a framework for general-purpose parallel algorithm design. Journal of Parallel and Distributed Computing, 2003, 63, 1175-1192.	4.1	14
24	A Randomized Linear-Work EREW PRAM Algorithm to Find a Minimum Spanning Forest. Algorithmica, 2003, 35, 257-268.	1.3	4
25	An optimal minimum spanning tree algorithm. Journal of the ACM, 2002, 49, 16-34.	2.2	203
26	A Randomized Time-Work Optimal Parallel Algorithm for Finding a Minimum Spanning Forest. SIAM Journal on Computing, 2002, 31, 1879-1895.	1.0	70
27	Improved Distance Oracles for Avoiding Link-Failure. Lecture Notes in Computer Science, 2002, , 523-534.	1.3	1
28	Parallel Algorithm Design with Coarse-Grained Synchronization. Lecture Notes in Computer Science, 2001, , 619-627.	1.3	1
29	A General-Purpose Shared-Memory Model for Parallel Computation. The IMA Volumes in Mathematics and Its Applications, 1999, , 1-17.	0.5	8
30	The Queue-Read Queue-Write PRAM Model: Accounting for Contention in Parallel Algorithms. SIAM Journal on Computing, 1998, 28, 733-769.	1.0	56
31	Computational bounds for fundamental problems on general-purpose parallel models. , 1998, , .		10
32	QSM: A general purpose shared-memory model for parallel computation. Lecture Notes in Computer Science, 1997, , 1-5.	1.3	8
33	An Efficient Parallel Algorithm for the Layered Planar Monotone Circuit Value Problem. Algorithmica, 1997, 18, 384-404.	1.3	1
34	Parallel Algorithms for Reducible Flow Graphs. Journal of Algorithms, 1997, 23, 1-31.	0.9	7
35	An optimal EREW PRAM algorithm for minimum spanning tree verification. Information Processing Letters, 1997, 62, 153-159.	0.6	13
36	A randomized linear work EREW PRAM algorithm to find a minimum spanning forest. Lecture Notes in Computer Science, 1997, , 212-222.	1.3	32

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37	An Efficient Parallel Algorithm for the General Planar Monotone Circuit Value Problem. SIAM Journal on Computing, 1996, 25, 312-339.	1.0	8
38	Efficient Low-Contention Parallel Algorithms. Journal of Computer and System Sciences, 1996, 53, 417-442.	1.2	32
39	Computing Minimal Spanning Subgraphs in Linear Time. SIAM Journal on Computing, 1995, 24, 1332-1358.	1.0	10
40	Finding the closed partition of a planar graph. Algorithmica, 1994, 11, 443-468.	1.3	2
41	Planarity testing in parallel. Journal of Computer and System Sciences, 1994, 49, 517-561.	1.2	29
42	Finding a Smallest Augmentation to Biconnect a Graph. SIAM Journal on Computing, 1993, 22, 889-912.	1.0	52
43	Finding Triconnected Components by Local Replacement. SIAM Journal on Computing, 1993, 22, 587-616.	1.0	24
44	An efficient parallel algorithm for the layered planar monotone circuit value problem. Lecture Notes in Computer Science, 1993, , 321-332.	1.3	4
45	A new graph triconnectivity algorithm and its parallelization. Combinatorica, 1992, 12, 53-76.	1.2	40
46	Multiplication, division, and shift instructions in parallel random access machines. Theoretical Computer Science, 1992, 100, 1-44.	0.9	9
47	Transitive compaction in parallel via branchings. Journal of Algorithms, 1991, 12, 110-125.	0.9	9
48	Improved algorithms for graph four- connectivity. Journal of Computer and System Sciences, 1991, 42, 288-306.	1.2	30
49	Parallel Algorithms for Shared-Memory Machines. , 1990, , 869-941.		279
50	Linear Programming with Two Variables Per Inequality in Poly-Log Time. SIAM Journal on Computing, 1990, 19, 1000-1010.	1.0	8
51	A Minimax Arc Theorem for Reducible Flow Graphs. SIAM Journal on Discrete Mathematics, 1990, 3, 554-560.	0.8	18
52	Finding triconnected components by local replacements. Lecture Notes in Computer Science, 1989, , 379-393.	1.3	25
53	Optimal VLSI graph embeddings in variable aspect ratio rectangles. Algorithmica, 1988, 3, 487-510.	1.3	8
54	Finding a minimum feedback arc set in reducible flow graphs. Journal of Algorithms, 1988, 9, 299-313.	0.9	41

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55	Efficient parallel circuits and algorithms for division. Information Processing Letters, 1988, 29, 307-313.	0.6	10
56	Efficient Parallel Evaluation of Straight-Line Code and Arithmetic Circuits. SIAM Journal on Computing, 1988, 17, 687-695.	1.0	60
57	Efficient parallel triconnectivity in logarithmic time. Lecture Notes in Computer Science, 1988, , 33-42.	1.3	23
58	Fast Parallel Algorithms for Reducible Flow Graphs. , 1988, , 117-138.		3
59	The complexity of minimum cut and maximum flow problems in an acyclic network. Networks, 1987, 17, 387-392.	2.7	11
60	On driving many long wires in a VLSI layout. Journal of the ACM, 1986, 33, 687-701.	2.2	2
61	Efficient parallel evaluation of straight-line code and arithmetic circuits. Lecture Notes in Computer Science, 1986, , 236-245.	1.3	12