# Jagannathan Ramanujam

List of Publications by Year
in descending order

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|---|---|---|---|
| 36 papers | 1,088 citations | 471509 17 h-index | 454955 30 g-index |
| 36 all docs | 36 docs citations | 36 times ranked | 615 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Tiling multidimensional iteration spaces for multicomputers. Journal of Parallel and Distributed Computing, 1992, 16, 108-120. | 4.1 | 138 |
| 2 | Compile-time techniques for data distribution in distributed memory machines. IEEE Transactions on Parallel and Distributed Systems, 1991, 2, 472-482. | 5.6 | 130 |
| 3 | Automatic code generation for many-body electronic structure methods: the tensor contraction engineâ€¡â€¡. Molecular Physics, 2006, 104, 211-228. | 1.7 | 104 |
| 4 | Improving cache locality by a combination of loop and data transformations. IEEE Transactions on Computers, 1999, 48, 159-167. | 3.4 | 96 |
| 5 | Task allocation onto a hypercube by recursive mincut bipartitioning. Journal of Parallel and Distributed Computing, 1990, 10, 35-44. | 4.1 | 66 |
| 6 | Cluster partitioning approaches to mapping parallel programs onto a hypercube. Parallel Computing, 1990, 13, 1-16. | 2.1 | 62 |
| 7 | Efficient algorithms for array redistribution. IEEE Transactions on Parallel and Distributed Systems, 1996, 7, 587-594. | 5.6 | 61 |
| 8 | Assessing the similarity of ligand binding conformations with the Contact Mode Score. Computational Biology and Chemistry, 2016, 64, 403-413. | 2.3 | 45 |
| 9 | Compiler-directed scratch pad memory optimization for embedded multiprocessors. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2004, 12, 281-287. | 3.1 | 36 |
| 10 | Loop transformations. ACM SIGPLAN Notices, 2011, 46, 549-562. | 0.2 | 32 |
| 11 | Beyond unimodular transformations. Journal of Supercomputing, 1995, 9, 365-389. | 3.6 | 27 |
| 12 | Efficient Computation of Address Sequences in Data Parallel Programs Using Closed Forms for Basis Vectors. Journal of Parallel and Distributed Computing, 1996, 38, 188-203. | 4.1 | 26 |
| 13 | Performance Optimization of Tensor Contraction Expressions for Many-Body Methods in Quantum Chemistry. Journal of Physical Chemistry A, 2009, 113, 12715-12723. | 2.5 | 24 |
| 14 | GeauxDock: Accelerating Structure-Based Virtual Screening with Heterogeneous Computing. PLoS ONE, 2016, 11, e0158898. | 2.5 | 22 |
| 15 | A layout-conscious iteration space transformation technique. IEEE Transactions on Computers, 2001, 50, 1321-1335. | 3.4 | 21 |
| 16 | A unified framework for optimizing locality, parallelism, and communication in out-of-core computations. IEEE Transactions on Parallel and Distributed Systems, 2000, 11, 648-668. | 5.6 | 20 |
| 17 | Compilation techniques for out-of-core parallel computations. Parallel Computing, 1998, 24, 597-628. | 2.1 | 19 |
| 18 | Compiler-assisted dynamic scheduling for effective parallelization of loop nests on multicore processors. ACM SIGPLAN Notices, 2009, 44, 219-228. | 0.2 | 19 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Parallel tempering simulation of the three-dimensional Edwardsâ€“Anderson model with compact asynchronous multispin coding on GPU. Computer Physics Communications, 2014, 185, 2467-2478. | 7.5 | 17 |
| 20 | A Matrix-Based Approach to Global Locality Optimization. Journal of Parallel and Distributed Computing, 1999, 58, 190-235. | 4.1 | 15 |
| 21 | Decoupling interaction hardware design using libraries of reusable electronics. , 2009, , . | | 14 |
| 22 | Empirical performance model-driven data layout optimization and library call selection for tensor contraction expressions. Journal of Parallel and Distributed Computing, 2012, 72, 338-352. | 4.1 | 13 |
| 23 | Compilation and Communication Strategies for Out-of-Core Programs on Distributed Memory Machines. Journal of Parallel and Distributed Computing, 1996, 38, 277-288. | 4.1 | 10 |
| 24 | GeauxDock: A novel approach for mixedâ€resolution ligand docking using a descriptorâ€based force field. Journal of Computational Chemistry, 2015, 36, 2013-2026. | 3.3 | 10 |
| 25 | Strengthening spatial reasoning: elucidating the attentional and neural mechanisms associated with mental rotation skill development. Cognitive Research: Principles and Implications, 2020, 5, 20. | 2.0 | 10 |
| 26 | Minimizing data and synchronization costs in one-way communication. IEEE Transactions on Parallel and Distributed Systems, 2000, 11, 1232-1251. | 5.6 | 9 |
| 27 | Static and dynamic locality optimizations using integer linear programming. IEEE Transactions on Parallel and Distributed Systems, 2001, 12, 922-941. | 5.6 | 9 |
| 28 | Compiler Algorithms for Optimizing Locality and Parallelism on Shared and Distributed-Memory Machines. Journal of Parallel and Distributed Computing, 2000, 60, 924-965. | 4.1 | 8 |
| 29 | An I/O-Conscious Tiling Strategy for Disk-Resident Data Sets. Journal of Supercomputing, 2002, 21, 257-284. | 3.6 | 8 |
| 30 | Gaslight: A comprehensive fuzzing architecture for memory forensics frameworks. Digital Investigation, 2017, 22, S86-S93. | 3.2 | 6 |
| 31 | Reducing false sharing and improving spatial locality in a unified compilation framework. IEEE Transactions on Parallel and Distributed Systems, 2003, 14, 337-354. | 5.6 | 4 |
| 32 | Iteration Space Tiling for Distributed Memory Machines. Advances in Parallel Computing, 1992, 3, 255-270. | 0.3 | 4 |
| 33 | An innovative application execution toolkit for multicluster grids. , 2009, , . | | 2 |
| 34 | DA-TC: a novel application execution model in multicluster systems. Cluster Computing, 2014, 17, 371-387. | 5.0 | 1 |
| 35 | CODE SIZE REDUCTION FOR ARRAY INTENSIVE APPLICATIONS ON DIGITAL SIGNAL PROCESSORS. Journal of Circuits, Systems and Computers, 2012, 21, 1250015. | 1.5 | 0 |
| 36 | Coarse and Fine Visual Attention Strategies during a 3D Mental Rotation Task. Journal of Vision, 2018, 18, 1203. | 0.3 | 0 |